MACMILLAN SOCIAL-STUDIES SERIES
A basal series in history and geography

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Living Together at Home and at School
MAE KNIGHT CLARK

Living Together in Town and Country
MAE KNIGHT CLARK

Living Together Now and Long Ago
BERNICE NEWELL

Living Together Around the World
MAE KNIGHT CLARK

Living Together in the Americas
KING • DENNIS • POTTER

Living Together in the Old World
WALTER LEFFERTS
LIVING TOGETHER IN THE AMERICAS

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THE MACMILLAN COMPANY - NEW YORK
ACKNOWLEDGMENTS

For the drawings and maps in this book acknowledgment is made to the following: to Mr. George M. Richards for the line drawings; to Mr. J. McA. Smiley and the Manhattan Drafting Company for the construction and line of the maps; and to Mr. Leonard Ralph Sorge for the art work and airbrush rendering of the half-tone maps; for the drawing on page 18, taken from the Conquest of Mexico, by W. H. Prescott, illustrated by Keith Henderson, published in England by Chatto and Windus, and in the United States by Henry Holt & Co., Inc.
PREFACE

The Living Together Series replaces separate elementary-school courses in geography, history, and the other social studies. These books provide an introduction to the important facts and principles of history and geography commonly included in the elementary-school curricula of the nation. The series has one major aim — to develop informed and loyal American citizens.

Subject matter of the series

Ten aspects of social living around which man's activities center give serial unity to the content of the books. These aspects—the vitally important activities of man's life—are communication, conservation, consumption, education, the expression of aesthetic and spiritual impulses, government and group living, home living, production and making a living, recreation, and transportation. They are related again and again to the new needs, interests, and situations which emerge in each grade. Consequently mastery of fundamental facts and the development of basic understandings are insured.

These books present the essential values and principles of geography, history, and the other social studies by using each of these subject-matter areas in helping pupils learn about the peoples, resources, traditions, and customs of the different regions of the Old World and the New. Geographic principles and influences are illustrated in numerous ways so that children may understand the growth and development of their own country and that of the other important regions of the world. At the same time rich historical materials point up the importance of the deeds and efforts of man in shaping and improving his environment. The subject matter is presented for the most part in an integrated manner, but where understanding can be developed best by emphasis on a single aspect, as a geographic principle, that aspect is made a center of interest. Thus rigid departmentalization is avoided, and the approach is direct and natural.

Knowledge of child growth used

These books provide for the continued growth of the child as an intelligent, responsible citizen by presenting carefully selected social concepts, essential facts, knowledges, and skills in such a way that he will become increasingly self-reliant in his ability to attack social problems on his level of understanding.

Because of the natural interest of children in adventure, accounts of imaginary trips and travel are included from time to time. In addition, because children seek facts and truths these volumes include numerous straightforward accounts of people— their life, work, play, and customs. These people are seen in their true setting, influenced by both their historical background and their present environment. Frequent use is made of the story method, sometimes in brief biographical sketches, sometimes in glimpses of representative scenes or historical flashbacks narrated in the present tense for greater immediacy.

Current learning techniques employed

The authors have been guided by current knowledge of the ways in which children learn. Some of these ways are:

1. Systematic attention is given to vocabulary building. The average child of this age has difficulty in understanding the usual social-studies texts largely because of the number and nature of new geographic and historical terms which are introduced. In this series new geographic and historical terms have been carefully selected for each grade level. When a new word or concept is introduced, it is italicized and defined at the point of first mention and repeated in a logical manner. These new words and terms are listed at the ends of sections for purposes of drill and collected in a glossary for ready reference. In general, the carrying vocabulary has been kept at one grade lower than the grade for which the individual book is intended. Pronunciations of difficult words are given both in the text and in the end matter.
All of these factors make the books of the series easy of approach and comprehension.

2. A variety of interesting, challenging visual aids are provided. The visual aids offer eye appeal. They also strengthen the content both by explaining it and by supplementing it. Many interesting and challenging photographs are included to aid the child in gaining understanding of the history and geography of the various regions. Maps, some in color, many with modeled terrain, and many of the special-purpose variety, serve to clarify the text and to interest the child in gaining information about places beyond his home-horizon. Illustrated charts help the child to pictorialize ideas, to summarize processes, and to orient himself in time and space.

3. Units culminate in definite learnings. Unit introductions stimulate the desire to learn and help the child to select and organize the facts, skills, and understandings he encounters. But if the knowledge he gains is to be meaningful, the child needs opportunities to use the things he learns and to develop acceptable behavior patterns. Exercises and projects at the ends of units help him to test himself on his achievement in definite tangible learnings and provide many opportunities for application to real situations. The authors offer these in belief that the time for the pupil to learn and to apply the attitudes, habits, and skills of democratic living is in the present.

Social concepts emphasized throughout

The concepts upon which the series is built are logically introduced and carefully developed. They have been selected from such basic social activities as (1) ways of making a living in the past and the present; (2) the development of institutions — the family, the school, the church, government and self-government; (3) the need for co-operation in both primitive and complex cultures; and (4) the progress of democracy in an interrelated world. Such concepts provide the child with a basis for acquiring knowledge which is meaningful and understandings upon which to build a satisfactory life.

Living Together in the Americas includes the history and geography of the countries and regions of the New World. The book covers the continents of North America and South America, the West Indies, Greenland, Iceland, and the island possessions of the United States.

The pictorial time-lines which introduce the units enlist the pupil’s interest at the outset, give him a grasp of the chronology of events, and help him to acquire historical perspective. On the geographic side each area under discussion is introduced by a spot-location map which helps the child to orient himself in terms of space.

The end-of-unit activities are designed to give the pupil an opportunity to check concepts, vocabulary, and understandings and to carry out many worth-while projects as an outgrowth of his study.

The text opens with an introduction to the lands and the people who lived in the Americas before the coming of the Europeans. This unit includes geographic terms and concepts which the pupil will need in his study of this and other units. The next unit takes the pupil to the Old World to show the impetus which led to travel and the discovery of the New World. Each unit which follows, with the exception of units 5 and 15, deals with the geography and history of a specific section of the New World. Sometimes the pupil is introduced to a region through geography and sometimes through history. In some instances the two disciplines run parallel to each other and, where possible, they are fused. Finally, the pupil sees each section and its people and their ways of living and working today. Unit 5 traces the history of how we became a nation with emphasis on the development of democracy and our form of government. The concluding unit shows how the nations of the New World have learned to live together democratically as good neighbors.

The content and presentation in this book are designed to give the pupil an understanding of the people of the Americas, their land, and the times in which they live. Pupils are led to see that people everywhere have common problems to face. They realize that the way people live, work, and play is due partly to the people themselves, their stage of development, and the use they make of their resources. They also learn that this shrinking world has made peoples interdependent and how this interdependence has helped to raise the standard of living and to spread democracy.

The Authors
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The story of the Americas began thousands and thousands of years ago. In that far-off time no people lived in these lands, which we now call the continents of North America and South America.

The Americas stretched far to the north and to the south. Great oceans washed the shores of the two continents. In these continents were regions of great heat and of biting cold. There were chains of towering mountains, hot deserts, dense forests, grassy plains, and many sparkling lakes. Mighty rivers glided onward to the sea.

In these lands were fine forests for lumber, good soil for farms, and rich grasses for pastures. In the rivers, lakes, and seas were many fish. The woods were full of wild life. Hidden beneath the soil were rich stores of gold, silver, iron, and other minerals.

All these riches were here. But for thousands of years there were no people to use them. Then people found their way to America. It is probable that they came from Asia. The map on page 7 shows how close the
American People and Lands

The northwestern part of North America and Asia are. At one point they are only a few miles apart. Only a narrow body of water, called Bering (ber’ing) Strait, separates them. It is easy to imagine these early people coming across on the ice in winter or floating across on rafts in the summer. There are islands in this strait, and this may have made the crossing easier.

As time passed, more people came to America. Some moved eastward across North America. Others moved south, until some groups reached the narrow neck of land connecting North America and South America. Then they crossed into South America. Gradually they spread over this great continent also. Some learned to live together in groups and had settled homes. But no one in the rest of the world knew that these lands or people were here.

For many, many years these people, who later were called Eskimos and Indians, made their homes in this great land. They lived in it, hunted and fished, and learned to plant a few crops. But they used up little of its riches. They left it much as they found it.

Then men from Europe discovered America. The stories they told when they returned to Europe caused others to set sail for the New World. Some of these were explorers who came to look for riches. Others were settlers who came to build homes and raise families. At first these settlers came in small numbers. Later they came by the thousands, and later still by the millions. These people, unlike the Eskimos and Indians, made great changes in the land. They made the Americas what they are today.

As you read this unit, you will find the answers to these questions:

1. How did people first come to the Americas? What was life like for these first Americans?
2. Why did other people come to America?
3. What is the land of the Americas like?
4. What is the climate of the Americas like?
THE COMING OF THE FIRST PEOPLE TO THE AMERICAS

Most people agree that the first Americans came from the continent of Asia in the Old World. They probably came into the New World across Bering Strait. They did not know how to write, so they left no written records. But the weapons, tools, and bones of men and animals that have been found give us some idea of how they lived.

THE FIRST AMERICANS

These early people dressed in the skins of wild animals and carried spears and clubs to defend themselves. Some may have had bows and arrows. They knew how to make fire by drilling one stick of wood into another. They chipped flint and shaped other kinds of stone into rough tools. They lived mainly by hunting and fishing. But they also gathered fruits, nuts, roots, and berries for food. Some brought their faithful friend, the dog, with them. He was their only tame animal.

These ancient people probably came to the Americas in small groups over a period of hundreds or even thousands of years. They traveled far and wide camping, hunting food, and raising families. Some pushed over mountains and through forests to the great plains of what are now central Canada and the United States. Others moved still farther eastward to the Atlantic Coast. Many worked their way slowly southward. They reached lands we now call Mexico and Central America. Some went still farther south. They pushed across the narrow strip of land which connects North America with South America. On they went, spreading over South America.

These people were the first immigrants to America. Immigrants are people who move from one land into another to live.

Hundreds and thousands of years passed. These people discovered that plants grew from seeds. They began to use the plants which grew wild about them, especially maize, or Indian corn. Maize was so useful that they believed it was the gift of a god whom they called the maize god. Some used rubber. Many learned to grow beans, squashes, tomatoes, and peanuts. White potatoes, sweet potatoes, peppers, and tobacco were other plants they raised. They made a drink from the seeds of the cacao (kā-kā′ō) tree. We make chocolate from the seeds of this tree today. When Europeans, or people

International Minerals and Chemicals Corp.

These huge bones were dug up out of the earth in our Southeast. They belonged to an animal living on the continent before the first Americans came. Parts of a jawbone and a legbone of the animal have been found.
The Plains Indians shown here are closing in upon a wounded buffalo which they have driven out from the herd. Compare their clothes and weapons with those of Indians in other pictures.

from Europe, came to America, they learned about these plants from the Indians. The Europeans also found the Indians growing cotton and weaving it into cloth. Some groups of Indians had learned to make baskets and pottery and how to spin and weave. Others had learned to make things from gold, silver, and copper. Stone and wood were used to make weapons and tools.

The lands the first Americans lived in were not alike. The soil, climate, plants, animals, and surface of the land were different in different regions. Some of the people lived in simple ways. They depended on the animals and plants they found as they wandered about. They lived in much the same way as their parents and grandparents had lived.

Others learned better ways of getting food, clothing, and shelter. They stopped wandering about and settled down in permanent homes. They lived and worked together in groups. They had strong governments. They built fine cities. Each group developed its own language, customs, tools, religion, and ways of living.

GROUP LIFE IN EARLY AMERICA

The map on page 4 shows where some of the most important groups of these early people lived about five hundred years ago. Let us imagine that we are visiting some of them at that time. This was about the time that Europeans discovered America.

The Plains Indians

We shall visit the Cheyenne (shē-ěn') Indians first. They are one of many tribes of Indians living on the great rolling, grassy plains west of the Mississippi River. These tribes are called the Plains Indians.

It is still dark. Not a sound is heard in the Cheyenne village. Even the dogs are quiet. They are tired from helping move the tepees (te'pēz), or skin tents, and supplies to this new camp along the river. Sun Maiden is lying on her bed of buffalo skins and willow
twigs. She is thinking of the exciting day before her. Sun Maiden is going to help her mother, Morning Star, make a new cover for their tepee.

It has taken many buffalo hunts to get all the hides Sun Maiden and Morning Star need for the tepee. They have worked hard to get them ready for this important day. First, they stretched the hides out and staked them to the ground with the flesh side up. Next they scraped off all the meat and fat. Then they turned the hides, and removed the hair with an elk bone. After that, Morning Star made the skins into leather by rubbing them with oak bark and drying them in the sun. Then she softened the skins by pulling them through a hole in a buffalo shoulder bone. What hard work that was! The soft leather skins were now ready to be made into a new tepee.

Sun Maiden hears her mother stir. Quickly she puts on her deerskin dress and moccasins. She hurries to the stream near the camp. Other girls are also getting water. Smoke is rising from the tepees. The women are preparing breakfast.

After breakfast Sun Maiden takes a message to Buffalo Woman. It is a Cheyenne custom to ask friends to help make the tepee. Buffalo Woman is the best tepee maker in camp. She and other friends will help make the covering. Then they will stretch it over the tepee poles. Among the Plains Indians, women always make the tepees. Whenever the camp is moved, it is the duty of the women to take the tepees down and set them up again.

Meanwhile, White Bull, Sun Maiden’s father, and some of the other men leave camp. They search for buffaloes on the tree-less plains about them. The buffalo is a useful animal to these Indians. Its flesh is their most important food. Its skin is made into leather for tepee covers, clothing, robes, bags, and cooking vessels. Arrow points, knives, and axes are made from buffalo bones. From buffalo horns the Indians make spoons, bowls, and cups. Buffalo sinew, the strong, tough cord which fastens muscles to bones, is used for sewing and for bow strings.

Sun Maiden’s friends go out to gather fuel for the fires and to dig roots for food. Sun Maiden usually goes with them. But today she has other work to do. She and Morning Star spread the skins on the ground. Buffalo Woman carefully cuts the skins. Sun Maiden and the women make holes in the skins with sharp-pointed bones. Then they sew the skins together with thread made by splitting pieces of dried sinew.

By the close of the day the new tepee covering is finished. Buffalo Woman, Sun Maiden, and the other women stretch it over the tepee poles. They pin it tight to the ground. That evening many visitors come to see the new covering. “You have done well, Sun Maiden,” they say. “Someday you will be a fine tepee maker.”

This tepee is made of buffalo skins. The dog pulls bundles fastened on the short poles tied upon his back. The Indians had no wagons.
Symbols Used in These Maps

Park Boundary ———— U. S. Interstate Highway
Lake  —— Connecting Road
River  —— Trail
Waterfall —— Small City
Mountain Range —— Ranger Station
Mountain Peak  —— Camp
Geyser  —— Geyser

Other Symbols That You Know

State Boundary ————
National Boundary ————
Large City —
Capital City —
Desert —
Swamp —
Physical Map of NORTH AND SOUTH AMERICA
One inch stands for 1200 miles

- Plains
- Plateaus
- Hills
- Mountains

Legend:
- Warm ocean currents
- Cold ocean currents
THE SOUTHEAST
One inch stands for 135 miles
Plains
Hills
Plateaus
Mountains

DELAWARE

WEST VIRGINIA

WILMINGTON

Huntington

Richmond

James R.

KENTUCKY

Frankfort

Lexington

Louisville

Covington

Ohio R.

ILINOIS

INDIANA

Columbus

Indianapolis

Huntsville

Chattanooga

MEMPHIS

Nashville

Frankfort

Louisville

CINCINNATI

Cleveland

COLUMBUS

Huntington

Wilmington

Charleston

Savannah

Key West

St. Augustine

Everglades

National Park

Lake Okeechobee

Miami

Tampa

Biloxi

MEXICO

Gulf of Mexico

ATLANTIC OCEAN

LAKE ERIE

Lake Ontario

Lake Michigan

Lake Erie

Lake Huron

Lake Superior

Lake Winnipesaukee
THE FAR WEST AND THE NORTHWEST

One inch stands for 170 miles
Cheyenne Indians still live in the United States today. But their ways of living have changed from those of long ago.

Next we shall go far to the North along the northern coast of North America. This is the land of the Eskimos (ěsk'ī-môz).

**Eskimos of the Far North**

It is summer in this Far Northern land. The snow and ice of the long, cold winter have melted. Grass, moss, and bright-colored flowers cover the ground. Sea gulls fly overhead. The ocean sparkles in the sunlight. For several weeks the sun has not set. During these long summer days there is no darkness at all. The sun circles the sky day and night. At noon it is in the southern sky. At midnight it is low in the northern sky.

Everyone is out of doors. It is hard to tell which are men, women, and children because they are dressed so much alike. Children in hooded coats of fox skin play in the sunshine. Their bear skin trousers are tucked into their sealskin boots. They are glad to wear their summer clothes. During the long, dark winter they have worn two suits of fur. Now they wear only one. Eskimo dogs are lying down near the tents.

Some women are busy cleaning skins with stone scrapers. Others are making the skins into clothing with bone needles and the sinews of animals for thread. The seams they sew keep out both air and water.

Most of the men have gone out to sea in their kayaks (ki' āks), or narrow boats made of skin. The top of the kayak is drawn closely about the person who paddles. In his kayak the Eskimo hunts seals, walruses, and whales. These animals, and others like the reindeer and the bear, are important to the Eskimos. From them the Eskimos get most of their food, clothing, and shelter.

Boys are spearing fish in a near-by stream. Suddenly a child's cry is heard. Taglook, who has been playing along the shore, has fallen into the water. He is only three years old.

A group of girls who are picking berries on a hillside close by hear the child's cry. As they start toward the shore, one of them calls, "Go get the women." But one of the big boys has already reached the spot where Taglook

Eskimo igloos are built of blocks of snow and have two rooms. The round room is where the family lives. The long narrow room which is being finished is a porch. Soon the family will move in, and smoke will be coming out from the chimney as the mother cooks the family meal.
In this picture of an Iroquois family each member is doing work that helps the whole family. At the left the father is bringing in a young deer. In the center the mother is scraping off hair from a deer skin so that it can be treated and made into clothing. The daughter is cutting deer meat into strips which she will hang on the pole at the right to dry. One son is a warrior and hunter. The other son is burning down a tree by building a fire around it.

fell in. He plunges into the water, seizes the child, and brings him safely to land.

When the women and girls reach the shore, Taglook is lying on the beach. As his mother rushes up, Taglook smiles at her. She turns to thank the brave lad who rescued Taglook. But he has slipped away and again is busy spearing fish.

Today Eskimos still live along the northern coast of North America. The summer is a busy time for them, as it was in early days. They work hard to store up food for the long, cold winter. They still depend mostly on hunting and fishing for their food and clothing. When animals become scarce, they move to new hunting grounds.

Indians of the Eastern Woodlands

In the forests east of the Mississippi River lived the Iroquois (ɪˈroʊ-kwoɪ) Indians. We call the Iroquois and their neighbors the Indians of the Eastern Woodlands. On the map, page 4, find where these Indians lived. The Iroquois were farmers as well as hunters and lived in settled homes.

Five groups of the great and powerful Iroquois joined together and formed a union. By uniting they kept peace among their people. The wise leaders of the league held councils, or meetings, from time to time. Laws, or rules, for the tribes and other agreements were made at these councils.
Pueblo Indians of the Southwest

The Pueblo (pəwbˈlō) Indians lived in the desert region of Arizona and New Mexico. A desert, as you may know, is dry land where little or no rain falls. The Pueblo Indians had no forests as did the Woodland Indians nor did they have buffalo as did the Plains Indians. They made their houses from the rocks and the earth of the desert around them. For protection from their enemies they built their houses close together, one on top of the other. Many of them were two and three stories high. Each of the upper stories was set back like a step from the story below. The roof of one house then formed the balcony or porch of the house above. Each house had a door in the flat roof. Ladders led from one story to the next. The ladders could be pulled up in time of danger. Many families lived in these houses.

The Pueblo Indians were farmers. Because there was little rain in their land, they brought water to their fields by digging ditches which led from rivers. We call this irrigation. Besides tending their fields, they wove blankets and made pottery. Even today the descendants of the Pueblo Indians, who still live in the Southwest, make beautiful pottery.

The Aztecs of Mexico

In Mexico there lived a rich and powerful group of Indians, the Aztecs (əzˈtēks). The map on page 4 shows where they lived.

Maxtla (məshˈtla), a young Aztec lad, stands by a hut of sun-dried mud bricks and watches his uncle until he is out of sight. His face is sad. He wishes he could have gone with his uncle, who is taking a load of pottery bowls to Tenochtitlan (tə-nōchˈtē-dlān'). This is the largest city of the Aztec Indians in the valley of Mexico. Here lives Montezuma (mənˈtē-zōˈmə), the ruler of the Aztec tribes.

Maxtla often wishes that he could visit this interesting island city, Tenochtitlan, with the

Indians built this cliff house in a rock wall in Colorado hundreds of years before white men from Europe came to America. The house had many rooms, and a number of families lived in it. Such houses were often three or four stories high. People used ladders to climb up and down.

A. Devaney
These Aztec nobles are bowing before their ruler. In their headdresses are bright feathers and streamers. Their clothing is trimmed with jewels. What do they carry in their hands?

beautiful mountains surrounding it. His uncle has described it to him many times. There are low dikes which are used as roads connecting the city with the mainland. There are beautiful green gardens and streets lined with fine houses. In the large square in the center of the city are many temples set high upon pyramids. Here the Aztecs worship their many gods. In the great market place are wonderful things from all over Mexico brought there for sale. There his uncle is taking the beautiful bowls he has made. Maxtla longs for the day when he can take the bowl he has made to market.

The day finally comes when Maxtla is allowed to go to the great city with his uncle. How proud he is of his red bowl with its black-and-white design!

Maxtla and his uncle start out before sunrise. People are already on the road. Like Maxtla and his uncle, they are carrying their goods on their backs. The Aztecs do not have pack animals to carry loads for them. There were no horses, cattle, sheep, goats, or pigs in America until Europeans brought them.

At last Maxtla and his uncle reach the city. Never before has the boy seen so many people and such huge buildings. Maxtla’s uncle leads the way to the great stone-paved market place. They find a place where other potters have already spread out their wares. Near them Maxtla carefully places his bowl with those of his uncle.

On all sides people are buying and selling. Much of the trading is done by barter, that is, by trading one thing for another. Although the Aztecs have no money, they sometimes use cacao beans, pieces of tin, or gold dust as money.

As people stop to look at the pottery, Maxtla’s heart beats wildly. “Who will buy my bowl?” he wonders. Some women come along. One of them likes Maxtla’s bowl. Quietly the woman and boy bargain over the price. At last the sale is made. The woman
gives Maxtla cacao beans in exchange for his bowl. Now he can buy something for his very own in this wonderful market.

The richness and great size of the market is beyond anything Maxtla has ever imagined. Here are booths in which are shown many pieces of gold jewelry set with precious stones. Near by are piles of cotton, beautiful cotton cloth, cloaks, and dresses. In another section are mirrors of polished metal and swords. Other merchants sell brilliantly colored feathers or cloaks made of them. Live birds of every color and kind are for sale. It is hard for Maxtla to decide what to buy. Finally he exchanges his cacao beans for a brightly colored bird.

At sundown the happy boy and his uncle start home. Maxtla will long remember this day.

Descendants of the Aztecs still live in Mexico. But Tenochtitlan is no longer there. In its place is Mexico City, the largest city of present-day Mexico.

The Mayas of Central America and Mexico

Farther south, in parts of what are now Mexico and Central America, lived the Maya (mä'yä) Indians. These wise people studied the sun, the moon, and the stars. They worked out a calendar and marked off the days, months, and years. They used picture writing and kept written records. They knew how to paint pictures and to weave. They built beautiful buildings of stone. Today the ruins of their temples can be seen in the jungles of Mexico and Central America. Descendants of the Maya Indians still live peacefully in the lands of their fathers.

The Incas of South America

High in the towering Andes (än'dez) Mountains of South America the Inca (ença) Indians built a great nation. They built fine roads and bridges and beautiful temples and palaces. They made ornaments of gold and silver and wove beautiful cloth. Their knives, chisels, and hammers were of bronze, made by mixing copper with tin. The Incas were excellent farmers. They used every bit of land that could be farmed. They even farmed the steep mountain slopes. On the mountaintops they built terraces, or broad steps, and leveled off the ground behind them. They built walls of stone along the edges of the terraces to keep the soil from falling or washing away. On these level terraces they planted their crops. In some places there was not enough rain for their crops, so they used irrigation.

The Incas tamed the llama (lä'ma), an animal which is a cousin of the camel. They taught these sure-footed animals to carry loads for them. Llamas also supplied the Incas with wool for weaving and meat for food. To the north and the east of the Incas lived other important Indian groups. Among these were the peace-loving Chibchas and Arawaks (ā'rä-wäks) and the warlike Caribs.
THE COMING OF OTHER PEOPLE TO THE AMERICAS

The first Americans knew little about their own land. They did not know that men lived across the seas in Europe, Africa, and Asia. Nor did the people of these continents know about the Americas.

EXPLORING AND SETTLING THE NEW WORLD

The real discovery of the Americas began with Christopher Columbus. Many years before Columbus's time sailors from northern Europe had found their way to America. But they had made no permanent settlements, and no others had followed them to the new land.

The coming of the white man

But the voyages of Columbus, which you will read about in the next unit, attracted the attention of all Europe. He sailed under the Spanish flag, and his discoveries interested daring Spaniards in exploring the New World. The news of the riches Spanish explorers found in the Americas spread through Europe. So explorers from other countries also came to the New World.

Some explorers came to the New World to look for a passage to China and the other countries of the Far East. Others wanted riches or adventure. The Indians tried their best to keep these lands which had belonged to them for centuries. But the newcomers kept coming, exploring, and taking more land in the New World.

First permanent settlements

Spain also led the way in making permanent settlements in the New World. Soon after Columbus’s discovery Spaniards began to settle in South America and in the southern part of North America. This explains why the chief language of these lands is Spanish. People from Portugal made settlements in South America in what is now Brazil. To this day the people of Brazil speak Portuguese.

Many years later people from Great Britain, France, and the Netherlands also came to the New World. They settled mostly in North America where the United States and Canada now are.

At first settlers came to the Americas only in small groups. There were some who came for the fertile soil and a chance to build better homes. There were others who wanted riches or adventure. Some came because they did not agree with their rulers. The desire to worship God as they wished brought many others to the new land. Then there were still others, like the slaves, who were brought by force. We shall learn their stories later.

Later settlement

As the years passed, more and more people found their way to America. Some people threw off the bonds that tied them to their mother country in the Old World. They formed new nations.

As more and more people came to the New World, they needed room to settle. They took the Indians’ land and drove the Indians farther into the wilderness. Sometimes the Indians were forced to work for the newcomers. Many died from diseases brought by the Europeans. But many Indians still live in the Americas today. Some live in the United States, but more of them live in Mexico, Central America, and South America, where they make up a large part of the population.

On and on they come!

People from all over the world came to the Americas. At first they came by the thousands. Later, they came by the millions, especially to the United States. No longer can such great numbers of people come to the New World. Yet even today the Old World looks to the Americas as a land of freedom and opportunity.
This view of New York City's tall buildings, as they are outlined against the sky, is called the skyline. New York is the largest city in the Americas. In these tall buildings thousands of people work and do business daily. Do you know why the buildings are called skyscrapers?

**POPULATION OF THE AMERICAS TODAY**

More than three hundred million people now live in the Americas. Although they live in all parts of the New World, they are not spread over it evenly. Some parts of the Americas are crowded with people. Other parts have very few people. These regions are almost as wild as when explorers first came to the New World.

On pages 36 and 37 there are population maps. They show where the people in the Americas live. Find the northern part of North America. The area is lightly dotted to show that few people live here. Regions where few people live are said to be thinly, or sparsely, populated. The darkest parts of the map show where the most people live. These parts of America are thickly, or densely, populated. Many of these densely populated places are found where large cities have grown up. Some are found where many smaller cities are close together. Find some densely populated regions in both North and South America on the maps. The map keys in the lower right-hand corners of these maps will help you. The keys will also tell you what the other shadings mean.
LAND OF THE AMERICAS

What is the land of the Americas like? Where are the highest mountains, the broadest plains, and the largest rivers?

AN AIR VIEW OF THE AMERICAS

A quick way to get acquainted with North and South America would be to take a plane trip. Let us imagine that we are taking such a trip over these two great continents. The map on page 24 shows the route we will take.

Across North America

We board our plane at Seattle, Washington, on the west coast of North America. As our plane rises into the air we look toward the Pacific Ocean and see the Coast Ranges. Ahead of us to the east are higher mountains. These mountain ranges and their valleys lie inland from the Pacific Ocean from Alaska southward to Mexico. They have different names in different places. In the northern part of our country is the Cascade Range. Farther south is the Sierra Nevada (sī-ér'ā nē-vā'dā) Range. Farther west, as we have seen, are the Coast Ranges. We cross the Cascades on our flight eastward. The eastern slopes of these mountains are not as heavily forested as their western slopes.

East of these mountain ranges are high plateaus. These high plateaus, or uplands, are lower than the mountains which border them. A huge plateau in this area is the Columbia Plateau. Parts of the Columbia Plateau appear dry and brown. In other parts are fields of wheat and irrigated farms. We speed eastward and cross the ranges of the Rocky Mountains.

The Rockies begin in Alaska and stretch southward through the western part of the United States. They are so high that some of their peaks are covered with snow the year round. Trees grow only part way up their slopes. Above the trees are grassy spots. Beyond the grass is nothing but bare rock. In the valleys between the mountain ranges are farms and pastures for cattle and sheep.

Some parts of the Rocky Mountains look like this as we fly over them. The high peaks have snow on them all year round. It is so cold up high on these mountains that no trees can grow.
These farms border on the St. Lawrence River, as the picture shows. Notice that in the village across the river the houses are built right out over the water.

As we fly across Montana, we take our last look at the Rockies. We will not find mountains as high as the Rockies again until we see the Andes in South America.

East of the Rockies rolling grasslands, or grassy plains, stretch far into the distance. These grasslands are part of the wide, fertile central plain which reaches eastward from the Rockies to the Appalachian (əpˈə-ləchˈ-ən) Highland. Find it on the map. Notice also that the central plain extends south to the Gulf of Mexico and north to the Arctic Ocean. There are great cattle ranches on these plains. On some are fields of alfalfa (əlfəlˈfə), a plant grown chiefly for hay. There are also wheat farms, or ranches, covering as much as a thousand acres. Farther east the farms become smaller. There are herds of cattle and dairy barns.

We cross the Mississippi River at Minneapolis. The map (page 24) shows that the great Mississippi and its tributaries, or branches, flow through the central plain. We speak of a large river and all its tributaries as a river system.

As we near Chicago, on the shores of Lake Michigan, we find cities and towns larger and closer together. Flying to Toronto (tō-rōnˈtō), Canada, we pass over orchards, vineyards, dairy farms, and more cities and towns. At Toronto we see Lake Ontario. Like Lake Michigan, it is one of the five Great Lakes. These two lakes and Lake Erie, Lake Huron, and Lake Superior form one of the best inland waterways in the world.

We fly northeast above the St. Lawrence River. This river forms a natural highway from the Great Lakes to the Atlantic Ocean. Along the river are fertile farmlands. East of Quebec (kwē-bék′) the fertile lowlands disappear. The forested hills and mountains of the Laurentian Upland come down to the water’s edge. This upland region with its rounded hills, forests, and thousands of lakes extends over most of eastern Canada (see the maps on pages 9 and 24).
On we go, over the Gulf of St. Lawrence to Newfoundland (nú'fänd-lând'). The rugged hills we see are a part of the Appalachian Highland. The Appalachian Highland extends southward into the United States. (Find it on the map on page 24.) It is made up of many ranges of hills and low mountains. These ranges are not so steep or so high as the Rockies. Most of them are covered with grass or trees to the top.

The Atlantic Coast of North America

We leave Newfoundland and fly toward the southwest. From Newfoundland to Miami has skyscrapers side by side with palm trees. This beautiful Florida city attracts thousands of visitors from all the other states.

Miami News Bureau

Boston, Massachusetts, the restless Atlantic Ocean is below us much of the time. But between Boston and New York City we see smooth beaches, dairy farms, truck gardens, and many cities and towns.

After we leave New York City, much of our flight will be over the Atlantic Coastal Plain. Low, flat land along a coast is called a coastal plain. The Atlantic Coastal Plain extends south and west along the Atlantic and Gulf coasts of the United States. Many cities and towns lie between New York City and Washington, D. C. This is one of the most densely populated regions of our country. On the Atlantic Coastal Plain we see many small farms where fruits and vegetables are raised for the crowded cities. Some of these farms also raise chickens and ducks for the city markets.

As we continue our flight southward, we see farther inland the tobacco fields of Virginia and North Carolina. The tobacco land is higher than the low, level coastal plain. The Appalachian Highland, which is still farther inland, is higher here than it is farther north. Yet most of this highland is covered with forests.

We continue southward above the Atlantic Coastal Plain. This plain grows wider as it reaches southward. In Florida we see miles of smooth, sandy beaches, palm trees, and groves of orange and grapefruit trees. At Miami we change planes for our flight to South America.

Over the West Indies to South America

Our flight from Miami to Barranquilla (bär'rán-kēl'yä), Colombia, is a thousand
If a straight line is drawn through Philadelphia, what other cities will it pass through or near?

miles long. We pass over the mountains and fields of Cuba and Jamaica, two islands of the West Indies. We look down on the blue Caribbean (kär'ë-bë'än) Sea. Then ahead we see a faint outline of land. It is the great continent of South America.

Colombia, Venezuela, and the Guianas

After we land at Barranquilla, Colombia, we feel heat and dampness in the air. The breeze blowing in from the Caribbean Sea makes it seem a little cooler.

We again board our plane and head eastward along the coast of Venezuela (věn'-ē-zuelə). We pass over the Orinoco (ō'rin-ō'kō) River, one of the three great rivers of South America. Inland from the flat, swampy coasts of the Guianas (gē-ā'náz) are the Guiana Highlands. These low, rounded mountains are one of the three highland regions of South America.

Brazil and Uruguay

As we go on, we look down on green treetops stretching far into the distance. This is part of the forest-covered lowland drained by the Amazon (äm'ä-zön) River. The Amazon River system, or the Amazon and its tributaries, is the largest river system in the world.

Now we speed around the eastern part of Brazil and fly southwest. There are few good harbors and no coastal plain along the Atlantic Coast of South America. Instead, the Brazilian Highland extends along the coast of Brazil. South America, like North America, has two highlands in the east. Like the Appalachian and Laurentian highlands, the Brazilian Highland and the Guiana Highland are low. (Find them on the map on page 24.)

As we continue south along the coast of Brazil, we leave the hot lands of the equator. From Brazil our plane flies over the fertile plains and rolling grasslands of Uruguay (ū'rā-gwi). Millions of cattle and sheep graze on these fine pastures.

From Argentina to Chile

We reach the busy city of Buenos Aires (bwā'nos ĭ'rās) on the Plata (plā'ťa) River. The Plata River system is another of the great

July 9 Avenue is the main street of Buenos Aires, capital of Argentina. It is named for the day when Argentina became independent.

Pan American — Grace Airways
river systems of South America. At Buenos Aires we head west across Argentina to Chile (chīl'ē). Mile after mile we fly over the flat pampas, or plains region. Here are fields of corn, wheat, and alfalfa, flocks of sheep, and herds of cattle and horses. The pampas region reminds us of the central plains of the United States.

At the western border of the pampas we find ourselves flying over the Andes Mountains. These high, rugged ranges are the second highest mountains in the world. They run the length of South America from the Caribbean Sea to the southern end of the continent. Their peaks, even those near the equator, are covered with snow the year round. In the dry plains at the foot of the mountains are spots of green. Why are these vineyards and fields of alfalfa here? The answer is irrigation. Water is brought to these lands from rivers flowing down from the Andes. We rise high above the clouds to cross the mighty Andes and soon arrive at Santiago (sān'tē-ā'gō) in the Central Valley of Chile (see the map, page 24). In this fertile valley are most of Chile's farmlands. The farms raise fine fruit and vegetables. The Central Valley is famous for its grapes.

The Pacific Coast of South America

At Santiago our plane turns its nose northward along the Pacific Coast to Lima (lē'mā), Peru. The high, snow-capped Andes are east of us now. Between us and the Pacific are the hills and low mountains of the Coast Range. We look down on the Atacama (ā'tā-kā'mā) Desert, one of the driest regions in the world. Here and there along the coast

Grace Line

These men are going to work in Chile. Their car has a sail that catches the wind and makes it run. By what means do people go to work in the United States?
of Peru are patches of green beside rivers flowing from the Andes down to the sea.

We speed on over Lima toward Quito (kë'tô), in Ecuador (ëk'wá-dôr). Large fields of bananas, rice, and cacao appear on the coastal lowlands beneath us. But when we land at Quito, we shiver in the thin, sharp air at the airport. Quito is almost on the equator. Even though it is so near the equator, it is cool because it is in the highlands almost two miles above the sea.

At the equator

Near Quito is a stone monument with a globe on top. This monument was built to mark the place where the equator is. As you know, the equator is a make-believe line which map makers have drawn on maps and globes. It goes east and west around the earth just halfway between the North and South poles. North of the equator is the Northern Hemisphere, or northern half of the earth. South of the equator is the Southern Hemisphere, or southern half of the earth. In which hemisphere is North America? In which hemisphere is most of South America? Look at the map on page 24 to find out. Be sure to find the equator first.

The Isthmus of Panama

When we take off from Quito, we soar northward on our way back to North America. We circle over the Isthmus of Panama. An isthmus is a narrow strip of land which connects two larger bodies of land. The Isthmus of Panama is the narrowest and most southern part of North America. It joins the continents of North and South America. This isthmus is so narrow that from our plane we can see both the Pacific Ocean and the Caribbean

These men in Ecuador are moving heavy machinery on a rough platform made of logs tied together. Do you know how we would move machinery as heavy as this in the United States?
Sea. The Isthmus of Panama used to separate these two bodies of water. But a waterway has been dug across the isthmus to connect the Pacific Ocean and the Caribbean Sea. This waterway is the Panama Canal.

**Over Central America**

Our flight now takes us over the countries of Central America. We see green forest-covered mountains, blue lakes, and peaks of volcanoes. A *volcano* is a mountain which has an opening through which steam, ashes, and hot, melted rock are thrown out. Here and there in the forests are towns and villages. These countries have many mountains but there are lowlands along their Pacific and Caribbean coasts. Most of the people live in the highlands.

**Across Mexico**

Now we fly toward Mexico City over the lofty, rugged peaks of Mexico’s southern mountains. The high peaks in this region are mostly volcanoes. Mexico City is on a high central plateau. Mountains on both sides of the plateau separate it from the lowlands along the Pacific Ocean and the Gulf of Mexico.

The country changes as we fly northward. The land becomes dry and barren. Here are sagebrush, cactus, and other plants that need little water. Sometimes there are green fields. These green fields are near rivers which flow down from the mountains. We cross the great river, called the Rio Grande (re’ō grän’då), which separates Mexico from the United States.

**Westward to Los Angeles**

On our way westward to Los Angeles (lōs ˈænˌjəl-əz) we see very little *vegetation*, or plant life. The vegetation is like that of northern Mexico. In the desert near Phoenix (fē’niks), Arizona, are irrigated farm lands.

*James Sawders-Cushing*

Mexico City, the capital of Mexico, is an old city located high up in the mountains. Around it are higher snow-capped peaks and volcanoes. Mexico City is also a business center.
We fly westward across mountains and see a fertile lowland. Here are groves of orange and lemon trees, orchards of peaches and apricots, vineyards, and groves of olive and walnut trees. Here also is Los Angeles.

Los Angeles to Seattle

From Los Angeles we fly northward over the Great Central Valley of California. The Great Valley lies between the Sierra Nevada (si-črˈā nē-vāˈdā) and the Coast Range. Below us are irrigated vineyards and orchards.

We cross into Oregon over high, forest-covered mountains. We see trains and trucks carrying giant logs to saw mills. We continue northward over the Willamette (wɪ-lamˈɛt) River Valley, which lies between the Cascade Range and the Coast Range. We look down on orchards, vegetable farms, and berry fields.

After we cross the Columbia River, we are in Washington. Towering among the high Cascades is beautiful snow-capped Mount Rainier (rāˈnēr), an old volcano. Its upper slopes are covered with ice and snow the year round. Soon we land at Seattle, and our air journey around the Americas is over. Later we may explore Alaska from the air.

U.S. Forest Service

This sawmill is on the bank of the Willamette River in Oregon. The logs float down the river from the forest to the mill. While the logs are in the pond, they will be sorted according to size.

Comparing the Americas

Let us now review what we have learned from our trip. How are the Americas alike? How are they different?

Likenesses between the Americas

South America, like North America, has its highest mountains in the west and its lowest mountains in the east. In each continent a great central plain lies between the western and eastern highlands. Both continents have great river systems which drain these plains. These two continents of the New World are both in the half of the world called the Western Hemisphere.

Differences between the Americas

On our plane trip we found that all of North America is north of the equator, or in the Northern Hemisphere. Most of South America is south of the equator, or in the Southern Hemisphere. Unlike South America, North America has a coastal plain along the Atlantic Coast. North America has a more broken coast line than South America. This means that North America has better harbors. But the most important difference between the two continents is in the climate.
CLIMATE OF THE AMERICAS

Climate is the kind of weather a place has year after year. When we describe the climate of a country, we describe its heat and cold, its rainfall, and the amount of sunshine it has. We also tell about its winds.

Places with similar climate are much alike. The same kinds of crops can be grown in them. Their native plants and animals are much the same. Their people often do work that is alike.

LATITUDE AND CLIMATE

As you go from the equator toward the poles, the climate becomes colder. If you know the latitude of a place, it will help you explain the climate. For latitude means distance north or south of the equator.

Latitude lines

You know that the equator is an east-and-west line halfway between the poles. Perhaps you have noticed other east-and-west lines on globes and maps. These east-and-west lines are called latitude lines. Since they are drawn parallel to — at an even distance from — the equator, they are called parallels of latitude. Parallels of latitude help you tell how far a place is north or south of the equator.

Each parallel of latitude is numbered in degrees. The equator is zero degrees or zero latitude (0°). The tiny raised circle after the number stands for degrees. The farther north or south the parallels of latitude are from the equator, the higher their number of degrees. The latitude of the poles is 90°. That is the highest latitude.

On the globes, on page 33, the equator is numbered 0°. All places on the equator are in zero latitude. Any place north of the equator is in the North latitude. Any place south of the equator is in the South latitude. The North Pole is 90° north of the equator. We say it is at 90° North latitude or 90° N. The South Pole is 90° south of the equator. That is 90° South latitude or 90° S. Find the parallel of latitude marked 40° N. Any place on this parallel is 40 degrees north of the equator, or at 40° North latitude.

Latitude helps explain the differences in climate between North and South America. As you read, find three latitude reasons for the differences in climate between them.

Low latitudes

Look at the map on page 7. Find the dotted line south of the equator. This parallel of latitude is called the Tropic of Capricorn. What is the dotted line north of the equator called?

We say that places on the earth between the Tropic of Capricorn and the Tropic of Cancer are in the tropics. In the tropics the noonday sun is always high in the sky. Temperatures are much the same from day to day and from season to season. The land never gets very cold. In the tropics there is no winter, spring, or fall as we think of them. Plants grow in these tropical lands which could not grow where it is cold.

Because places in the tropics are nearest the equator, they have parallels of latitude with low numbers. We say they are in the low latitudes.

Look at the map again. Notice how much of South America lies between the Tropic of Cancer and the Tropic of Capricorn. About three fourths of this continent is in the tropics or the low latitudes. How different North America is! Only the narrowest part of North America lies in the tropics. This is one latitude difference between the two continents.

High latitudes

Next find the Arctic Circle and the Antarctic Circle on the map. Which one of these imaginary lines is near the North Pole? Which one is near the South Pole? Places
between these circles and the poles are very far from the equator. Their parallels of latitude have high numbers. We say they are in the high latitudes.

The parts of the earth between these circles and the poles are also called polar regions. The polar regions have a cold climate for most of the year. In summer they have long hours of sunlight. In some parts of the region the sun does not set at all. Then there is no darkness. Even so, the noonday sun is never high in the sky. Winters are just the opposite. There is little sunlight. There are some parts of the polar regions where the sun does not shine at all.

As the map on page 7 shows, no part of South America is in the polar region, or the high latitudes. What part of North America is in these latitudes?

Middle latitudes

Between the low latitudes and the high latitudes are the middle latitudes. They are not so close to the equator as the low latitudes. They are not so far from it as the high latitudes. Find the middle latitudes on the map. They are between the Arctic Circle and the Tropic of Cancer and between the Antarctic Circle and the Tropic of Capricorn. If you live in the United States, you live in some part of the middle latitudes.

The middle latitudes are also called the temperate regions. These regions have four seasons—winter, summer, spring, and autumn. In some parts of the middle latitudes the winters are very cold. Lakes, streams, and ponds freeze over, and snow falls. People enjoy skiing, skating, and coasting. In the parts toward the low latitudes, the winters are cool but not very cold. People go there to enjoy the mild winters. Because the temperate regions stretch from the tropics to the polar regions, they have great differences in climate.

Which continent has the most land in the temperate region, or the middle latitudes? Look at the map on page 8 to find out.
As the winds blow in from a warm body of water, such as the Pacific Ocean, they are warm and carry much moisture. When they strike the sides of the mountains, they rise and pass over the top of the mountains. As they rise, the winds cool, and clouds form. The clouds then drop their moisture in the form of rain or snow. As the winds continue to blow, they force their way under the warm air of the valley. The warm air rises, and clouds form again. But now the winds have less moisture, and when they pass over the second row of mountains the rainfall is less. Can you see why the land farthest from the ocean in this diagram is a desert area?

ALTITUDE AND CLIMATE

The climate of a place is also affected by altitude. Altitude means height measured from the level of the ocean or sea level. Even on the equator not all places are hot. As you know, Quito, Ecuador, is almost on the equator. Yet Quito is cool the year round, for it has a high altitude. It is almost two miles above sea level.

On the map, page 8, find the part of South America north of the Tropic of Capricorn. This part of South America is in the tropics, or low latitudes. Even so, all of it is not warm the year round. The highlands in the Andes Mountains do not have a tropical climate. They are too high above sea level. In the tropics the lowlands are usually warm or hot the year round. The highlands are cool or cold. Remember that the higher you go above sea level, the colder it becomes.

SEASONS

Seasons in the Southern Hemisphere are just the opposite of those in the Northern Hemisphere. While the Northern Hemisphere has winter, the Southern Hemisphere has summer. In the Southern Hemisphere the shortest day comes in June, the longest day in December. Imagine celebrating Christmas in the summer time! When the Northern Hemisphere is having spring, the Southern Hemisphere is having fall. What season is it now in the Southern Hemisphere?

RAINFALL

The amount of rain or snow a place gets in one year is called its rainfall. Rainfall is measured in inches. (One inch of rain is equal to ten inches of snow.) The maps on pages 36 and 37 show how much rain North and South America get in a year.

Places that have the darkest shading on the map get the most rain. If the water that falls there in a year were saved, it would measure over eighty inches. Regions having this heavy amount of rainfall usually have dense or thick forests. Forests grow only where there is plenty of rain. Twenty inches of rainfall is enough for growth of most crops and trees in lands outside the low latitudes. Places that have the lightest shading receive less than ten inches of rain. Regions receiving this light rainfall are usually deserts. The map key tells you the rainfall for which each of the other shadings stands.
Symbols Used in These Maps

NATURAL VEGETATION
- Mountain Vegetation
- Forest
- Mixed Forest and Grassland
- Grassland
- Desert
- Tundra
- Ice

YEARLY RAINFALL
- Less than 10 inches
- 10 to 20 inches
- 20 to 40 inches
- 40 to 80 inches
- More than 80 inches

POPULATION
Number of people to a square mile
- Less than 2
- 2 to 25
- 25 to 125
- 125 to 250
- 250 to 500
- More than 500
Symbols Used in These Maps

NATURAL VEGETATION
- Mountain Vegetation
- Forest
- Mixed Forest and Grassland
- Grassland
- Steppe
- Desert

YEARLY RAINFALL
- Less than 10 inches
- 10 to 20 inches
- 20 to 40 inches
- 40 to 80 inches
- More than 80 inches

POPULATION
Number of people to a square mile
- Less than 2
- 2 to 25
- 25 to 125
- 125 to 250
- 250 to 500
- More than 500
Much of Arizona is desert like this. Only cactus and desert shrubs grow here because of the lack of water. Giant cactus like those in the picture often live more than a hundred years. They have roots fifty feet long. Irrigation makes it possible to turn land like this into farms.

VEGETATION

As you know, the plant life found in a region is called its vegetation. Vegetation not planted by man is called natural vegetation. Regions with light rainfall or many months of cold weather have sparse, or little, natural vegetation. Few plants grow there. Where the rainfall is heavy and the weather is warm, the natural vegetation is dense. Thick forests usually grow in these regions.

The natural-vegetation maps (pages 36 and 37) show how North America and South America look today. The map keys show what each kind of shading means.

Forests

On the vegetation map notice how many forest lands are in the Americas. Two important kinds of trees grow in these forests. Trees like the fir, spruce, pine, and hemlock are called cone-bearing trees. Their seeds grow in cones. Most of their leaves are narrow like needles and stay green the year round. However, not all cone-bearing trees stay green the entire year. Some lose their leaves in autumn. Trees like the maple, elm, oak, and cottonwood are called broadleaf trees. Some broadleaf trees have leaves which are rather large. Others have many small leaves on one branch. Some broadleaf trees lose their leaves in autumn. Others, like the live oaks, keep their leaves all through the year.

Deserts

As the map shows, both North America and South America have desert lands. Wherever there is enough moisture in these lands, plants grow. Because of the small amount of rainfall, desert plants and grass usually grow in bunches. There is bare ground between them.

Grasslands

Grasslands receive more rain than deserts, but less than forest areas. In these lands grass
The land shown here once produced good crops. Now it is poor because the rain washed away some of the topsoil down the slopes. Gullies, or little ditches, were formed and grew deeper as the rain went on washing away the soil year after year.

and other plants cover the ground. There are few trees. Find some grasslands on the maps on pages 36 and 37.

RICHES OF AMERICA

Soil, water, forests, minerals, and wild animal life are furnished by nature. We call these gifts of nature natural resources.

America's natural resources

North America and South America have fish, birds, and other wild animal life in abundance. And that is not all. The Americas have large mineral resources. Iron, copper, tin, lead, silver, nickel, and gold are some of the minerals which make up these resources. So also are coal, natural gas, and petroleum (pē-trō'le-um). From petroleum we get fuel oil and gasoline.

Saving our resources

For hundreds and hundreds of years the only people living in the Americas were Indians. These early Americans used up little of the natural resources of these lands, for their ways of living were simple. When settlers from Europe came to America, they began to change the land. They cut down the forests and plowed up the land. They turned cattle and sheep out to graze on the grasslands. They dug minerals from the
This map shows the areas or belts in which different farm products are raised. You can see that no large areas are left unused. Conservation of land and forests made this possible.

ground. As they built cities, factories, and railroads, they needed more food and more raw materials from the farms, forests, and mines. America’s resources seemed endless, and people were careless and wasteful. Forests were cut down and not replaced. Careless farming methods ruined millions of acres of land. Minerals were wasted.

Today people realize that we must practice conservation, or wise use, of our natural resources. Some natural resources are destroyed by use. They can never be replaced. When minerals and fuels are taken from the earth, man cannot put them back. Only nature can do that. But we can practice conservation by mining the minerals carefully and by using only as much as we must. Other resources need not be destroyed by use. Fish can be replaced if young fish are raised in specially built tanks where the eggs are hatched. The young fish can then be put into rivers and lakes. Soil need not be washed away or plant food used up if, through conservation, good care is taken of the land.

Conservation of our forests means planting new trees to replace the ones cut down and preventing forest fires. It also means careful cutting to avoid waste.

**Americans all**

People are part of America’s riches too. They are its human resources. They have come from all over the world to help build America. Some, like the Eskimos and Indians, came thousands of years ago. Others came more recently.

All are Americans. They are from many lands, many countries, and many races. They worship God in different ways and speak different languages.

Each of these people brought something with them. Many brought their ways of preparing foods and their ways of living. Some brought love of freedom. Others brought skill in farming or in manufacturing. Still others brought their art, music, and poetry. Each has helped make the countries of the New World what they are today.
*TO HELP YOU LEARN*

**Words and Terms You Should Know**

- latitude
- rainfall
- vegetation
- immigrant
- grassland
- volcano
- isthmus
- council
- alfalfa
- tropics
- barter
- kayak
- maize
- pampas
- tepee
- low latitudes
- polar regions
- coastal plain
- river system
- high latitudes
- natural resources
- migration
- petroleum
- middle latitudes
- temperate regions

**A Matching Test**

The phrases below explain, or define, the words and terms listed above. Number a sheet of paper from 1 through 25. After each number write the word or term which matches the definition.

1. A group which meets to make laws and to decide community matters
2. A narrow strip of land connecting two larger bodies of land
3. Places in the high latitudes
4. Plant life in a region
5. A plains region in South America
6. The movement of people from one place to another
7. Low, level land along a coast
8. Distance north or south of the equator
9. Places in the low latitudes
10. Places in the middle latitudes
11. A large river with all its branches
12. Indian corn
13. A person who moves from one land to another to make his home
14. A narrow boat made of skin used by Eskimos
15. Trading through the exchange of one thing for another without using money
16. Grassy plains
17. All the rain or snow which a place receives in one year measured in inches
18. A plant grown chiefly for hay
19. A skin tent used by the Plains Indians
20. A mountain with an opening from which melted rock and steam flow out
21. Gifts of nature, such as soil, water, forests, and minerals
22. A mineral from which fuel oil and gasoline are made
23. Places near the equator which have parallels of latitude with low numbers
24. Places far from the equator, which have parallels of latitude with high numbers
25. Places between the arctic regions and the tropics

**Can You Answer These?**

1. How did people first come to America? Look at the map on the top of page 7 before answering this question.
2. How did the first Americans secure their food and clothing? How did they defend themselves?
3. Which groups of Indians lived on the plains? In the woods? On the desert? What kind of homes did each group build?
4. How are North America and South America alike? How are they different?
5. Name three groups of Indians who were living in what are now Mexico, Central America, and South America when the white men came. Describe their ways of living.
6. What does latitude mean? How does the latitude of a place help to explain its climate?
7. Why are latitude lines often called parallels of latitude? Where is the lowest latitude found? Where is the highest latitude found?
8. What are some of the ways we can practice conservation, or the saving of our natural resources?
9. What is meant by America's human resources?
10. How can it be said that the many different peoples who live in the New World are all Americans?
A Latitude Game

Complete each sentence below by using the words low latitudes, middle latitudes, high latitudes, northern, and southern. Write the numbers from 1 to 12 on a piece of paper. After each number write the words which complete the sentence. The map on page 7 will help you.

1. The South Pole is in the ____ ____.
2. The southern part of South America is in the ____ ____.
3. The equator is in the ____ ____.
4. Forty degrees north latitude is in the ____ ____.
5. Places north of the Arctic Circle and south of the Antarctic Circle are in the ____ ____.
6. Tropical lands are in the ____ ____.
7. Most of North America is in the ____ ____.
8. Places between the Arctic Circle and the Tropic of Cancer are in the ____ ____.
9. Places between the Antarctic Circle and the Tropic of Capricorn are in the ____ ____.
10. Most of South America is in the ____ ____.
11. Places north of the equator are in the ____ hemisphere.
12. Places south of the equator are in the ____ hemisphere.

Using Maps

1. On the map on page 4 find the land of the Plains Indians, the Eskimos, the Aztecs, and the Incas. Which of these groups of people lived near the equator? Which was farthest from it? What other Indian groups do you find on this map? What groups lived together in the Northeast?
2. Find the land of the Eskimos and the Aztecs on the rainfall map on page 36. Do these lands have much or little rain?
3. Prove from the maps on pages 36 and 37 that South America is not as densely populated — does not have as many people — as North America.
4. On the four maps on page 33 find the North Pole. Find the equator. Find the continent on which you live. Why does it look so different on these four maps?
5. What ocean is east of North America? North of North America? West of South America? West of North America?
6. On the vegetation map of North America on page 36 how many different kinds of vegetation do you find?
7. On the vegetation map of South America on page 37 how many different kinds of vegetation do you find?
8. Trace the route of our airplane trip on the map of the Americas on page 24.
9. Study the map symbols on the map on page 6. How many of these map symbols can you find on the map on page 14?
10. Look at the group of six maps on page 20. Note that these maps are exactly the same size on the page. But the first one represents the whole United States, and the last one represents only a city square. How many miles does an inch stand for in the first map? In the next? In the map at the bottom of the page on the left? Why are feet used instead of miles in the last map?

Interesting Things to Do

1. Make a collection of pictures taken from railroad folders, travel booklets, post cards, magazines, and newspapers of the places named on the airplane trip around North America and South America. Divide your class into committees. Make a pictorial map with these pictures.
2. Draw a large circle. Let this represent a globe. On it draw and label the equator, Tropic of Cancer, Tropic of Capricorn, Arctic Circle, and Antarctic Circle. Label also the North Pole and the South Pole.

With your lead pencil shade very lightly the part between the Arctic Circle and the North Pole. Shade lightly also the part between the Antarctic Circle and the South Pole. What latitudes have you shaded? What regions are these?

Shade in black the part between the Tropic of Cancer and the Tropic of Capricorn. In what latitudes is this area? What other name is often given to this part of the earth?

Do not shade the part between the Arctic Circle and the Tropic of Cancer or the part between the Antarctic Circle and the Tropic of Capricorn. What latitudes do these regions represent?

3. Pretend you are a Plains Indian girl, or an Eskimo boy, or an Aztec boy. Tell where
you live and some of the things you and your family do.

4. Pretend you are a Plains Indian boy. Write as many sentences as you can telling in what ways the buffalo is useful to you and your parents. Here are some sample sentences to guide you:

Our home is made of buffalo skin.
Buffalo skin is used to carry our tools and arrows.
We cook our food in buffalo skin.

5. Make drawings to illustrate the plants which were grown and used in the Americas before the Europeans came. Choose a title for your drawings.

6. In your library find a story about one of the groups of people whose stories are told in this unit. Read it, and tell the most interesting part to your classmates.

Things to Think About

1. Why do explorers of the Antarctic polar region try to arrive there at the time our winter is beginning?
2. A weather report in an Argentina newspaper for July 31 stated: “Today the temperature in Buenos Aires will go down to freezing.” Could this report be true? Why or why not?
3. All of us who read this book live in two hemispheres. Since the word hemisphere means “half of the globe,” can you explain how this is possible?
4. Hundreds of years ago the five groups of powerful Iroquois Indians united to form a league, or union. Today many countries of the world have joined together to form the United Nations. What was the purpose of the Iroquois League? What is the purpose of the United Nations?

Using a Book

Because this book is yours you will want to learn how to use it. Here are some good rules to follow.

Open your book to the Title Page. On it you will find the name of the book, the names of the authors, and the name of the publisher.

Now turn to the Contents (pages vii–viii). Here you will find the subjects of all the units, or parts, which the book contains. What is the subject of the first unit? How many units are there in the book?

Now turn to the beginning of Unit 1. Notice that the introduction, found on the first two pages of the unit, closes with a group of questions. These questions tell you what the different sections of the unit are about. You will find that there is a center head that matches each question. How many sections does Unit 1 have? What is each section about?

On pages viii and ix you will find the List of Maps in your book. How many colored maps are there? Find them.

As you turn through the book, look at the other maps, photographs, and drawings. Notice that each map and picture has an explanation, called a caption, printed in heavy type. You will understand the illustrations better if you read the captions carefully.

At the end of the book, on pages 489–494, is a Word List. What do you find in this list?

The Index, on pages 495–504, is the last thing in the book. An Index is a list of the most important topics, persons, and places, arranged in alphabetical order. Each name or topic is followed by a page number or numbers where it is discussed in the book. By using the Index, you can find quickly what you want to look up. For example, look up the word Aztec in the Index. Now turn to those pages in the text. What do you find?
The ancestors of all of us who now live in America came from the Old World. Many thousands of years ago, as you have learned, people from Asia came to the new land and settled here. Their descendants became the Eskimos and the Indians. But none of these early travelers went back to his old home to tell about this new land.

In the year 1000, men from the Old World again found their way to America. Daring men of the sea from northern Europe sailed in their swift ships far out into the Atlantic. They made settlements on the islands of Iceland and Greenland. While on a voyage to Greenland, one of these sea rovers landed by accident on the coast of North America. His name was Leif Ericson. When Leif went back home, he talked about the new land far to the west. But most people paid no attention to him. They soon forgot his story of the strange new land.

Time passed, and still the people of the Old World knew nothing about America.
Discovering the New World

Then trade and travel began to open up. The men of western Europe began to be interested in faraway lands. They went farther and farther from home.

The East had spices, silks, and gems to sell. To obtain these more easily, men began to look for new trade routes to the East. Travel by water is cheaper, they knew, than travel by land. So they began to look for a way to reach the East by sailing around Africa. After a time one explorer finally found his way around this continent, sailed east, and reached India. When he returned home and told about his voyage, everyone realized that an important discovery had been made. The people of western Europe now had an all-water way to the East.

About this time some men from western Europe began to sail far out into the Atlantic. One of these explorers was Christopher Columbus. Columbus believed that the earth is round and that he could reach the East by sailing west. Some men of learning held this idea also, but no one had ever tried it. What Columbus did not know was that a new unknown land lay between Europe and the East. When he sailed west to prove his idea, he bumped into a new continent. He had discovered America. The year was 1492.

Many explorers followed Columbus on visits to the New World. Then came settlers who made America their home. Columbus had shown the way to the New World. After him America was always linked to Europe. For this reason Columbus was the real discoverer of America.

As you read this unit you will learn the answers to these questions:

1. How did the Norsemen find a continent only to lose it?
2. Why did Europeans need new routes to the East?
3. How did Columbus find America?
4. Which explorers gave European countries claims to land in the New World?
On this globe, the heavy line shows the route the vikings followed as they crossed from Norway to North America. Where did they stop along the way? In what part of North America did they land?

HOW THE NORSEMEN FOUND A NEW CONTINENT

In a castle in Norway a group of men are listening to a storyteller. He is telling a tale full of daring and adventure.

"Then one of our men killed the red man with his spear," he says. "With the slaying of this warrior our troubles began. After that we were not safe from the anger of the red men. We had to leave the warm, fertile land."

"Where is this pleasant land?" asks one of his audience.

"Far across the ocean to the west. It was discovered by a son of Eric the Red."

"Eric the Red!" exclaims one of the men. "He lived near my home many years ago. He was one of the vikings (vi'kings), or sea rovers, who sailed away, never to return. What finally became of Eric?"

Settlements in Iceland and Greenland

"He settled in Iceland, an island far to the west of us. Other vikings had settled there. Eric became rich and respected. But he had some trouble and he was forced to leave Iceland.

"Eric the Red sailed westward until he found another land," the storyteller went on. "This land looked cold and forbidding. Icebergs floated in the waters surrounding it. But this did not frighten Eric. He saw green land along the coast and named the island Greenland. Then he returned to Iceland for his family and his possessions. He also talked some friends into going with him to the land he had discovered. Greenland was warmer and pleasanter than it looked from the sea. The settlers were able to raise a few crops, some cattle, and sheep."

Discovery of Vinland

"Did Eric leave Greenland too?"

"No, but his sons did. Like Eric, his sons were restless and full of the spirit of adventure. They made many trips from Greenland
A viking ship like this brought Eric the Red to Iceland and his son Leif to the east coast of North America. A viking ship was high at both ends and had a square sail. When there was no wind or when they had to sail against the wind, the men used the long oars to row the boat. The viking standing in the front of the boat, just back of the dragon's head, is the captain.

to Norway. On one of these voyages, Eric's son Leif ran into a storm. He was blown a great distance off his course. He reached a new land. He saw a low coast covered with trees. The summer air was sweet with the smell of growing things. Leif named the country Vinland because the sailors found grapes growing wild in the woods.

"Vinland was a pleasant country, warmer than any the Norsemen had ever known. Leif Ericson built a house and lived there for many months. When winter came on, the adventurers decided to return to Greenland. They loaded their boats with wood and grapes and other supplies. Then they left the land where they had lived so happily."

"Did you sail with Leif?"

"No. I sailed on a later voyage to Vinland. We loaded our boats with food, cattle, sheep, and tools. We intended to make a settlement in Vinland. We found Leif Ericson's hut and lived in it for three years. We might still be living there if it had not been for a quarrel. As I told you, one of our men killed a native warrior during this quarrel. This turned the whole tribe against us and we had to leave Vinland. None of the men of my country have ever returned to this pleasant land."

The man who told this story lived about a thousand years ago. This tale was told for many years in Norway. But after a time people forgot about the western land the Norsemen had visited. Five hundred years passed before white men again set foot on it. The land these Norsemen called Vinland was North America. Leif Ericson and his party had explored the eastern coast of our continent. But they left no maps or written records of the lands they had visited. The stories of their adventures were told to their children. Later they were written down. Many years afterward when people again heard these stories, they wondered whether the Norsemen really had discovered new lands.
THE SEARCH FOR NEW

For many years after the Norsemen's visit to North America the people of Europe did not travel. Most of them were poor. They lived and worked on the lands belonging to rich, powerful men called lords. They were glad to have a roof over their heads and enough to eat. Sometimes the lords and knights left their castles to fight an enemy or to visit the king or another lord. But even they seldom went far from the place where they were born.

TRAVEL IN EARLY TIMES

No wonder people did not like to travel during those times. The few roads they had were only trails through the woods. Robbers hid in the dark forests. A poor man had to walk or jog along on a donkey. Knights and ladies rode on horses. Often a weary traveler had to sleep out of doors because there were few inns or hotels.

Pilgrims and crusades

Most people of those days could neither read nor write. Their priests taught them about God and told them stories about Jesus and the saints. Often they urged the people to visit a beautiful church near by. "I could die happy if I could see that church," an old man might murmur. "If I could pray at the tomb of the saint perhaps my sins would be forgiven," another might think.

Gradually it became the custom for people to visit near-by churches and holy places. People who traveled to holy places to worship were known as pilgrims. The journeys they took were called pilgrimages.

For years pilgrims visited places only a few miles from their native villages. Then someone suggested a pilgrimage to the holy places connected with the life of Jesus. "That would be wonderful!" others agreed.

They knew that Jesus had lived and died in the eastern country called Palestine. They spoke of it as the Holy Land. They had no idea how far to the east it was nor how hard the journey would be. Look at the map to see what mountains and seas lie between Palestine and Europe. Pilgrims began to make this journey of hundreds of miles.

The Arabs who lived in Palestine at that time were friendly people. They allowed the pilgrims to come and go as they pleased. They traded with the visitors.

Peaceful pilgrimages ended when the Turks from Asia conquered the Holy Land. They were warlike and did not like to have foreign people visit their land. They treated the pilgrims cruelly. This aroused the people of Europe to gather armies and drive the Turks out of Palestine. These wars were called crusades. Men who fought in them were known as crusaders. For about three hundred years there was war between the Christians of Europe and the Turks. When the crusades finally ended, Palestine belonged to the Turks.

THE BEGINNING OF TRADE

Europeans had visited many different lands on their way to Palestine. They had seen beautiful cities, fine clothing, jewels, and glassware. They too wanted these comforts.

Traders and merchants began to send ships to Palestine and other countries of the Middle East. The Middle East means the countries at the eastern end of the Mediterranean Sea (see the map, page 49). Seaports in Italy grew busy and important. Then traders began to send caravans, or groups of pack camels, across the land to India, China (sometimes called Cathay), and other countries in Asia. We speak of these countries as the Far East.

THE ADVENTURES OF MARCO POLO

Two famous merchants who traveled from Italy to the Far East were the Polo brothers.
From what city did Marco Polo start? Trace his route to the East. How did his route differ from the trade routes? What bodies of water did he cross? What country in the East did he visit?

On their second visit to China they took along seventeen-year-old Marco Polo. Marco Polo, his father, and uncle left Venice, Italy, by ship. They crossed the Mediterranean (mɛdɪˈtɛr-ən) Sea and then continued by caravan. They traveled over hot, dry deserts, steaming lowlands, and the highest, most rugged mountains in the world.

At last they reached Cathay. Young Marco was delighted with everything he saw. The emperor Kublai Khan (kʊbˈli kɑhn) lived in a palace of gleaming white marble. The people in the palace were richly dressed in silks and satins. They wore jewelry set with precious stones. Marco Polo could hardly believe his eyes. He thought he must be dreaming.

The emperor received the Polos kindly. He was pleased to have them back. He was especially interested in Marco. “That young man looks quick and intelligent,” thought Kublai Khan. Marco Polo became the trusted friend of the emperor.

Years passed. The Polos had become important men in Cathay. But they began to think about returning home. So after twenty-four years the travelers finally returned to Venice.

How surprised their relatives and friends were to see them after so many years! The merchants had a hard time proving they really were the Polos. Marco himself was forty-one years old by the time they reached Venice. They sold the rubies, pearls, silks, satins, and other goods they brought from the East. The Polos became rich and powerful leaders in Venice.

Marco Polo loved to tell stories about his life in Cathay. People begged to hear them. After a while Marco Polo persuaded a friend to write the stories as he told them. What excitement this Book of Marco Polo caused! Many people thought he had made it up!

The first copies of Marco Polo’s book were written by hand, so there were only a few. When printing was invented, this book was one of the first to be printed. Then hundreds of people could get copies. Marco Polo’s book and the tales of other travelers made Europeans want to visit the Far East. They traveled farther and farther from home. Europe was waking up.
Prince Henry of Portugal was called Henry the Navigator because of his interest in finding better ways of sailing. He built a school where sea captains could learn to read maps and also to make better maps of their own voyages.

Trade with the Far East

Between the years 1300 and 1500 Europe's trade with the Middle East and the Far East grew rapidly. Genoa and Venice in Italy became the chief trading centers in Europe. In the markets of the Middle East traders from Asia bargained with the traders of Europe. Western merchants brought coarse woolen goods, iron goods, and leather. They exchanged their wares for the spices and jewels, the china and glass dishes, the tapestries, rugs, silks, satins, dyestuffs, and sugar of the East.

Traders began to follow regular routes, or roads, to and from the trading centers. The three most important trade routes are sometimes called the Northern Route, the Middle Route, and the Southern Route. Towns and cities grew up along each route.

The Northern Route began at Venice, went through Constantinople, and ended in China (see map, page 49). From Venice the Southern Route crossed the sea, went across Arabia by land, then on to India by sea. Genoa had taken the area around the Black Sea and controlled the entire Northern Route. The merchants of Venice used the Southern Route because they held the cities along it. Both Genoa and Venice had armies and warships to see that no one else used their routes. Merchants from other cities of Europe followed the Middle Route (mostly by land).

All the routes were partly by land and partly by sea. Two passed through the Holy Land. As you know, Turkey had conquered Palestine. When the Turks seized the ports in the Middle East, the Middle and Southern Routes were closed. Then the Turks conquered Constantinople and blocked the Northern Route. Trade between Europe and Asia was stopped.

THE SEARCH FOR AN ALL-WATER ROUTE TO THE FAR EAST

"We must have the products of the East," said Europeans. "Without spices our food will spoil."

"Unless we find a new route to the East, we are ruined," thought the merchants.

"An all-water route would be the best," they decided. "It costs less and it is safer and easier."

Henry the Navigator

Prince Henry was the son of the king of Portugal. He believed a sea route to the Far East could be found. Portugal is on a peninsula in southwestern Europe. It is well located for trade (see the map on page 49). Prince Henry said, "Sailors are afraid to go far from land. They should learn more about the world and about ships." So he built a school for sailors. The best geographers taught them about the world. The best navigators, men who knew how to sail ships well, taught them how to chart voyages.
Until Prince Henry's time ships had been small wooden vessels moved by the wind. Sailors had had no way of telling direction or where danger lay. By the time the trade routes were blocked, however, ships were being made stronger and better. New instruments made sailing safer. Navigators had learned to use the compass to tell in which direction they were sailing. They also used an instrument to tell in what latitude they were. Latitude, you will remember, means distance from the equator. Geographers were making better maps and charts to show where shallow water, rocks, or other dangers lay.

When Portugal had some well-trained sailors and navigators, Prince Henry said, "Now we are going to find a sea route around Africa."

Ship after ship sailed south along the western coast of Africa. When one returned, Prince Henry sent another. But Prince Henry died before his ships had rounded the southern coast of Africa.

**Dias and Da Gama, successful Portuguese explorers**

The men, however, were still afraid. "Sail as far as you dare," ordered their king. "Then build a tower on the shore to show where you turned back." Each year towers appeared farther and farther south along the western coast of Africa. At last a captain, named Bartolomeu Dias (bahr-tol'-oh-moy dë's), set out. He passed the southernmost tower. Then his ship ran into a storm. For days it was tossed about by wind and waves. After the storm Dias found himself sailing north along the east coast of Africa. Dias wanted to go on. But his men were frightened, so the brave captain had to turn his ship around and return to Portugal.

Dias wanted to name the southernmost point of Africa the Cape of Storms. But the king said, "We will call it the Cape of Good Hope." That was a good name. This voyage of Dias gave the Portuguese hope that they would find a sea route to Asia.

Trace the route of Da Gama around Africa. How much farther did he travel than Dias?

At last in 1498 a bolder captain, named Vasco da Gama (dah gah'-muh), sailed around Africa to Asia. He visited India and the Spice Islands. The rich products Da Gama brought back proved that he had reached his goal at last.

**Portuguese claims in South America**

About two years later a Portuguese ship sailing to India was blown westward to the coast of South America. The captain claimed the land he touched for Portugal. That is how a large part of South America became a Portuguese possession. We shall learn more later about this land.

Portuguese captains continued to use the route around Africa. The sailors of Portugal became the best in the world. Its merchants and traders became very rich. In this way, little Portugal became an important country in Europe.
HOW COLUMBUS FOUND AMERICA

Meanwhile other men were searching for a sea route to the Far East. Some sailed east, others south. One brave explorer left Spain and sailed west into the unknown ocean. His name was Christopher Columbus. Let us imagine that we are sailing with him.

THE STORY OF COLUMBUS

It is a dark, gloomy August night in 1492. Captain Columbus is standing on the deck of his tiny sailing vessel peering into the darkness. For more than two months his three little ships have been sailing across an unknown sea. Food is running low, and his sailors are hungry and frightened. Unless they reach land soon, he fears they will seize his ships and turn back. The captain’s eyes search the western horizon desperately.

Suddenly he starts! Is that a light in the distance? Captain Columbus calls his men. They too see the faint glow through the darkness. All are sure that the light is coming from land!

“Our long, hard voyage is over, men,” says Christopher Columbus. “Tomorrow we will row to shore.”

Columbus sends his men to their bunks, but he remains on deck. He is too happy for sleep. “A ship can sail west and reach the East,” he whispers. “Men have laughed at me for believing this. Tomorrow I will find the king of this land. Then I will return to Spain with the products of Asia. And everybody will see that I have been right.”

In his mind he returns to his years of struggle. He finds himself going over the important events of his life one by one. First he thinks of his childhood in Genoa, Italy.

Boyhood of Columbus

Christopher’s father was a wool comber. The family lived above the father’s shop. In those days Genoa was a great trading center. Whenever possible young Christopher would go to the harbor. There he listened to the exciting stories the sailors told. He decided to become a sailor. When he was fourteen, he went to sea.

A few years later Christopher was shipwrecked on the coast of Portugal. His brother was studying map making in Portugal at this time. Christopher found his brother and entered a school for navigators. While studying maps in this school, Christopher first got his new idea. “The world must be round, not flat!” he decided. “Travelers tell of a great sea east of Asia. The ocean west of Portugal is probably that very same sea. China must lie far to the west of Portugal across this ocean.” From that time on Christopher thought about nothing except getting a ship and men to test his idea.

Seeking help

Many persons laughed when Columbus said he could reach the Indies by sailing west. But King John of Portugal finally listened to his plans. He told Columbus to wait for an answer. Then he secretly sent a ship to test the plans. A storm in the eastern Atlantic frightened the sailors, and they soon turned back. They reported that the idea was impossible. The king refused to help Columbus.

But Columbus would not give up. From Portugal he went to Spain. He found that country at war. King Ferdinand and Queen Isabella of Spain had no time or money to spend on a voyage of discovery. They were fighting a war and could hardly raise enough money for armies to fight their enemies. For years Columbus followed them from camp to camp. They listened but would give him no definite answer.

Columbus decided to try to interest the French king in a voyage of discovery. He was getting ready to leave Spain for France when a messenger from Queen Isabella arrived. The queen promised Columbus money for ships, supplies, and men. At last he could make his voyage!
Columbus secured three sailing ships. They were called the *Niña*, the *Pinta*, and the *Santa María*. But it was hard to get a crew, as the men who sail a vessel are called. The men were afraid of falling off the earth or of being swallowed by sea monsters. Finally Columbus was allowed to get men from the prison to help sail his ships.

On a morning early in August, 1492, Columbus sailed with eighty-eight sailors. They were a hard crew to handle. They could not forget their fear of the “Sea of Darkness,” as the Atlantic was sometimes called. As days passed without sight of land, they began to grumble. The farther they sailed the greater were their fears. When Columbus refused to turn back, the crew threatened to throw him overboard.

Then things began to change. Signs of land appeared. Land birds flew overhead. A bush with berries on it was found floating in the water. The men lost their fears. They looked eagerly for the first sight of land.

The king and queen had promised money to the man who first saw land. Columbus now said he would add a silk coat to this gift.

**Land at last!**

At last, one night a faint light appeared in the distance. As the three little ships sailed on, the men caught sight of a thin, dark low-lying shadow. It was land — land at last!

Early in the morning of October 12, 1492, the men of the *Niña*, the *Pinta*, and the *Santa María* row to shore. Christopher Columbus wears the cloak and sword the king and queen gave him. He carries the flag of Spain, a letter of introduction, and gifts for the ruler of the country. When they reach the beach, they kneel and thank God for bringing them safely across the sea. Then they look for the king of this land. But they find only crude huts and brown natives. Columbus calls these people Indians. “This is an island near India. We must now find India,” he decides.

Columbus had reached the West Indies (see the map above). He named the island San Salvador (sän säl’vā-dōr). He also discovered Cuba and other islands of the West Indies. On another island, which Columbus named Hispaniola (hīs’pän-yō’lā), meaning “Spanish land,” his men found some gold.
This raised their hopes. But they found no cities, no palaces, no jewels.

By Christmas Eve they were short of supplies. That night a storm arose. The Santa María was dashed to pieces. Columbus decided to return to Spain. His men placed the gold they had found and some of the strange fruits and birds on the Niña and the Pinta. They also put several Indians aboard. Then Columbus bade farewell to the sailors whom he was leaving at the fort he had built on Hispaniola and sailed for home.

**Back to Spain**

What a welcome Columbus received in Spain! Bells rang. People cheered. Everybody treated him like a hero. Crowds lined the streets through which he passed on his way to the court. Queen Isabella and King Ferdinand received him with great honor. Everyone believed Columbus had reached the Indies, or islands near India. Columbus himself was sure that on his next voyage he would find India.

**Later voyages**

It was easy for Columbus to arrange for a second voyage. Settlers, sailors, explorers, missionaries, and adventurers begged to go with him. Fifteen hundred went. They took with them horses, cattle, lemon trees, sugar cane, and other plants. Spaniards were going to make a settlement in the land Columbus had found.

What an unpleasant surprise they had at Hispaniola! Not a Spaniard was there to greet them! Both the men and fort had disappeared. Had the Indians killed the Spaniards? But the Indians had disappeared too.

The settlers began to build a town on Hispaniola. Columbus wanted to continue his exploring so he left his brother to govern the settlers. He sailed among the islands of the West Indies seeking a passage to India. The map on page 53 shows that the West Indies are nowhere near India. Of course, Columbus found no passage. Then his supplies ran low, and he had to return to Spain. King Ferdinand and Queen Isabella were not pleased. Still they gave him money for another voyage.

On the third voyage he reached a place where the people wore great strings of pearls. “This is India!” he said, still hopeful. Again he was wrong. He had been sailing along the coast of South America and Central America.
When he returned to Hispaniola he met with more trouble. In his absence a new governor had arrived. He accused Columbus of mistreating the settlers and arrested him! Six years after his great discovery Columbus returned to Spain in chains!

Columbus had no trouble proving he had done no wrong. King Ferdinand set him free and helped him make a fourth voyage. Again Columbus did not reach Asia.

Today we know that Columbus had discovered a new world. But he did not know this. To the end of his life he believed that he had reached islands near the coast of Asia.

NOT COLUMBIA, BUT AMERICA

The land Columbus discovered does not bear his name. While Columbus was sailing near the Americas, another Italian sailor was also exploring the coast of the Americas. His name was Amerigo Vespucci (ä-mër-ë'gō vēs-pōöt'chē). He sailed along the eastern coast of both North and South America. He wrote letters about his trips to people in Europe. In one letter he wrote, “This is a new continent which Europeans have never seen before. A whole new world lies between Europe and Asia.”

Some of Amerigo’s letters reached a learned man who was writing a new geography. He believed that a new continent had been discovered. In his geography he drew a map of what he thought it looked like. Because Amerigo Vespucci had first spoken of this land as the New World, the new continent was named for him. In that way our continents came to be called America instead of Columbia.

Today we honor Columbus as the greatest discoverer of all time. He dared to do what others of his time would not. He sailed westward across unknown waters and found a new land. His courage opened a new world.

EXPLORATIONS IN THE NEW WORLD

After Columbus’s first voyage many Spanish explorers came to the New World. Some came to seek gold, others for adventure.

SPANISH EXPLORERS

One Spanish adventurer whose name was Balboa (bål-bō’ā) had to flee Hispaniola to escape arrest for debt. He stowed away on a ship that took him to South America in 1513.

Balboa’s discovery of the Pacific

When the ship reached the shore, Balboa found himself in Panama. Soon he met an Indian chief who told him about a great body of water lying to the west.

“This water lies beyond towering mountains,” said the chief. “The journey is almost impossible,” said the Indians.

“I’ll do the impossible,” determined Balboa. He gathered together a group of Spaniards and Indians. After many days of hard travel across the hot jungle and over high mountains they reached the narrowest part of Central America. Here North America and South America are connected by an isthmus. An isthmus, as you know, is a narrow strip of land connecting two large masses of land. Only about fifty miles wide, this isthmus is a land of steep mountains and hot, steaming jungles.

It was torture to cross the isthmus. But Balboa drove his men on. Near the top of the last mountain, he ordered his men to wait. He wanted the thrill of discovery for himself.

Balboa stood alone on the mountain top and looked down on deep blue waters. He had no idea how large the ocean was, nor what lands it touched. He was the first white man to see the ocean now called the Pacific.

Magellan’s marvelous voyage

About six years after Balboa discovered the Pacific Ocean, Ferdinand Magellan (mä-jēl’ān) found a passage leading into it.
Magellan and Drake sailed around the world. What places did Magellan visit that Drake did not? Where did Drake start from? How far north along the coast of North America did he go?

Magellan was a Portuguese captain who had sailed from Spain. He was determined to reach the Spice Islands by sailing west. (Find the Spice Islands on the map above.) “I’ll find a passage through the New World or around it!” he vowed. His five ships sailed southward along the coast of South America. The explorers spent a miserable winter in the southern part of the continent. The sailors wanted to go home.

But Magellan persuaded them to sail on. They came to a narrow strait, or waterway between two masses of land, near the southern end of South America. One of the ships had been lost on the way. As the others entered the strait, fog hid the skies. Mountainous waves battered the ships. After several weeks three of the vessels reached the Pacific Ocean. Another ship had disappeared in the fog. It later turned up in Spain.

Magellan’s men begged him to turn back. “Isn’t discovering a passage through America enough?” they asked. “Our food is nearly gone!”

Still Magellan sailed on and on. Months later Magellan and his crew, starved and ill, reached a group of islands near Asia. These islands were later named the Philippines (fil’i-pëns) for King Philip of Spain. On one of the Philippines Magellan was killed by a native of the islands.

One September day in 1522 Magellan’s ship, the Victoria, laden with spices and manned by the eighteen sailors who were left, returned to Spain. Three years had passed since its departure. This tiny vessel had sailed around the world, or circumnavigated the globe. This circumnavigation of the globe proved that the world is round. It also proved that the waters of the earth form one great ocean. The continents are huge masses of land lying in this ocean.

Traders thought Magellan’s route to Asia was too long. But soon Spaniards stopped looking for an Eastern route. This was because in America another Spaniard discovered a land richer than the Far East. His name was Hernando Cortés (kôr’täs’).

**Cortés and the Aztecs**

Living in Cuba, Cortés had heard tales of a rich country somewhere in Mexico. Cortés was an adventurer who could not overlook a chance to get rich. In 1513 he formed a party
Cortés sailed from Cuba to take Mexico. Follow his route on the map on page 57.

which sailed to the eastern coast of Mexico. There they built Veracruz (vā’rā-kroos’). This city is still standing.

The Indians whom Cortés found near the coast told him about a great tribe called the Aztecs, who lived on a plateau in Mexico. The Aztecs were rich and powerful.

Cortés prepared to cross the Sierra Madre (mā’drā), a wide range of steep mountains on the east side of the plateau. His men complained about the hardships of such a journey. Cortés then burned all his ships but one. “If anyone is afraid, take this ship and return to Cuba. The brave men will follow me,” he said. None of the men went on board the ship. No one wanted to admit he was a coward.

After long forced marches Cortés and his men, hungry and footsore, finally reached the mountains overlooking the Aztec city. On islands in a blue lake surrounded by moun-
tains lay the beautiful capital of the Aztecs. Today Mexico City stands here. The Spaniards saw splendid palaces and temples and magnificent gardens. Bridges connected the islands with the mainland.

Montezuma, the ruler of the Aztecs, had heard that the white men were coming. Montezuma sent rich presents of gold and silver, precious stones, and fine cloth to the Spaniards. He hoped they would take the gifts and leave. Instead the treasures aroused their greed. They were more anxious than ever to conquer his country. And now they were at his very gates!

Montezuma invited the white men to be his guests. If he planned to kill them, he did not get the chance. Instead Cortés captured the Aztec ruler. When the Indians tried to rescue their ruler, fighting broke out. But the Aztec weapons and armor were no match for those of the white men. The stamping, snorting horses frightened the Indians, who had never seen such creatures before. The Aztecs turned and ran at the sight of the horses. Later they fought so bravely that it took Cortés more than two years to conquer all the Aztecs.

Cortés sent shiploads of treasure from Montezuma’s storehouses to his king. Spain no longer needed the riches of the Far East.

Pizarro and the Incas

A Spaniard named Francisco Pizarro (pē-thär’rō) found another rich land in the Andes Mountains. On the map, page 57, find Peru. In this region lived a happy, peaceful group of Indians. Their ruler was called the Inca, which means “Child of the Sun.” His subjects also came to be known as the Incas. They had even more gold, silver, precious stones, and fine cotton than the Aztecs. They did not love gold and silver for what they could buy. They used them to decorate their temples, palaces, and the clothing of their ruler.

Francisco Pizarro, a cruel adventurer, had been with Balboa in 1513. It was then he
Pizarro, who conquered the Inca Indians of South America, seized their gold and jewels.

heard of the “Children of the Sun” and their land of gold. He planned to conquer the Incas.

About twenty years later Pizarro returned to Peru with his followers. After they landed, they journeyed to the Inca cities in the Andes Mountains. The Inca treated the white men as honored guests. Like Cortés, Pizarro tricked his host and made him a prisoner. He wanted the Inca’s wealth. At first the Inca did not understand what Pizarro wanted. Then he said, “My people will fill this room with gold, and another twice as large with silver if you will set me free.” Pizarro agreed. The Inca then sent a message to his subjects. Soon they brought the gold and silver to ransom their ruler. But when he had the treasure, Pizarro killed the Inca and made himself master of the land.

Pizarro had stopped at nothing to get the Inca’s wealth. But the Spaniards quarreled over dividing the treasure, and Pizarro was killed by one of his own followers.

**Ponce de León in Florida**

Ponce de León (pôn’thâ dâ lâ-ôn’) was a Spaniard who had once sailed with Columbus. Later he became governor of Puerto Rico (pwêr’tô ré’kô), an island in the West Indies. Ponce de León was sad because he was growing old. He loved exploring and danger.

“In that direction lies a magic fountain,” said an Indian pointing northwest. “Anyone who drinks its waters never grows old.”

Ponce de León determined to find this fountain of youth. He sailed from Puerto Rico to what is now Florida to look for the magic fountain. He tasted the water of every river and drank from every brook. Of course, he found no waters which would make him young again.

Ponce de León returned to Puerto Rico but he remembered the beauty of Florida. A few years later he went back to build a colony there. But an arrow from the bow of an Indian killed him.

Ponce de León was the first Spaniard to explore a part of North America. His explorations gave Spain a claim to the southeastern part of our country.

**De Soto and the Mississippi**

De Soto, the gay, young governor of Cuba, went searching for treasure and glory. He and his followers reached Florida in 1539. For more than four years they wandered through much of what is now the southern part of the United States. In the swamps of Florida, the Indians, mosquitoes, and fever made their life miserable. The laughing young explorer became a harsh leader who refused to give up. The men dragged themselves over mountains and plains north to the Carolinas. Then they pushed westward until they came to the Mississippi River. De Soto and his party were the first white men to see the mighty Mississippi.
They crossed the Mississippi on rafts made of driftwood. At first the Indians west of the Mississippi considered De Soto a god. When they learned that he was not, they refused to guide or feed his men. After another year of wandering, the Spaniards recrossed the river. They found no gold, but they claimed for Spain all the land the Mississippi River drained.

Still De Soto was not satisfied. He continued his search for gold until he became sick and died. He was buried in the river he had discovered. Some of his men succeeded in floating down the river and then journeying to the Spanish settlement in Mexico.

Other Spanish adventurers

Other Spaniards went north from Mexico on exploring trips. One of these, Francisco Coronado (frän-sëskô kôrô-nä' thô), led a party through what is now our Southwest and gave Spain a claim to that region. Because of adventurers like Ponce de León, De Soto, Coronado, and Spanish priests who braved the wilderness, Spain claimed the southern and western sections of our country. This was only a small part of the New World which Spaniards claimed about three hundred fifty years ago. (The map on page 65 shows us Spain's lands in the New World.)

ENGLISH EXPLORERS

When King Henry VII of England heard that Columbus had reached the Indies, he was unhappy. "If I had helped Columbus when his brother came to me, England would be getting rich now," he thought.

Another Italian navigator, John Cabot (käb'ät), lived in England at that time. He asked King Henry for permission to search for another route to the Indies. The king gave Captain Cabot permission to go exploring for England. Permission was all King Henry gave. Cabot himself had to raise the money he needed. In 1497 he sailed westward into the Atlantic in one ship with eighteen men. England also had entered the race to the East. At that same time Columbus was planning his third voyage.

Cabot's voyages

Cabot had promised the king he would not go near the route Columbus had found. England did not want a war with Spain. So Captain Cabot sailed north, then west.

Almost directly across the Atlantic Ocean from England he reached a continent which he thought was China. What continent had he reached? Cabot was the first white man to set foot on North America after the Norsemen. The land he had found was probably Newfoundland or Nova Scotia (nô'vâ skô'shâ). But Cabot thought he had reached Asia.

"By some accident I missed the cities of Cathay," he told the king. "I must go back and explore the coast more thoroughly."

On his second voyage Cabot followed the coast of North America from the Gulf of St. Lawrence south to Cape Hatteras (hät'ër-as). Still he found no cities, no spices, no gold. But off the coast of Newfoundland Cabot and his men found millions of fish. The sailors lowered baskets into the water and scooped them up. Cabot had discovered the Grand Banks, the greatest fishing grounds in the world.

King Henry was disappointed in Cabot's discovery. But years later Englishmen realized the importance of the Grand Banks. England claimed North America because of Cabot's explorations.

Sir Francis Drake

About sixty years after John Cabot's voyage, Queen Elizabeth was the ruler of England. During her reign Englishmen became good sailors and clever navigators. Some of them found a way of getting part of Spain's treasure.

At their own expense, Englishmen began to fit out swift armed sailing vessels, called privateers. These ships waited in the Atlantic Ocean somewhere along the route of Spain’s
Many French and English explorers came to North America. Which explorer gave France a claim to Louisiana? To New France? Which explorer gave England a claim to North America?

Silver Fleet. The Silver Fleet carried the riches of the New World to Spain. In this fleet were many large three-decked sailing ships called galleons. When a Spanish galleon came along, the swift English privateer suddenly bore down and captured it. Englishmen swarmed up on the ship helping themselves to the treasure. Then they sailed away before the Spaniards had time to fire a gun.

The most famous of the English sea rovers was Francis Drake. Time and again, Drake robbed the Silver Fleet. Even his sailors became so rich that some of them ate from golden plates with golden spoons and knives.

Drake was not satisfied with robbing Spanish ships on the Atlantic Coast alone. He sailed through the Strait of Magellan to the Pacific Ocean. He took much treasure on the west coast of South America. To avoid Spanish warships which might be waiting for him he sailed on across the Pacific and so around the world.

Drake was the second man to circumnavigate the globe. He followed Magellan's route around the Cape of Good Hope (see page 56).

The English people were overjoyed when Drake reached home. At first, Queen
Sir Francis Drake, an Englishman, was the second man to sail around the earth. Who was the first to circumnavigate the earth? Trace the routes of both on the map on page 56.

Elizabeth hesitated about rewarding him because of the damage he had done to Spain. Later she came to his ship at his invitation. How her eyes sparkled at the treasure he showed her! The Spaniards thought of Drake as a thief and a pirate, but Queen Elizabeth made him a knight. After that he was called "Sir Francis Drake."

Queen Elizabeth was very clever. She pretended not to know that her subjects were building privateers. In that way she did not have to pay for either ships or crew. England was the only nation to get a strong navy without paying for it. It also got a good share of the wealth of the New World. The little island kingdom became a rich, strong nation. It dared to lay claim to much of North America.

**Raleigh's colonies**

Englishmen also tried to settle the land claimed by Queen Elizabeth. Sir Walter Raleigh (rō'lī) spent a fortune trying to start English settlements in America.

He sent a group of men to build a colony on Roanoke Island off the coast of what is now North Carolina. The settlers spent their time exploring instead of raising food. Soon their food was gone. It looked as if all would starve. Luckily for them, Raleigh's friend Drake stopped by to see how they were getting along. The starving colonists begged him to take them home. So they all returned to England.

The failure of his colony did not make Raleigh give up. The following year he sent another group of colonists to Roanoke Island. This time women and children went along with the men. "The men will work harder if they know they must feed their families," he thought. But crops did not grow well on the poor soil of Roanoke Island. When the settlers ran out of supplies, their governor had to go back to England for more food. The governor hated to leave the colony. He especially hated to leave his daughter and his little granddaughter, Virginia Dare. Virginia Dare was the first English baby born in America.

At this time England was at war with Spain. There were no ships sailing to America. It was three years before the governor again set foot on Roanoke. Imagine his horror to find that the settlers had completely disappeared. No trace has ever been found of Raleigh's settlers. To this day we speak of Roanoke as the "Lost colony."

Sir Walter Raleigh failed to build a colony in America. His failures showed Englishmen that many men would have to work together to hold the land England claimed.

**FRENCH EXPLORERS**

Late one summer a small ship was exploring the waters of a gulf near Newfoundland. Its captain, Jacques Cartier (zhāk kär'tyā’), had been sent by the king of France to find a westward passage through the land. Cartier cruised in and out among the islands until at
last he found such a passage. This was the Gulf of St. Lawrence. By this time it was almost winter. The explorers had neither food nor supplies for a winter in America. On the island at the mouth of the passage the crew set up a cross on which was a shield bearing the arms of France. Then they sailed homeward. Cartier felt sure he had found a westward passage to the Far East.

**Cartier and the St. Lawrence**

The French king gave Cartier another fleet, and Cartier sailed back to the Gulf of St. Lawrence. He found the waterway which he thought was a passage through North America. He sailed westward feeling sure that he would reach the Pacific Ocean. He came to an Indian village where the chief tried to tell him that he was sailing not on the ocean but on a river. But the Indian could not make the Frenchman understand. When Cartier reached the place where Montreal (mônt’re-öl’) now is, he understood. “The Indian was telling us that this is a river,” he said sadly. “We’ll call it the St. Lawrence River.”

The Great Lakes, the St. Lawrence River, and their tributaries form a river system which drains the St. Lawrence Basin. The map, page 61, shows how much land the St. Lawrence Basin includes. Cartier claimed it all for France and called it New France.

Frenchmen paid no attention to Cartier’s claim for many years. Then fox, beaver, and other fur-bearing animals were discovered in its forests. French trading companies became interested. They sent trappers and traders to New France. These men spent years in the wilderness collecting furs. But they always returned to France. Seventy years passed but there was not one permanent, or lasting, French settlement in New France.

**Champlain and Quebec**

One morning in 1608 a boat flying a French flag lay anchored in the St. Lawrence River. It was near the Indian village of Jacques Cartier, the Frenchman, found the St. Lawrence River as he was looking for the Northwest Passage. Cartier claimed all the land drained by this river for France.

Quebec. Indian canoes were beached on the shore. Axes could be heard from the forest near by. A Frenchman was directing the building of a fort and a storehouse. A storehouse is a building where food, ammunition, and other supplies are kept. “We will build our fort on this cliff high above the river,” he said. “Then we can come here in case of attack. Our homes will be at the foot of the cliff near the river, and we will trade with the Indians. Ships from France will be able to reach us.”

This determined leader was Samuel de Champlain (shām’plān’). Like Raleigh he believed in settling the land his country claimed. He had brought twenty-seven men to build a colony. They called their settlement Quebec. This was the first permanent French settlement in the New World. For this reason he is known as the “Father of New France.” The king made Champlain governor of New France.
Champlain then set out to find a northwest passage through America to the East. We know that he found none. During his exploring trips he discovered Lake Huron and Lake Ontario, two of our Great Lakes. Farther south he found a beautiful, smaller body of water which is called Lake Champlain in his honor.

Champlain helped France hold its possessions, and he added to them. Unfortunately he made enemies of the powerful Iroquois Indians because he joined other tribes in a war against the Iroquois.

**Frenchmen in the wilderness**

Frenchmen came to America for furs and adventure. Explorers, hunters, and trappers added land to New France. Some followed the St. Lawrence River westward. They discovered the source, or beginning, of the Mississippi River, and the rest of the Great Lakes. What are the names of the five Great Lakes?

Wherever daring Frenchmen went, priests followed. They went among the most savage tribes to teach the Christian religion. They, too, helped New France grow.

**Joliet and Marquette**

When they had found the source of the Mississippi, Frenchmen wondered where its mouth, or end, was. “Perhaps it flows into the Pacific Ocean,” said the governor. He sent a fur trader and a priest to find out. You can see they were still hoping to find a passage through North America.

Louis Joliet (zhô’lyë’), the trader, and Jacques Marquette (mär’kët’), the priest, paddled up the Fox River from Lake Michigan to its source. Carrying their boats on their backs, they crossed a narrow strip of land until they reached the Wisconsin River. Then they traveled down the Wisconsin to the place where it flows into the Mississippi. They floated down the Mississippi past the mouths of the Ohio and the Arkansas rivers. Marquette and Joliet turned back at the place where many years earlier De Soto had first seen the “Father of Waters.” They did not know that Spain had already claimed this land. But they had proved that the Mississippi River flows south and east.

“The Mississippi River is not a passage to the Pacific Ocean,” they reported. Then Joliet went back to his fur trading. Marquette returned to his preaching.

**La Salle — greatest of the French explorers — on the Mississippi**

The greatest of all French explorers was Robert La Salle (lā säl’). His ship, called the *Griffin*, was the first sailing vessel on the

*Beitmann Archive*
Robert La Salle, who also explored the Mississippi, did not turn back until he reached its mouth at the Gulf of Mexico. Then he claimed the whole river valley for France's king.

Great Lakes. He urged Frenchmen to build forts along the great waterways they claimed. At one time he was ruler of all the French possessions in North America.

La Salle became known as the "man with the iron will" because he never gave up. He made up his mind to follow the Mississippi to its mouth. After many misfortunes he reached the Gulf of Mexico. He named the Mississippi Valley Louisiana in honor of King Louis XIV and claimed it for France. Find this huge area on the map on page 65.

La Salle sailed to France to get colonists. He wanted to build a settlement at the mouth of the Mississippi River. In this way he could hold the land for France. The ship bringing La Salle and his settlers somehow missed the river's mouth. They landed in Texas on Spanish territory, where they were in danger of attack by Spaniards and Indians. La Salle could not find the place he had chosen for the settlement. So he decided to go to New France to get help for his suffering colonists. On the way north he was shot by a jealous follower, but a few of La Salle's colonists finally reached New France.

Robert La Salle's dream of a colony failed, but he added the huge Mississippi Valley to the French Empire. The map on page 65 shows that the French claimed the land drained by the St. Lawrence River system and the Mississippi River system. They controlled the great waterways which were the only roads into the continent. Frenchmen were late in starting, yet by 1700 they had laid claim to a large part of North America.

THE DUTCH IN AMERICA

At first the Dutch, who lived in the Netherlands, or Holland as it sometimes is called, did not care to join in the race for land. Dutch sailors used Portugal's route around Africa. Their merchants were getting rich through the trade that they were taking away from the Portuguese. The Dutch East India Company was doing well.

But the route around Africa was long. "Others are looking for a northwest passage. Wouldn't a northeast passage around Europe be shorter?" asked Dutch traders. So they employed Henry Hudson, an English navigator and explorer, to sail in search of such a passage through the waters North of Europe.

Hudson's first voyage

Henry Hudson left Amsterdam in a gaily decorated ship called the Half Moon. His crew of eighteen or twenty men was made up
of Englishmen and Dutchmen. The sailors could not understand each other and did not get along well.

When they reached the cold seas to the north of Europe, the Half Moon was surrounded by towering icebergs. The sailors were frightened. "Turn back!" they cried.

"I must find a passage to the East," said the captain. "Will you sail west and help me find a northwest passage through America?" His men agreed, and across the Atlantic went the Half Moon.

On the Atlantic Coast of North America, Hudson found a deep bay. He decided that this was the beginning of a passage, so he steered the Half Moon into it. As he sailed inland, the banks became higher and the waterway narrower. Then it became too narrow and shallow for the ship. Some of the men rowed northward in a small boat. They reported that the water was no longer salty. They had explored the beautiful river now called the Hudson. Captain Hudson claimed the land for Holland, but he had failed again to find a passage to the Far East which all nations were hoping to find.

Henry Hudson knew that the English had already made their first settlement at Jamestown, Virginia. He did not know that Champlain was claiming land near the Hudson River for France. The map on page 61 shows that the Dutch had taken land which both the French and the English claimed.

**The founding of New Netherland in the New World**

When the Half Moon returned to Holland, members of the Dutch East India Company were disappointed to learn that no trade route to the East had been found. But they were pleased when they saw the beaver, otter, mink, and muskrat skins which had been brought back. "Captain Hudson has found something which will bring us wealth, after all," said the Dutchmen. They called the land in North America, New Netherland.

The Dutch East India Company immediately sent trappers and traders to the wilderness along the Hudson River. They built trading posts at which Indians and Dutch trappers traded furs for food, clothing, and other articles. Shiploads of furs from America made the Dutch merchants feel pleased with the result of Hudson's voyage.

To protect their small strip of North America, the Dutch built Fort Orange where Albany now stands. They also built another fort where New York City is located.
Hudson's second voyage

You are probably wondering what became of Henry Hudson. An English trading company hired him to try once more to find a northwest passage. So Henry Hudson set sail again. With him he took his son. On this voyage he sailed farther northwest than any other European had ever been. Then he found a huge arm of the sea which cuts into North America. Hudson sailed west for days without seeing land ahead.

Winter comes early in these northern lands. The waters froze suddenly, and the explorers were trapped! They dragged their ship and supplies to the frozen shore. They spent a long, miserable winter there. At last spring came, the ice melted, and the crew prepared to return to England. But when they shoved the ship into the water they heard Captain Hudson's orders, "Steer west!" said he.

"This waterway is sure to lead us into the Pacific and on to the Far East."

"Hudson is mad! There is no such passage to the Pacific," cried the crew. "We want to go home." Some of the men planned secretly to get rid of the captain. They seized Hudson, his son, and seven loyal men and set them adrift in a tiny boat. No one knows what happened to them. Today we call this arm of the sea Hudson's Bay.

Back in England Hudson's crew told of the large bay which they had discovered. England claimed the land around Hudson's Bay. Henry Hudson's voyages gave both England and the Netherlands claims to regions rich in fur-bearing animals.

Brave explorers gave Spain, France, England, and the Netherlands claims to North America. But it remained for groups of settlers to back up these claims.

TO HELP YOU LEARN

People to Remember

La Salle Balboa Henry Hudson
Pizarro Cabot Marco Polo
Coronado De Soto Leif Ericson
Cartier Cortés Kublai Khan
Columbus Da Gama Prince Henry
Queen Elizabeth Ponce de León
Bartolomeu Dias Queen Isabella
Amerigo Vespucci Sir Walter Raleigh
Samuel de Champlain Sir Francis Drake
Ferdinand Magellan

Words and Terms You Should Know

crew galleon settlement
vikings crusades storehouse
compass permanent pilgrimage
navigator privateer trade route
pilgrim

A Matching Game

The phrases below explain, or define, the words and terms listed above. Number a paper from 1 to 14. After each number write the word or term which matches the definition.

1. A sea rover, or adventurer, who sailed far into the Atlantic in early times
2. A road or route used by travelers going to and from cities where they traded
3. To sail completely around the world
4. A person who knows how to sail a ship well
5. A journey made for religious reasons, usually to a holy place
6. An instrument used by sailors to find directions
7. Wars to take the Holy Land away from the Turks
8. A village or community started by people from another country
9. A large sailing vessel having three or four decks
10. An armed sailing vessel owned by an individual or a private company
11. A building where supplies are kept
12. Sailors who man a vessel
13. Something which lasts
Can You Answer These?

1. Who were the first people from Europe to visit the New World? How long did they stay in America?
2. How did pilgrimages and the crusades lead to the growth of trade between the East and the West?
3. How did Marco Polo’s book lead to trade with the Far East?
4. Why did Europeans need a new route to the Far East after the Turks gained control of Constantinople?
5. Which country led the race for an all-water route to the East? What part did Prince Henry the Navigator play in the search for a sea route? Bartolomeu Dias? Vasco da Gama?
6. What new idea did Christopher Columbus have about reaching the East? How did he get this idea?
7. How did Columbus finally get help to carry out his idea? How did he discover the New World? On what island did he land? What did he find there? What did he take back to Spain with him? What kind of welcome did he receive when he returned to Spain? How many other voyages did Columbus make to the New World?
8. How did the New World happen to be named America?
9. How did Magellan prove that Columbus was right when he said he could sail west and reach the East?
10. Why did Spain stop looking for a new route to India?
11. Name six explorers who gave Spain the right to claim a large part of the New World. What regions of the New World did these men explore and claim for Spain? The map on page 57 will help you find the answers to these questions.
12. What early explorer gave England a claim to land in North America? How did England try to hold its claims in the New World?
14. What Englishman gave the Netherlands a claim to land in the New World? Where was this land? What was it called?

Who’s Who

The phrases which follow describe some of the people whom you have met in this unit. Match the descriptions with the names. The list under “People to Remember,” page 68, will help you.

1. Discovered the New World in 1000
2. Discovered the New World in 1492
3. Conquered the Incas of Peru
4. First called America the New World
5. Discovered the Mississippi River
6. Ruled Cathay, a rich country in Asia
7. First circumnavigated the globe
8. Tried to build a colony on Roanoke Island
9. Was called the Father of New France
10. Found the first all-water route to India
11. Gave England a claim to North America
12. Told Europeans about the wonders of Asia
13. Gave the Netherlands a claim to land in the New World
14. Built a school for sailors
15. Furnished Columbus with money for ships, supplies, and men
16. Took Spanish treasure for England
17. First Spaniard to explore North America
18. Discovered the Pacific Ocean, which he called the South Sea
19. Found great wealth in Mexico
20. Claimed the Mississippi Valley for France

Using Maps

1. On the map on page 7 find the continents of Europe, Asia, and Africa. This was known as the Old World. Which continents are called the New World?
2. On the globe on page 46 trace the route of the vikings. What parts of North America did the vikings visit?
3. On the map on page 49 find the route of Marco Polo. Find the three trade routes to the East.
4. On the map on page 53 trace the route of Columbus’s first voyage. Where did he go on his third voyage?
5. On the map on page 56 trace the routes of Magellan and Drake.
6. The routes of which Spanish explorers are shown on the map on page 57? What did Balboa discover? What country did Cortés conquer? What did Ponce de León discover?
7. Trace the routes of the explorers on the map on page 61. For what country was Cabot exploring? Cartier? Hudson?
8. Why did the Spaniards who settled in the New World choose the low latitudes, or the tropics, for their first settlements?
9. Why was it likely that John Cabot, who sailed from England, should reach North America rather than Central or South America? A globe will help explain this.

**Can You Choose the Right Answer?**

Below is a list of sentences with three possible endings. Choose the ending which will make each sentence true.

1. The birthplace of Columbus was
   (a) Genoa (b) Venice (c) Cathay
2. The country which was known as the Holy Land was
   (a) India (b) England (c) Palestine
3. The city whose capture blocked trade between Europe and Asia was
   (a) Venice (b) Genoa (c) Constantinople
4. The country from which Columbus set sail was
   (a) England (b) Spain (c) Portugal
5. The river Cartier explored and claimed for France was the
   (a) St. Lawrence (b) Mississippi (c) Hudson
6. The country in the Far East which Marco Polo visited was
   (a) England (b) Palestine (c) Cathay
7. The great body of water which Columbus crossed was the
   (a) Atlantic Ocean (b) Indian Ocean (c) Mediterranean Sea
8. Genoa’s rival for trade with the Far East was
   (a) Cathay (b) Constantinople (c) Venice
9. The continent which the English explored and claimed was
   (a) Africa (b) Asia (c) North America
10. Countries of the Far East are on or near the continent of
    (a) Asia (b) Africa (c) Europe

**Interesting Things to Do**

1. Pretend that you are one of the persons listed at the top of the next column, and tell your story to your classmates. Use the globe to show where your adventures took place.

Leif Ericson  
Henry Hudson  
A Crusader  
Marco Polo  
Francis Drake  
Vasco da Gama  
Ferdinand Magellan  
Christopher Columbus  
Francisco Pizarro  
Hernando De Soto  
Hernando Cortés  
Robert La Salle

2. Divide the class into groups. Let each group choose an explorer as a leader. Plan a little play to give for the rest of the class. If you wish, you may give this as a shadow play. Choose boys and girls to narrate the story of an explorer while a group acts it out behind a screen.

3. Make up riddles about the people you met in the story of discovering the New World. Tell some important things about the person and end by asking “Who Am I?”

4. Read about ships and sailing in Columbus’s time. Make models of Columbus’s three ships, a Spanish galleon, and an English privateer.

5. Pretend that you are a newspaper reporter living in the Age of Discovery. Write an article about one of the explorers, and make it so exciting that everyone will want to buy a paper.

6. Collect poems and pictures which tell about the explorers of the New World. Arrange them according to time or people. This might be the beginning of a social-studies scrapbook which will give you much pleasure.

7. With the help of your teacher make a frieze, or border of pictures, telling the story of this unit.

8. Hold an exhibit of all the things you have collected or made while studying this unit.

**Things to Think About**

1. Columbus was not the first European to sail west and reach land. The vikings had done that almost five hundred years earlier. Nor did Columbus know that he had found a new world. Why then should he be honored as the discoverer of America?

2. Columbus took six Indians back to Spain with him when he returned from his first voyage. We can imagine that the king and queen of Spain found the Indians, with their painted bodies and feathered headdresses, very strange. What do you suppose the Indians thought of the king and queen and the Spanish court?
3. The new land was not named for its discoverer. How did this happen? Do you think this was right?
4. Someone once said that the discovery of America was "a lucky accident." Do you agree? If so, explain.

**Finding the Right Order**

Below are six sets of sentences which tell the story of the discovery of America. In each set are important events in the story. They are not in the order in which they happened. Decide which came first, which happened next, and so on. Rewrite them in the right order.

1.  
   a. Europeans learned to like the products of the East.
   b. Pilgrims from Europe traveled to the Holy Land.
   c. The warlike Turks conquered the Holy Land.
   d. Crusaders tried to take the Holy Land away from the Turks.

2.  
   b. Spain, England, France, and Holland claimed land in the New World.
   c. Christopher Columbus discovered the New World while sailing for Spain.
   d. Henry Hudson discovered the Hudson River while sailing for the merchants of Holland.
   e. Jacques Cartier explored the St. Lawrence River for France.

3.  
   a. Bartolomeu Dias was blown around the Cape of Good Hope.
   b. Prince Henry built a school to train sailors and navigators.
   c. Vasco da Gama sailed around Africa to India.
   d. Prince Henry sent ships to search for a water route around Africa.

4.  
   a. Columbus tried to get help from Portugal and Spain.
   b. Columbus said he could sail west and reach the East.
   c. Columbus died believing he had reached the East Indies.
   d. Columbus sailed west and discovered the New World.

5.  
   a. Cortés conquered the Aztecs and took Mexico for Spain.
   b. Balboa discovered the Pacific Ocean.
   c. Pizarro added Peru to the Spanish possessions.
   d. Magellan proved Columbus was right by circumnavigating the globe.

6.  
   a. The Turks closed the trade routes between Europe and Asia.
   b. After the Crusades trade grew up between the East and the West.
   c. For a while traders followed certain trade routes by land and sea.
   d. Europeans began to want an all-water route to Asia.

**Using a Time-line**

A time-line is useful to show the order in which important events of history took place. Here is a time-line for Unit 2. Notice that it extends from the year 1000 (the first date mentioned in your text) to 1700 (through the end of the period discussed in this unit). Some of the important events which took place between these two dates are shown in their proper place on the time-line. On a sheet of paper or on the blackboard, copy the time-line and add to it other events mentioned in the text.

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<th>1000</th>
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<tr>
<td>Leif Ericson discovers America (1000)</td>
<td>Marco Polo's journey to China (about 1260)</td>
<td>Columbus discovers America (1492)</td>
<td>Magellan starts on voyage around the world (1519)</td>
<td>Hudson discovers Hudson River and Bay (1609)</td>
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Five countries of Europe claimed land in the New World by the early 1600’s. They were, as you know, Portugal, Spain, England, France, and the Netherlands. One race for land had almost ended, but another one had begun. Each nation wanted to settle its lands in America. Settlers could protect the land and drive off anyone from another nation who tried to take it.

You know that the Spaniards began immediately to settle almost every part of their lands. The English were much slower in starting their settlement. The lands they claimed were farther north, and the climate was colder. The Indians who lived there were poor. Their weapons and tools were made of stone. “These Indians have no gold, silver, or precious stones,” reported the English explorers. At first the English did not think it worth while to settle such land.

After many years the English realized that good soil, fish, furs, and forests made their...
The Northeast

land valuable. Then they wanted to keep their claims in the New World. In 1620 colonists began to settle the northeastern part of what is now the United States.

At first the colonists were afraid to leave their settlements and push into the inland regions. But later they began to move westward away from the Atlantic Coast. Some liked to farm on low, level land. These farmers settled on lowlands. Others wanted higher, rolling hills or uplands. Those pioneers who had lived in rough, rugged country settled where they found mountains. These natural regions of the Northeast offered all kinds of land surfaces to the colonists.

The early settlers made a living by fishing, hunting, and farming. Some of the settlers were skilled workmen. After a while each began to work at his trade. They made shoes, furniture, clothing, and many other things. People no longer made everything themselves at home. They were able to get these things from the tradesmen. In this way manufacturing and trade began. Today the Northeast is the greatest manufacturing and trade area in our whole country.

Our Northeast is made up of ten states. Six of these states are called the New England States. They are Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island. The other four — New York, Pennsylvania, New Jersey, and Delaware — are often called the Middle Atlantic States because of their central position on the Atlantic Coast.

In this unit you will find the answers to these questions:

1. What is our Northeast like?
2. How was our Northeast settled?
3. How do people earn a living in the New England States?
4. How do people earn a living in the Middle Atlantic States?
WHAT THE NORTHEAST IS LIKE

The Northeast has three large bays along the Atlantic Coast. One of these, Massachusetts Bay, is in New England. The other two, New York Bay and Delaware Bay, are in the Middle Atlantic States (see map on page 10). All three of these bays form excellent, protected harbors. The Northeast also has many rivers. The two longest and best for navigation, or travel by ship, are the Connecticut and the Hudson rivers. The Connecticut River is in New England. The Hudson River is in the Middle Atlantic States.

The map on page 10 is a physical map of our Northeast. On this map you can tell the natural regions by the colors used to represent them. The key or guide is in the lower left-hand corner. What color represents plains or lowlands? Find the lowland along the Atlantic Coast. This is called the Atlantic Coastal Plain. Notice that it ends at Cape Cod. Where else are there lowlands? West of the Atlantic Coastal Plain is the great chain of mountains called the Appalachian Highland. What color are these mountains? What color are high mountains?

THE LOWLANDS

The lowlands in our Northeast include the Atlantic Coastal Plain, the river valleys, and the Lake Plain.

The Atlantic Coastal Plain

The Atlantic Coastal Plain extends south from Cape Cod, in Massachusetts, to Florida. This plain is so near sea level that some geographers believe it was once a shelf below the surface of the water. It was built up by the many slow, wide rivers which flow across the plain. These rivers have their sources in the highlands to the west. Year after year they kept dropping at their mouths the silt, or mud and sand, which they carried down from the highlands. Gradually they built up a shelf. Then there was a rising of the ocean floor near the coast caused by some great force. Part of the shelf rose above sea level and became the Atlantic Coastal Plain. The rest of the shelf, which is still below sea level, is known as the continental shelf. It is really the drowned part of the coastal plain.

The deep, sandy soil of the Atlantic Coastal Plain is well suited to raising vegetables and fruits. The early colonists who settled here had little trouble raising enough food for their families.

River valleys

Not long after the founding of the first settlements some colonists dared to leave the coast. They moved farther inland to look for other fertile lowlands. They found good farm land in the valleys of the Connecticut, Hudson, Mohawk, and Delaware rivers.

The Lake Plain

There are also fertile lowlands south of Lake Ontario and Lake Erie. These lowlands are called the Lake Plain. Winds from the lake make these lands cooler in summer and warmer in winter than the country around them. However, there are no rivers connecting the Lake Plain with the Atlantic Ocean. Many years passed before colonists knew about the Lake Plain.

THE UPLANDS

The uplands in the Northeast consist of the New England uplands, the Piedmont (pē’d’mōnt), and the Appalachian Highland. The first settlements in the Northeast were made in the Atlantic Coastal Plain.

New England coastal uplands

The New England coastal uplands reach almost to the Atlantic Coast. There is no coastal plain north of Cape Cod, Massachusetts. The New England coast lands are
rugged. They have poor soil and a cold climate. The winters are long and cold.

The great glacier

We have already said the surface of the land of New England is very uneven. Most of the soil is thin and strewn with rocks and boulders right down to the water's edge. A great glacier, or sheet of ice, caused this. Thousands of years ago the glacier covered the northern part of North America. For years the land lay under the great sheet of ice. Then the glacier began to move. Slowly, very slowly, it moved southward. As it moved, it wore down the tops of mountains, carrying rocks and soil with it.

Slowly the weather grew warmer. The ice and snow began to melt. Water filled the hollow places the glacier had scooped out and formed rivers and lakes. Millions of large rocks and piles of gravel were left where they had been dropped by the melting ice. The men who first tried to farm on the rocky New England coast lands had to clear their land of these large rocks.

The Piedmont

When the coast lands became crowded, colonists moved farther inland to the Piedmont region. A piedmont is an upland region between a coastal plain and mountains. The region called the Piedmont in North America lies between the Atlantic Coastal Plain and the Appalachian Highland. It extends from the Hudson River south to central Alabama. The Piedmont is a region of rolling hills, green valleys, and slopes covered with trees. While its foundation is hard rock, the soil is deep and fertile. Because it has a lower latitude, the climate is milder and the growing season is longer than that of the New England upland. Pioneers found they could raise good crops and strong livestock there.

The Fall Line

The map on this page shows that all the rivers of the Atlantic Coastal Plain have their sources in the Appalachian Highland. They flow across the Piedmont with its foundation of hard rock. The eastern edge of this rock makes a ledge over which the rivers tumble down to the low coastal plain. Falls are found at the edge of the Piedmont in rivers south of New York City. For this reason the place where the Piedmont and the Atlantic Coastal Plain meet is known as the Fall Line.

Between the Piedmont and the ocean the rivers are slow and wide. Some ocean ships can sail up the rivers as far as the falls. That is, the rivers are navigable that far. This point marks what is called the head of ocean navigation. Waterfalls furnish the power which can turn mill wheels. So people built grain and lumber mills at falls in the rivers. Soon towns grew up around the mills.
Some of the colonial towns grew into the busy *industrial*, or manufacturing, cities found on the Fall Line today. Philadelphia, Trenton, Paterson, Schenectady, and Fall River are examples of such cities.

**The Appalachian Highland**

Beyond the Piedmont the land rises to form the Appalachian Highland. This highland consists of many mountain ranges, or chains. These are old, worn-down mountains with valleys between them. The slopes of these mountains are gentle, and their peaks are rounded. Forests cover most of the Appalachians. The highest New England peak, Mount Washington, in New Hampshire, is only a little over six thousand feet above sea level. Snow covers the tops of these mountains only in winter.

Ranges of the Appalachian Highland extend as far north as Maine. These ranges include the White Mountains of New Hampshire and Maine and the Green Mountains of Vermont. The Adirondack and Catskill mountains of New York and the Berkshire Hills of Massachusetts are also important Appalachian ranges.

Much good farm land is found in the wide valleys of the Appalachian Highland region. The largest, most fertile area of these farm lands is known as the Great Valley. The Great Valley begins in southeastern Pennsylvania and extends far southward.

The western part of the Appalachian Highland in the Northeast is often called the Allegheny (āl’ē-gā’ni) Plateau. Below the surface of the Allegheny Plateau great mineral wealth is hidden.

The natural regions of the Northeast — the Atlantic Coastal Plain, the Piedmont, the Appalachian Highland, and the Great Valley — also extend into the Southeast.

**SETTLING THE NORTHEAST**

Many of the early settlers in the Northeast came from England. These English colonists sought freedom of worship in the New World. There were pioneers also who came from the Netherlands, Sweden, and other countries in Europe. They wanted fertile land and a chance to make a living. As we follow the story of the settlement of the Northeast, we shall see that most of these people found what they were seeking in America.

**THE SETTLEMENT OF MASSACHUSETTS**

The earliest settlements in the Northeast were made in Massachusetts. The first colonists came to America because they did not have freedom of worship in England.

King James said, “Everybody must attend the Church of England. I belong to it, and so must all my people.”

**The Separatists**

But some Englishmen refused to attend or support the Church of England. They said, “We believe that everyone should worship God as he pleases. The king should not tell people which church to attend.” This group of people wanted to separate from the Church of England, so they were called Separatists.

The Separatists would not go to the king’s church. King James found many ways to punish them. He sent soldiers to break up their services, arrest their ministers, and nail up their church doors. The Separatists then held services secretly in their cottages. They often changed the places where they met. Still the soldiers found them, and their leaders were thrown into prison.

In the village of Scrooby, England, lived a group of Separatists who were very unhappy. The king had made them suffer until they could stand it no longer. Many felt that they had to leave England. These people, chiefly farmers and laborers, were too poor to travel far.

Across a narrow strip of water from England is the country of the Netherlands. In
Why were the early settlements in the Northeastern states made near the ocean? Which early settlement was farthest inland? Which settlements became important cities in later times?

the Netherlands people could go to any church they pleased. They could even stay away from church altogether if they liked. There was freedom of religion among the Dutch in the Netherlands. The Separatists decided to go to the Netherlands.

Moving to the Netherlands

The king did not like the Separatists, but he gave orders that they were not to leave England. Only a few at a time could slip out secretly. Then a large group of Separatists succeeded in reaching the Netherlands.

Most of the Separatists found work in the factories of the Netherlands. For a while they were happy in their new homes. Then some of them became ill because they were not used to working in factories.

They were also worried about something else. The Separatists had left England, but they did not want their children to become Dutch. The English children, however, went to Dutch schools and played with Dutch children. The only time they spoke English was to their parents. “Ah, me,” said one Separatist, “our children have become as Dutch as the Dutch themselves.”

Then war broke out between Spain and Holland. It looked as if English boys might have to fight in the Dutch army. Again their parents said, “We must leave this land.”

“Why not go to America?” asked one.

“That is a good idea,” agreed the others. “In America we could be free and still live as Englishmen on English soil. We could have freedom of religion there.”
As soon as the Pilgrims stepped on shore, they stopped to give thanks to God because they had safely reached the New World.

A few leaders returned to England to ask the king for land in America and for money. Surprising as it may seem, the king was willing to let them build a colony in the New World. The Virginia Company gave them land just north of Virginia and lent them money for two ships, food, clothing, and other supplies. The Separatists promised to pay the company by sending them half of any crops they raised for seven years. They also promised any gold, silver, furs, or other things they found.

By this time we begin to speak of the Separatists as Pilgrims. They had been traveling from one place to another because of religion. For this reason Pilgrims seems a good name for them, does it not?

The voyage to America

In September, 1620, the Pilgrims set out from England in two small ships called the Speedwell and the Mayflower. A short distance from shore the Speedwell began to leak. The Pilgrims realized that it could not possibly make the voyage. So the Speedwell sailed back to port. As many of its passengers as possible were crowded into the other vessel. The rest watched sadly as the Mayflower began its long voyage alone. Among the group on the Mayflower were William Bradford, John Carver, Captain Miles Standish, and Elder William Brewster, their religious leader.

The Mayflower was small. It was less than three times as large as an ordinary schoolroom. Yet one hundred and two Pilgrims and the crew ate, slept, and lived in it for more than two months. The ship was tossed about by the waves and beaten by storms which drove it off its course. What a happy day it was when a low, sandy beach came into view on the western horizon. The land they had reached was Cape Cod, in what is now Massachusetts.

On the map on page 10 find Cape Cod, the peninsula in Massachusetts which extends into the ocean like a great hook. It is many miles north of the land that the Virginia Company had given the Pilgrims. But the Mayflower dropped anchor, and all who could went ashore. They found deep snow and a bitterly cold wind.

Cape Cod was not a good place for a settlement. The soil was too sandy for farming. The Pilgrims decided to find a better place to build their town. Meanwhile they lived on the Mayflower.

The Mayflower Compact

The Pilgrims held a meeting in the cabin of the Mayflower. "We have two important questions to decide," said the chairman. "The first is, Shall we sail south to the land the company gave us? The other is, How shall our colony be ruled?"

After talking both matters over carefully, they agreed to stay where they were, to choose their own leaders, and to make laws for the good of the colony. They wrote out
their agreement and the forty-one men on board signed it. They chose John Carver as their governor.

For the first time in America men had met to plan their government. The agreement they signed is known as the Mayflower Compact.

**Settlement at Plymouth**

The Mayflower lay off Cape Cod for about five weeks. Early every morning some of the men set out in a small boat to explore the coast.

Late in December of 1620 the explorers came to the place where Plymouth, Massachusetts, now stands. Plymouth is located where a river flows into a bay. “Here are clear drinking water, a safe harbor, a hill for our fort, and trees for houses,” said the Pilgrims. “This is a good location for our settlement.”

The waves were high, and the wind was strong that cold winter day. Boatload after boatload of Pilgrims left the Mayflower. When all had landed, they fell upon their knees and thanked God for their safe voyage.

**The first winter**

Winters in Massachusetts are long and cold. Bitter winds and heavy snows made building almost impossible. Only the storehouse, one or two houses, and the stockade were finished that winter. The stockade was a high fence around the storehouse to protect it from Indians.

Meanwhile the Pilgrims still had to live on the Mayflower. Because they were crowded, sometimes hungry, and often cold, many became sick. They had no medicine and no fresh food. About half of the brave little band died that winter. Among them were Governor Carver and the wife of Captain Miles Standish.

William Bradford was chosen to be the new governor. He was a wise and kind man. Governor Bradford and Captain Standish worked day and night to save the little colony. They were fortunate enough to find some hidden stores of corn left by the Indians. And the waters off Cape Cod were full of many kinds of fish.

At last spring came. The Pilgrims went to work with a will. They cut lumber, hunted, trapped, and fished. The lumber, fish, and furs were to be their first payment to the Virginia Company. The Mayflower was returning to England.

The colonists gathered on the shore to see the Mayflower depart. As it slowly sailed out of sight, the colonists realized that their lives depended completely upon their own efforts. From sunrise to sunset they cleared land, plowed, and planted. In the evenings they mended tools and guns, finished building their houses, and made furniture. They were

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In the colony at Plymouth, while some men kept watch, the rest built a stockade, or high fence, of logs. Inside the stockade they built a church, storehouse, and homes for the Pilgrims.
determined to have enough food and good homes for their second winter in America.

Pilgrims and Indians

During the first winter the colonists saw only a few Indians. Then one spring morning an Indian walked boldly into the center of Plymouth. The settlers were unhappy at his coming. They feared this meant war. To their surprise he was friendly, and he spoke English. "Welcome, Englishmen," he said. "I am Samoset." He had learned the language from Englishmen who had come from Europe to this coast to fish. Samoset brought a message of welcome from Massasoit (mäs'-ə-soit'), the chief of a neighboring tribe.

The Pilgrims treated the messenger kindly. He enjoyed the food and attention he received during his few days' stay. When he left, Samoset promised to return.

He returned with Squanto, another Indian who spoke a little English. Squanto was a real friend to the settlers. He showed them a better way of planting corn, which was their chief food. By putting a dead fish into each little hill to fertilize, or make the soil richer, they could raise more and better corn. Squanto also taught them how to hunt, where to look for game, and how to spear fish. From such friendly Indians the colonists learned to live more comfortably in their new land.

But the Indians were not always friendly. Once the chief of a warlike tribe sent a snake-skin full of arrows to Governor Bradford. This meant, "We are on the warpath."

"How shall we answer this message?" Bradford asked Captain Standish.

Miles Standish emptied the skin, filled it with powder and bullets, and sent it back to the chief. The white man's answer meant, "If you talk with bows and arrows, we will answer with powder and bullets." There was no war between the settlers and that tribe.

The Pilgrims were fair with the Indians. Pilgrims and Indians lived at peace with one another for many years.

The first Thanksgiving

Work in the fields and on the houses continued all summer. That fall the Pilgrims were glad to see their ripening fields. Even in this rocky New England soil they had raised good crops.

"There will be plenty to eat this winter," said Governor Bradford proudly.

"Let us set aside a day to thank God for our many blessings," said the Pilgrim fathers.

Governor Bradford agreed. "We shall invite the Indians to share our feast," he said. "Without their help we could not have had such a fine harvest."

For many days the Pilgrim women were busy preparing all kinds of good things to eat. They roasted turkey and deer meat. They made puddings and baked corn bread. They cooked squash and cranberries. Fruit and nuts were added to the feast. More than
eighty Indians came to celebrate with their Pilgrim friends. The Indians brought wild turkey and deer as their share.

Before the feasting and games began, they thanked God for the rich harvest. This celebration lasted for three days. Then the Indians said good-by to the Pilgrims and left. And the Pilgrims returned to their daily tasks.

Americans still celebrate Thanksgiving Day. Every year on the fourth Thursday in November we thank God because we live in America.

The Puritans

A few years after the Pilgrims reached the New World, another group of men were holding an important meeting in England. They were wealthy, educated men. They were talking about leaving England because they could not worship as they wished. King James had died, but his son Charles was even stricter with the people who did not agree with him.

These people who disagreed were members of a group known as Puritans. Puritans did not want to separate from the Church of England. They wanted only to purify it. By "purify" they meant that they wanted plainer buildings and simpler services.

The Puritans would not attend or support the king's church unless the services were changed. To punish them King Charles made them pay high taxes. He made them pay money when they stayed away from services. He took away their lands and their high offices in the government. Such treatment made the members of the Massachusetts Bay Company decide to leave England.

This company had been formed some years earlier by a group of wealthy men to build colonies and to trade with the New World. The king had given them land north of Plymouth and a charter, or a paper containing his written permission to settle this land. This land was bounded by the Merrimack River on the north and the Charles River on the south. The Indians called it Massachusetts, and so the company became known as the Massachusetts Bay Company. There was already one Puritan settlement at Salem, Massachusetts. It had been started two years earlier.

The Puritan members of the Massachusetts Bay Company chose John Winthrop as their governor. About one thousand Puritans left England in 1630. That is why 1630 became known as the year of the "Great Migration" from England. A migration is a movement of persons from one place to another.

How different their departure was from that of the Pilgrims! Instead of one little ship, eleven good vessels sailed at one time. They carried a large supply of food and seeds to plant in spring. Farming tools, axes, saws, guns, and gunpowder were stored in the holds. Cattle and other livestock were kept in pens below deck. Bedding, curtains, carpets, and chests were stored wherever space could be found. The new settlers tried to bring everything that would make life in the new land easier.

Starting the Massachusetts Bay Colony

The new colonists found most of the people in Salem ill. Soon many of them were also sick. "This sickness is caused by poor drinking water," decided the leaders. "We will find a more healthful place to live."

Salem is on the coast of Massachusetts Bay. Governor Winthrop's colonists followed the coast line south to where the Charles River flows into Massachusetts Bay. Near by was a brook of clear water. Here the Puritans built the town which they called Boston. Theirs was a wise choice. Boston has the best harbor in New England.

In spite of all their good planning the Puritans too suffered during their first winter. New England winters start earlier and are colder than those of England. The colonists had arrived too late to raise enough food. By February their food was gone. Many became ill and died. Luckily a ship brought food from England in time to save the rest.
Life in the New World was hard for the Puritans. They were not used to living in rude huts. The thatched roofs and dirt floors let in cold and dampness. In the new country they plowed land that was covered with rocks. This was especially hard for them because they had not been farmers. Each colonist received twenty acres of farm land outside the stockade. Every morning he left the village to work on his land. He had to raise food for his family.

Women worked as hard as men. They had to spin and weave, make clothing for the family, make candles and soap, and cook and clean too. The colonists had to depend on themselves for everything they needed.

Each year more Puritans arrived. When mechanics and skilled workmen came, larger and better homes were built. Better furniture, clothing, and other things were brought from England. Life in the colony became easier as time went on.

Puritan towns

By 1640 there were twenty-two towns in Massachusetts Bay Colony. On the map on page 77 find Boston, Cambridge, Charlestown, and other Puritan settlements. They were all built on the upland along the coast. Why were the towns usually located on streams or rivers? Boston grew more rapidly than others because of its excellent harbor.

Early Massachusetts towns had a meetinghouse, used for worship and as a place where the affairs of the town could be discussed. The meetinghouse was most important. For many years only Puritans could live in the colony. The minister and elders decided how the people should dress and behave at all times. They were the judges of what was right and wrong. The church fathers punished severely anyone who broke their laws.

Schools were built because the Puritans wanted their children to be able to read the Bible. At first children were taught at home. Or they went to a neighbor’s house where they learned their ABC’s, to spell, and to read a little. Because these schools were taught by women in their own homes they were called dame schools.

Soon after the colony was founded, a law was passed requiring each settlement of fifty
families to support a school. In such schools reading, writing, and arithmetic were taught. Any town which had one hundred families was required also to have a “grammar school,” in which boys could study to go to college. Girls went to school for only a few years in these early times. Only six years after Boston was settled, Harvard College was founded. Harvard was the first college built in what is now the United States.

At first, town meetings were held in the meetinghouse. After a time each town built a town hall. At the town meetings laws were made and officers chosen. Only those in good standing with the church could vote.

The Town Hall in Boston was the most important meetinghouse. The general assembly, which made laws for the whole colony, met at Boston’s Town Hall several times a year. But it was not possible for all the people in all the Massachusetts towns to attend these meetings in Boston. So each town sent one or two men to act for, or represent, it at the assembly. These men were called representatives. It was the duty of the representatives to elect, or choose, a governor and other officers. It was also their duty to vote on problems which concerned the colony.

Through the town meetings and the general assembly the colonists ruled themselves.

Massachusetts Bay Colony grew stronger and more important as more Puritans arrived. After a while Plymouth became part of their colony. Later the Puritans claimed other parts of New England. Massachusetts Bay Colony was the strongest English colony in America for many years.

**No freedom of religion among Puritans**

The Puritans came to America because they wanted to be free to worship God in their own way. People of other religions came to Massachusetts for the same reason. Those who came to the colony had to join the Puritan church. If they did not, they were driven out of the colony. Those who refused were thrown into prison, whipped, or even hanged. There was no real religious freedom in Massachusetts.

**THE SETTLING OF RHODE ISLAND**

Many Puritans objected to this lack of religious freedom in the Massachusetts Bay Colony. They did not believe that everyone in the colony should have to accept the Puritan ways. One Puritan minister had a better understanding of religious freedom than the others. His name was Roger Williams.

**Roger Williams**

Roger Williams had come to the Massachusetts Bay Colony hoping to find religious freedom. But he was disappointed when he saw how the Puritans treated people of other faiths. “Let these people stay and build churches of their own,” he begged. “They are only looking for what we have found in this new land.”

But the Puritans would not put up with people of other religions. They accused Williams of turning against the church, and they arrested him. During his trial he said that the white settlers had been unfair to the Indians. He said that the land in the New
World did not really belong to the king of England and that the colonists should have paid the Indians for it. "This man is false to his king as well as to his God," cried the Puritans. "Send him to England to be tried as a traitor."

Fortunately Williams escaped. In the cold New England winter he wandered alone through the wilderness. He was half dead when some Indians found him. They took him to their village, fed, and cared for him. "How can I repay them for their kindness?" wondered Williams.

The chance came when an important member of the tribe became sick. Williams, who knew something about medicine, helped him to get well. The grateful chief sold the white "medicine man" a large area of land bordering Narragansett (när'ō-gān'sēt) Bay.

Religious freedom in Rhode Island

Others who were unhappy in Massachusetts joined Roger Williams. On the land the chief had given him, they found a place where a river flowed into Narragansett Bay. Here they started Providence, the first settlement in Rhode Island. Find it on the map on page 77.

Everybody seeking religious freedom was welcome in the new colony. Quakers, Jews, and Catholics found a home and peace in Rhode Island. They were free to go to any church they wished or not to go to church at all. No one had to pay taxes to support a church unless he wanted to. Every man who owned land could vote and help make laws. At last there was a place in the New World where real freedom of religion was to be found.

Rhode Island is the smallest state in our country. But it has the honor of being the first colony in which people of all religions were welcome.

THE SETTLING OF CONNECTICUT

Many people came to New England to earn a better living. But farming on the coastal upland was difficult, and Massachusetts laws were very harsh. Colonists began to wonder about the country farther west. Was there good land farther inland? The forests would surely furnish lumber. And how about furs? People began to move away from the coast and to form new settlements. In this way new colonies were formed. This was the beginning of what is known as the westward movement. From that time until they reached the Pacific Ocean, Americans moved west for new opportunities of every kind.

Thomas Hooker

One of the first groups to start toward the west was led by Thomas Hooker. Hooker was another Puritan minister who disliked the strict laws of Massachusetts. He left the Massachusetts Bay Colony with a group of men, women, and children. They tramped westward through the pathless wilderness, driving their cattle, pigs, and sheep before them and carrying their household goods on wagons.

After crossing more than one hundred miles of rough, hilly country, they reached a wide, fertile valley. Hooker's group built a town on the bank of the Connecticut River where Hartford now stands.

Others, too, followed Hooker to the Connecticut Valley. There was plenty of rich farm land in the wide valley for new settlers and old. As more people from the older colonies and from England arrived, more towns were built along the river and the coast. These towns later united to form the colony of Connecticut.

Connecticut's constitution

Most of the people who settled in Connecticut came from other colonies, so they had no charter from the king. The leaders, therefore, wrote out laws for governing the colony. Such a group of laws is called a constitution. Connecticut had the first written constitution in America. The men living
under this constitution did not have to be church members in order to vote. Nor did the church control the lives of the people as it did in Massachusetts.

PIONEERING IN NEW HAMPSHIRE AND MAINE

A few years after the Pilgrims arrived at Plymouth, fishermen made settlements along the coast of what are now New Hampshire and Maine. Some fishermen became trappers or traders and moved inland. They built trading posts on the many rivers and lakes. Then farmers who were unhappy in Massachusetts settled here. Soon there were several little towns and many farms. The Puritans of Massachusetts Bay Colony then claimed this land too.

For a while the people of New Hampshire and Maine belonged to the Massachusetts Bay Colony. They had to obey the strict Puritan laws of that colony. After fifty years New Hampshire broke away. New Hampshire became one of the thirteen original English colonies. Maine was not able to break away for a long time. In 1820, long after the United States became an independent country, Maine finally became a separate state.

THE SETTLING OF VERMONT

In late colonial times a few hardy pioneers moved west into what is now the state of Vermont. Because the slopes were covered with evergreen trees, the pioneers named the mountains west of the Connecticut River the Green Mountains. The Green Mountains are part of which highland (see page 10)?

For a long time white men visited Vermont only for furs. Then good farm land was found in its valleys. Farmers crossed the mountains and settled in Vermont.

When they learned that Vermont was a rich and fertile land, New Hampshire and New York both claimed it. The settlers, who called themselves the "Green Mountain Boys," wanted to have their own colony.

The Dutch who settled in New Netherland built their houses like those back home. They used stones to pave their city streets.

Quarrels and bloodshed followed. The year after the Declaration of Independence, Vermont declared its own independence from New York and New Hampshire. Vermont became the first state, after the original thirteen, to enter the Union.

BUILDING NEW NETHERLAND

As you know, the Dutch claimed land that the English also claimed. Your map on page 77 shows that New England, where the Pilgrims and the Puritans lived, is northeast of New Netherland. Virginia, another English colony, was south of New Netherland. But the Dutch said the land was theirs because Henry Hudson had explored it. The land claimed by the Dutch included the fertile
New Amsterdam, at the mouth of the Hudson River, had the best harbor on the Atlantic Coast.

Hudson River Valley and the northern part of the Atlantic Coastal Plain.

**New Netherland**

At first the Dutch came to America for furs. The fur traders did not clear the land or build towns. Englishmen had already built colonies in the New World. But for many years the nearest things to permanent settlements the Dutch had were trading posts. A trading post consisted of a store, a home or two, and a fort. The company’s agent lived at the post. A few soldiers stayed in the fort in case of an Indian uprising. The trading post got all its supplies from the company. The first of these trading posts was Fort Orange, where Albany now stands.

After a time the Dutch West India Company was formed in the Netherlands. This company was set up to build settlements in Dutch lands in the New World. These lands were called New Netherland.

From the story of the Pilgrims you know that in the Netherlands people had religious freedom. There was also plenty of work for everybody. Most of the Dutch people were happy in their own country. They did not care to leave.

**New Amsterdam**

In 1623 a group of Dutch families came to New Netherland to start a colony. About eighteen families sailed up the Hudson River to Fort Orange. The rest stayed at a trading post on Manhattan Island. Near this post they built the town of New Amsterdam. Today New York City stands where New Amsterdam was built, at the mouth of the Hudson River. It has the best harbor on the Atlantic Coast of North America.

**Peter Minuit’s bargain**

One day an interesting scene took place near New Amsterdam. A group of Indians sat on the ground. Spread in front of them were beads, bright-colored cloth, shining knives, and other things white men used in trade. What were the white men asking in exchange? It took the Indians a while to realize that the Dutch governor, Peter Minuit (mɪnˈɪt), wanted to buy Manhattan Island.

Would the chief trade? The chief nodded. Governor Minuit smiled. A bargain had been made. For about twenty-four dollars’ worth of trinkets Peter Minuit had bought Manhattan Island, now the heart of our largest city.

**Getting more settlers**

The Dutch settlements grew slowly. The Dutch West India Company offered large estates to rich men who would bring fifty settlers to the colony. These *patroons*...
(pə-trōnz'), as they were called, had to pay the settlers’ passage, furnish them with houses, tools, seeds, and other supplies. In return, the colonists had to till the soil, work for their patroon, and give him a share of everything they raised. They were not allowed to hunt or trap animals. And they could never own the land upon which they lived. Under these conditions few people were willing to leave the Netherlands to become colonists.

Then the Dutch West India Company tried to get settlers to come to New Netherland by offering free land and the right to trade with the Indians. Still few Dutchmen would settle in New Netherland. The Dutch were ruled by governors sent by the company. Most of the governors were strict and harsh men who were chiefly interested in getting riches from the colonies.

Peter Stuyvesant

Peter Stuyvesant (stə-vē-sānt), a governor of New Netherland, wanted the colony to succeed. The laws he made were good but too strict. He gave the people no voice in the government.

Stuyvesant tried to make life in the colony safer. He saw to it that the stockade and fort, which had been neglected, were repaired. After his arrival the soldiers at the fort were drilled every day.

In spite of the improvements he made, the colonists did not like Governor Stuyvesant. They said that the older he grew, the fiercer he became. Stuyvesant had lost a leg in a battle, so he wore a wooden leg with silver nails. The people made fun of him behind his back. They called him “Old Silver Nails” and “Old Peg Leg.”

The surrender of New Netherland

As if the Dutch did not have trouble enough, the English wanted New Amsterdam because of its fine harbor. One day in 1664 four English warships arrived in the harbor. Their commander sent a message to Governor Stuyvesant demanding the surrender of the fort. Governor Stuyvesant was so angry he almost burst a blood vessel.

“These terms of surrender are very generous!” said some of Stuyvesant’s men. “The English are willing to let us keep our property, attend our own churches and schools, and speak our own language. They even promise to let us help make laws for our colony. Let us surrender.”

“I would rather die!” shouted the governor. “Man the guns!” he ordered. But the soldiers refused to fire. Poor Governor Stuyvesant had to surrender. Without firing one shot, the English won New Netherland.

Under the English flag

The English king gave New Netherland to his brother, the Duke of York. The duke

When the English demanded the surrender of New Netherland, Peter Stuyvesant stormed and stamped his wooden leg. But he had to give in because his people did not want to fight.
changed the name of the colony to New York. New Amsterdam became the town of New York and Fort Orange became Albany. At first all of it was called New York. Later it was divided into three colonies, New York, New Jersey, and Delaware. The Duke of York kept New York. The other two colonies changed hands several times.

THE SETTLING OF NEW JERSEY

New Jersey had few settlers before the English received it as a part of New Netherland. Then settlers from England and some pioneers from other colonies came to New Jersey. As we have said, the ownership of this colony changed hands several times. Finally in 1702 New Jersey became a royal colony. That is, it belonged to the king. New Jersey was a royal colony until the Revolutionary War, when the colonies won their independence. During these changes in government the settlers in New Jersey farmed peacefully, and the colony grew.

THE SETTLING OF DELAWARE

The first permanent settlement in what is now Delaware was made by people from Sweden. Then the neighboring Dutch conquered this colony, and Delaware became a part of New Netherland. After the English took New Netherland, Delaware was owned and ruled by the Duke of York. About eighteen years later he sold Delaware to William Penn, the owner of a neighboring colony, called Pennsylvania.

Becoming a part of Pennsylvania did not please the settlers in Delaware. The Duke of York had let them have their own assembly. In this way they had made their own laws. Now they objected because they had to obey the laws of Pennsylvania. Finally William Penn gave Delaware the right to have its own assembly again. But it was ruled by the governor of Pennsylvania until the Revolutionary War. After that war it became the state of Delaware.

THE FOUNDING OF PENNSYLVANIA

A year before William Penn bought Delaware, he started the colony of Pennsylvania. This colony was settled by English people called Quakers, a religious group who wished to worship God in their own way. Quakers believed that each person had an “inner light,” or conscience, which told him what was right and what was wrong. They were treated very harshly in England and in the New World too.

The Quakers in England

Why were the Quakers, or the Society of Friends as they called themselves, treated so badly? Perhaps it was because their clothing, their speech, and their religion were so different from those of other Englishmen. At first they had no churches. They usually met in the homes of the members. Men and boys sat on one side of the room, women and girls on the other. All prayed silently. No organ notes or minister’s voice broke the silence.

The first settlers in Delaware were Swedes. They built this church in Wilmington, and it is still being used. How does it differ from churches which are in your community?
Suddenly someone would begin to speak. The rest listened attentively. They believed that God had heard his prayer and that he had a message for them.

Quakers tried to follow the teaching of the Bible exactly. Because the Bible says, “Thou shalt not kill,” they would not fight even to protect themselves. They refused to serve in the army or navy. They would not take off their hats or show any other signs of respect to the king. “Why should we bow down to our brother?” they asked. The king tried to force them to change their ways by having them arrested.

**William Penn, Quaker leader**

The Quakers needed a leader who had wealth and was friendly with the king. They found such a leader in William Penn. His father, Sir William Penn, was a good friend of King Charles II. He was a member of the king’s church and had loaned the king money. Sir William Penn was very angry when his son William joined the Quakers. For some time young William Penn did not see his father. Just before his death, however, the elder Penn sent for his son. He told William that King Charles owed him a large sum of money.

Soon after his father’s death William decided to try to collect what the king owed him. But King Charles did not have the money to pay the debt. So William asked for land in the New World so that Quakers would have a place where they were welcome. This the king was glad to grant him.

“Name this land Pennsylvania, or Penn’s Woods, in honor of your father,” suggested King Charles. William Penn agreed. When the charter was drawn up, he became the owner of a piece of land which was bigger than all of England!

**The building of Philadelphia**

A year later the first shipload of Quakers arrived in America. They found Swedes, Dutchmen, and Englishmen already living

![William Penn, Quaker leader](Pennsylvania Historical Society)
make sure that Pennsylvania would have a good government, he drew up a constitution. This constitution gave the people more rights and liberties than they had anywhere else, except perhaps in Rhode Island. According to it, anybody who believed in God could live in Pennsylvania. Everyone who paid taxes could vote. The only crimes for which people could be put to death were murder or treason. *Treason* is trying to change the government by force or giving aid to the enemies of one’s country. Prisoners had to be taught some trade so that they could be good citizens when they were freed. Penn’s laws were very much like modern laws.

When Penn wanted land, he bought it from the Indians just as he would have done from white land owners. He made an agreement to live at peace with the Indians. As long as Penn lived, the agreement was kept.

**Mason and Dixon’s line**

Boundary lines were not definite in colonial times. Pennsylvania and Maryland quarreled over land along the Delaware River. William Penn and the governor of Maryland met twice to settle the matter, but they could not agree.

Many years later the English government sent two men to measure the land and to decide where the boundary line belonged. These surveyors were Charles Mason and Jeremiah Dixon. They put up a line of stone markers between Pennsylvania and Maryland. This boundary was later known as Mason and Dixon’s Line. Find it on the map.

**Rapid growth of Pennsylvania**

At first Pennsylvania had very little coast land. Because the people of this colony needed seaports, William Penn bought Delaware from the Duke of York. Pennsylvania continued to grow. Penn advertised in Europe for settlers, and many pioneers came to Pennsylvania. They were attracted by cheap land and free passage to America. Pennsylvania grew rapidly. It became one of the most important colonies, as we shall learn later.

**HOW THE COLONISTS EARNED A LIVING**

As more people came to the Northeast, they settled in the river valleys, on the plains, and in the highlands. One region after another was opened by brave pioneers. They found fertile soil in one region, furs and lumber in another, fish, minerals, and other natural resources in still others.

**Farming, hunting, and fishing**

At first, all the colonists tried to make a living by farming. There was no other way for them to get food in the wilderness. Farming was easy in the part of our Northeast that is often called the Middle Atlantic States. This area has the Atlantic Coastal Plain. But colonists in New England found it difficult to raise enough food on their rocky coast. So they grew whatever they could. Then they hunted and fished to add to their food supply. Codfish were so plentiful that the colonists could easily catch them in great
The early settlers in Massachusetts found many fish in the waters off their shores. Profits from the fish which they shipped to England, especially dried cod, saved the colony in the early days. In later years a large wooden codfish was hung on the front of the old State House, which is shown at the right. Today the old State House is a museum, but the codfish hangs in the new State House in Boston.

Boston Chamber of Commerce

quantities. Soon they were sending shiploads of dried cod to England each year. The profits from the sale of the codfish saved the colony. Years later the people of Massachusetts remembered this by hanging a large wooden codfish on the front of the Boston State House. Today it hangs in an honored place inside the new State House.

Some of the settlers in New England were skilled workmen. They began to work at the trade they knew best. For example, those who knew how to make furniture began to make more than they needed. Shoemakers made more shoes than their families needed. Then they bartered, or exchanged, their extra articles for goods they needed. Sometimes, however, it was hard to make a trade. For example, a shoemaker might need clothes just when the tailor did not need shoes. So the colonists began to use money. Then they could be paid with money for what they made. They bought the things they needed with money.

The skillful workmen in New England began to spend all their time at one kind of work. Colonists living farther south as well as near by bought their products. So New England became a manufacturing region.

Machines, factories, and towns

During colonial times machines which were run by water power were invented in England. Luckily New England had many rivers and falls which could supply power to run machinery. In colonial times New Englanders had put these swiftly running streams to work. Water pouring over a wheel could be made to grind grain. So now the same kind of wheel was used to run other machines. But the machines were too large to be kept in homes or even in small shops. Special buildings had to be made to hold them. In these buildings people worked at the machines to manufacture goods. Such buildings are called factories.

With the coming of factories, towns began to grow larger. Many workers were needed to tend the large machines. People left their rocky farms to do this work. Skilled workmen and laborers from Europe also came to work in the factories of New England.

Factory workers were busy at their special jobs all day. They had no time to raise food, build houses, or make clothing and furniture. Soon people who did many different kinds of work lived in the towns around the factories. The towns grew rapidly.
TO HELP YOU LEARN

People and Places to Remember
Separatists  Massasoit  Thomas Hooker  The Fall Line
Pilgrims  John Carver  John Winthrop  Lake Plain
Puritans  William Penn  William Brewster  Atlantic Coastal Plain
Quakers  Peter Minuit  Peter Stuyvesant  Appalachian Highland
Samoset  Miles Standish  William Bradford  Mason and Dixon’s Line
Squanto  Roger Williams  Great Valley

Words and Terms You Should Know
charter  elect  fertilize  town meeting  continental shelf
county  silt  navigable  industrial  Mayflower Compact
piedmont  treason  head of ocean  constitution  natural region
patroon  stockade  navigation  freedom of religion  representative

A Matching Game
Number a sheet of paper from 1 through 20. After each number write the word or term which matches the definition.

1. Laws or rules for governing a nation or a state
2. A person who acts for, or represents, a group of people
3. An upland region between a coastal plain and mountains
4. A person who received a large tract of land from the Dutch West India Company
5. A paper giving a person or company certain rights, such as permission to settle in the New World
6. Freedom to go to church or not to go to church
7. Mud and sand carried down by the water of a river
8. Choosing or selecting an officer by vote
9. Trying to change the government by force
10. An agreement made by the Pilgrims before landing in America
11. A high fence built around something to protect it from attack
12. Making soil richer and more productive
13. Having to do with manufacturing of different kinds of goods
14. The art of sailing ships or piloting planes
15. The different surface features of land such as lowlands, hills, and mountains
16. A meeting at which laws are made and officers chosen
17. Capable of being sailed upon, such as a river that is deep and wide enough for ships to sail upon
18. The part of the Atlantic Coastal Plain which is still below sea level
19. The point on a river beyond which ocean vessels cannot travel
20. A building in which people work at machines to manufacture goods

Can You Answer These?
1. Name the states of the Northeast. Which of these are called the New England states? Which are the Middle Atlantic states?
2. What are the capitals of the Northeastern states? Hint: Look at the map on page 10, and you will find the capitals of all these states marked with a star.
3. What is a glacier? How did the glacier which moved over North America in early times change the surface of New England?
4. What colonies were settled where the Northeastern states now are? Who founded each of these colonies? What was each group of settlers seeking in the New World?
5. What was the Mayflower Compact? Where was it drawn up? For what purpose?
6. What were some of the problems the Pilgrims had to solve in their new homes?
7. Why did Roger Williams leave the Massachusetts Bay Colony? What colony did he found?
8. Why did Thomas Hooker leave the Massachusetts Bay Colony? Where did he go?
9. What kind of people were the early settlers? What made them good pioneers?
11. What colonies about which we have read were settled by people from the Netherlands and Sweden?
12. How did England finally gain control of all the colonies in the Northeast?
13. How did most early settlers in New England make a living? What other occupations did New Englanders turn to? Why?
14. How did New England become a manufacturing center?

Matching People and Places
The first list below is a list of places which are discussed in the text. The second list contains the names of persons you have met in the text. Match the people and the places. You will need to use some places more than once.

Connecticut   Delaware   New Netherland  Pennsylvania  
Plymouth Colony  Peter Minuit  
Rhode Island   Pilgrims  
Massachusetts Bay Colony  Puritans  
William Penn  Squanto  
John Winthrop  Samoset  
Miles Standish  Separatists  
Peter Stuyvesant  Massasoit  
Roger Williams  
William Bradford  
Thomas Hooker  
John Carver  

Can You Choose the Right Answer?
One of the three names which follow each of the statements below will make that statement true. On a sheet of paper write each statement so that it will read correctly.

1. The six states farthest to the northeast in our country are called the:  (a) Middle Atlantic States  (b) New England States  (c) Mountain States  
2. The mountainous region of this section is called the:  (a) Appalachian Highland  (b) Piedmont  (c) Uplands  
3. The lowland along the eastern coast is the:  (a) Great Valley  (b) Atlantic Coastal Plain  (c) Lake Plain  
4. The Pilgrims first landed at:  (a) New Amsterdam  (b) Massachusetts Bay  (c) Cape Cod  
5. The colony founded by the Puritans was:  (a) Plymouth  (b) Massachusetts Bay Colony  (c) Connecticut  
6. The first permanent settlement in the Dutch colony was:  (a) Boston  (b) Philadelphia  (c) New Amsterdam  
7. The natural region between the Atlantic Coastal Plain and the Appalachian Highland is the:  (a) Piedmont  (b) Allegheny Plateau  (c) Great Valley  
8. Pennsylvania was founded as a home for:  (a) Puritans  (b) Quakers  (c) Pilgrims  
9. The boundary line between Pennsylvania and Maryland came to be known as:  (a) The Mayflower Compact  (b) The Fall Line  (c) Mason and Dixon’s Line  
10. The place where the Piedmont and the Atlantic Coastal Plain meet is called the:  (a) Great Valley  (b) Fall Line  (c) continental shelf
LIVING AND WORKING IN NEW ENGLAND TODAY

Notice that on the population map, page 36, the dots are very close together in Massachusetts, Connecticut, and Rhode Island. That is where most of New England's industrial, or manufacturing, cities and towns are located today.

Four New England manufacturing regions

An airplane tour of New England would show us that there are four sections where the manufacturing industry is especially important. They are (1) the valley of the Merrimack River in southeastern New Hampshire and eastern Massachusetts, (2) southeastern Massachusetts and Rhode Island, (3) Boston and the near-by towns of Massachusetts, (4) the Connecticut River Valley in western Massachusetts and central Connecticut. Find these industrial regions on the map, page 110.

The first two areas are noted for textiles, or woven cloth. The Boston area is famous for the manufacture of leather goods. The cities of the Connecticut River Valley are noted for their metal goods.

THE TEXTILE INDUSTRY

The weaving of cotton, woolen, silk, and other kinds of cloth is called textile manufacturing. This industry early became important in New England.

Slater’s spinning jenny

Cotton was spun by hand in New England for a long time. But English factories had begun to use power machines called spinning jennies. These machines could spin many threads at a time. Cloth made in this way could be sold at a much cheaper price than cloth made by hand labor. New Englanders wanted spinning jennies too. But the English government wished to keep this invention for its own manufacturers. It would not allow a single power machine or even a drawing of one to be taken out of the country.

A bright English mechanic named Samuel Slater heard that Americans were offering prizes for machines that would improve their textile manufacturing. He studied and learned by heart all the parts of the spinning jenny and how these parts worked. He came to New England where two men supplied the money for him to build this machine. In 1793 Slater’s machine was set up in a mill on a river near Pawtucket, Rhode Island.

Then power looms, or weaving machines run by water power, were invented. The first power loom in our country was built.

Bettmann Archive

The waterfall in the river at Pawtucket, Rhode Island, supplied power for Slater’s mill. New England has many rivers with falls. How did they help New England’s early industries to grow?
Many mills like this are found in the Northeast. This one is in Lawrence, Massachusetts, one of the cities that leads in the making of cotton textiles.

A. Devaney

in a factory in Waltham, Massachusetts, in 1814. Then cotton was spun into thread by one power machine and woven into cloth by another power machine in the same building.

The first textile mills of New England were run by water power. As time went on, steam power, then electricity, took the place of water power in many factories. Much of the coal used for steam in New England factories today is brought from Pennsylvania.

**Getting raw cotton and raw wool**

New England cotton mills get raw cotton from the South. When wool manufacturing started in New England, the colonists raised some sheep for wool. Today New England woolen mills get wool from our West, from Australia, and from other foreign countries. This raw wool is stored in huge warehouses in Boston. Manufacturers come to Boston to buy for their mills. Boston has become the largest wool market in the United States and the second largest in the world. It is the capital of Massachusetts. The capital is the place where the laws of the state are made. The building in which the lawmakers meet is called the capital.

**New England textile centers**

Fall River, New Bedford, Lawrence, and Lowell in Massachusetts, Providence in Rhode Island, and Manchester in New Hampshire are important for the manufacture of cotton textiles. Lawrence and Providence are also noted for their woollen cloth.

Concord, the capital of New Hampshire, is located on the Merrimack River in the textile region. Besides the textile industry, Concord has granite, silverware, and printing industries. Many magazines are printed here.

**THE LEATHER INDUSTRY**

The colonial shoemaker in Boston and near-by towns cut and sewed every pair of shoes in his tiny shop. He used leather made from the hides and skins of animals from neighboring farms. He made leather in small factories, called tanneries, by treating hides with tannic acid. Tannic acid is made from juices of wood and bark of certain trees.

Today huge factories in the Boston area have taken the place of the shoemaker’s shop. Great plants have replaced the village tanneries. Hides and skins are brought to Boston by railroad from our West and by ship from South America. Tannic acid is also shipped to Boston from South America. Goods that are brought in from another country are called imports.

Pocketbooks, jackets, billfolds, and hundreds of other leather articles are manufactured in Boston and its surrounding towns.
The business buildings of Hartford, Connecticut, show that this city is a large manufacturing center. The building with the round dome is the state capitol.

But shoes are still the most important leather product. More than one third of the shoes produced in the United States are made in the Boston area. Leather products are shipped from Boston by railroad throughout the United States and by steamer to all parts of the world. When products are shipped to foreign countries to be sold or for purposes of trade they are called exports.

**THE METAL INDUSTRY**

Articles of iron, copper, zinc, gold, and silver are manufactured in cities along the Connecticut River and in neighboring cities in Massachusetts. Yet metals are scarce in New England. Many of the settlers had been skilled metal workers in England. Because they were so skilled, it began to pay people in New England to import metal for small articles like jewelry, guns, hinges, and watches. New England metal factories still produce these goods.

Machinery for mills and factories and household machines like refrigerators are made in New England. Hardware, tools, small machinery, silverware, typewriters, small guns, and brushes are also produced here. Springfield, Massachusetts, is noted for its guns and electrical goods. Many of the silver-plated knives, forks, and spoons that we use today are made in Meriden, Connecticut. Fine sterling, or solid, silverware is made in Providence and in near-by towns in Massachusetts. Providence and its neighboring towns in Rhode Island and Massachusetts produce about one third of all the costume jewelry made in our country. Providence is also important because it is the capital of Rhode Island. Many articles which are made of brass come from Waterbury, Connecticut. Hartford, the capital and largest city of Connecticut, is the chief insurance center in the United States.

**LUMBERING AND PAPER MANUFACTURING**

In the thinly settled regions of New England some of the original forests still remain. Here spruce trees furnish wood for the manufacture of paper. The lumber is also used to make bowls, toys, and other things that do not need much wood. During colonial times Bangor, Maine, was the most important lumber market in the New World. Today Maine has one of the largest paper mills in the world. Berlin, New Hampshire, and Holyoke, Massachusetts, also have important lumber and
In addition to its lumber and paper mills, Augusta, the capital of Maine, has shoe factories and cotton mills.

Much of the paper produced in New England is made into books, magazines, and newspapers. Towels, napkins, cleansing tissues, and wrapping paper are only a few of the useful articles produced.

Other forest products are maple sirup and maple sugar made from the sap, or juice, of the maple tree. The early colonists first heard about maple sugar from the Indians. They learned to tap, or bore small holes into, the trunks of maple trees in the early spring. Then they put a spout into the holes and hung buckets beneath them to catch the sweet, flowing sap. The sap was boiled until it became maple sirup. With longer boiling it became maple sugar. Today there are sugar-maple trees in the whole Northeast. Vermont is well known for its fine maple sugar and sirup.

Trees are cut for lumber during the fall and winter. In the spring the logs are hauled on trucks or floated downstream to the mills.

In the spring the sap of sugar maple trees is collected in buckets like these. Then the sap is boiled down to make sirup and sugar.

Standard Oil Co. (N. J.)

QUARRYING IN NEW ENGLAND

New England has much granite, marble, and slate, which are valuable building stone. Many people in New England make a living by quarrying, or cutting out, these stones. The place where stone is cut is a quarry.

Building stone is found in huge solid layers. Men loosen great pieces of the stone by blasting with dynamite. Special saws run by machinery then cut them into blocks. These blocks are so large and heavy that they cannot be hauled far. That is why quarries are located near rivers or railroad centers.

On the map, page 10, find Rutland and Barre, Vermont. Rutland is noted for marble and slate quarrying. Barre leads the nation in the production of granite. Montpelier (mônt-pěl'yèr), the capital of Vermont, has several granite quarries. The beautiful statehouse is of Vermont granite. The granite of Vermont is good, hard material for making...
monuments and large public buildings. Slate, for blackboards, shingles, and roofs, is quarried in Vermont and Maine.

**FARMING IN NEW ENGLAND**

People who live in industrial areas must buy their food. They work in stores, offices, factories, or quarries all day. They depend upon farmers to supply them with milk, butter, eggs, meat, bread, fruit, and vegetables. But New England is not a good region for farming. The soil is thin and rocky, and the land is hilly. So New England can raise only a small part of the food it uses.

In early colonial times each farmer tried to raise grains, vegetables, fruit, livestock, and poultry. That is, he tried to produce all his own food. We say he did mixed farming. But as cities grew in size, more and more people went to work in factories. During this time a change took place on the farms of New England. Farmers turned from mixed farming to the practice of specialized farming. That is, they began to raise the special crops which they could sell in city markets.

Farmers turned to specialized farming for one of two reasons. Some learned that only certain crops grew well on their particular land and in their particular climate. Others lived near large cities and found it profitable to supply food for the people of the area.

Today farmers nearest to the cities profit by specializing in dairying, raising poultry, and truck farming. Those farther away raise such special crops as potatoes, tobacco, cranberries, and apples.

**Dairy farming**

Can you imagine how many quarts of milk a city like Boston needs each day? Because all industrial cities like Boston need dairy products daily, dairy farming is an important business. Early each morning trucks bring in milk and cream to the markets of these cities. Farther away from the cities dairy farmers use milk to make butter and cheese. Vermont is the leading dairy state in New England.

Cattle can graze on hilly land. Even the rocky hillsides of New England furnish pastures for dairy cattle. Hay and corn grow on the thin soil and in the moist climate of the less hilly parts. Farmers cut the corn while it is still green and store it in tall buildings called silos. The corn stored in silos and hay are used to feed cattle in winter.

**Truck farming**

Truck farms are found near all large cities. Land close to cities is expensive, so the farms are small. The soil is fertilized and farmed carefully. Only vegetables and fruit which
the city people especially want are raised on truck farms. They are grown out of doors in summer and in greenhouses during the winter. In the coldest months of the year people eat hot-house tomatoes, lettuce, celery, and strawberries. Trucks bring the fresh produce to market within a few hours after the vegetables and fruits are picked.

Poultry raising

Poultry farms are found near cities. They supply city dwellers with chickens, fresh eggs, ducks, geese, and turkeys. The poultry farms of Connecticut, Rhode Island, and Massachusetts supply most of the cities of New England with poultry products.

Fruit growing

Fruit orchards are a common sight in New England. The reason for this is that fruit trees will grow on hilly land where farm machinery cannot be used. Because apple trees are not easily killed by frost, apples are the most important fruit crop of New England.

Potatoes, tobacco, and cranberries

Potatoes grow especially well in Aroostook (əˈrōstək) County in northern Maine. The Aroostook River runs through the eastern part of this county (see map, page 10). The light, sandy soil and the cool, moist summers are perfect for this crop. On their large potato farms Maine farmers use machinery to plant and to harvest. Their carefully fertilized land yields more bushels to each acre than that of any other state. The potatoes grown in Aroostook County alone furnish about one sixth of the potatoes used in the United States.

To grow well, tobacco needs fertile soil and special care. In New England only the Connecticut River Valley is suited to its growth. A leaf tobacco especially good for wrappers for cigars is grown in northern Cranberries grow well in marshy land like that of Cape Cod. A board walk keeps the wheelbarrow from sinking into the ground.
Connecticut and southern Massachusetts. It is sent to the cigar factories of New York to be manufactured.

The cranberries that the Pilgrims ate that first Thanksgiving Day probably came from the marshes of Cape Cod. Cranberries grow only in wet lands. Cape Cod and the near-by islands of Nantucket and Martha’s Vineyard are famous for their cranberries. This small part of Massachusetts produces more than half of all the cranberries in the United States. Some of the berries are sold fresh. The rest are sent to canneries to be made into cranberry sauce and jelly.

**FISHING**

The Grand Banks, which are the finest fishing banks in the world, lie near the southeast coast of Newfoundland. Other good fishing banks are nearer New England. Fishing banks are shallow places in the ocean. Sea plants grow at the bottom of these shallow places. Billions of small fish come to feed on the plants. Larger fish, like cod, halibut, and
haddock, come to eat the smaller fish. It is these larger fish which fishermen catch for sale in city markets.

Deep-sea fishing

Fishing far from the coast is called deep-sea fishing. Early in spring great fleets leave Boston and Gloucester (gloś'tër) in Massachusetts and Portland in Maine.

Schooners with both sails and motors are used for deep-sea fishing. Each ship carries several small rowboats called dories. Every morning the men leave the ship, two in each dory. At sunset all the dories return to the schooner. Then the day's catch of cod, halibut, and haddock is packed in ice or stored in refrigerated rooms.

Inshore fishing

Fishing which is carried on within two or three miles of the coast is called inshore fishing. Inshore fishermen use small motor boats and return to their homes every evening.

Mackerel, herring, and other small fish are found in the shallow waters of the continental shelf. You remember that the continental shelf is part of the coastal plain which is below sea level. The fish swim so close to the surface that they can easily be located. Fishermen throw their nets into the water. When they draw them in, the nets are full of fish. On the Massachusetts coast codfish are also caught close to shore.

In the quiet waters of New England bays, inlets, and river mouths, several kinds of shellfish, or fish that live in a shell, are found. Clams, oysters, crabs, and lobsters are shellfish. Lobsters are found along the coasts of Maine and Massachusetts. Massachusetts is famous for its clams. These shellfish provide many fishermen with a good source of income.

Lobsters are caught in traps called lobster pots. These pots are made so the lobsters can swim into them but cannot get out. Lobsters are becoming scarce in the waters along our eastern coast. Lobsters are now raised to re-stock these waters. The eggs are gathered and kept in quiet inland ponds until they hatch. The baby lobsters are then put into the inlets, bays, and river mouths.

Two other valuable products of inshore fishing are scallops and clams. Scallop muscles between two shells. They swim by moving their shells. Scallop offshore southern clam. They have to be scooped up with dredges or gathered with rakes. Clams live in the sands along the seashore. More than three hundred years

These crates, which are made of slats, are traps to catch lobsters. Such traps are called lobster pots. They are baited with meat or fish and lowered to the floor of the ocean. When a lobster enters the trap to get at the bait a net around the opening keeps the lobster from getting away.
ago, the hungry Pilgrims ate clams to keep from starving. Today Americans dig so many that there is danger of their disappearing. The Massachusetts law now allows the digging of clams only at certain times.

**Preparing fish for market**

Because they spoil quickly, fish must be prepared for market almost as soon as they are caught. Colonial fishermen cleaned and salted the day’s catch on the decks of their boats each evening. The fish were stored in barrels. When the fishermen had filled all the barrels, they returned to shore. They again cleaned the fish, salted them, and dried them in the sun. New England shipped barrels and boxes of dried cod and other fish to the other colonies, to the West Indies, and to England. Massachusetts became famous for its dried codfish. Gloucester, which became famous for its fishing in colonial days, is still the center for dried and salted cod and for other fish.

Today each fisherman carries boxes or barrels of ice in his dory. As soon as he catches a fish, he puts it into the ice to keep fresh. Inshore fishermen sell their catch as soon as they reach shore. Deep-sea fishing boats usually have refrigeration chambers where the fish are stored.

Most fish is sold fresh and must be handled quickly. Fresh fish is packed in ice and salt, loaded into refrigerator cars, and shipped to the buyers immediately. Some fish is stored in the plant on the pier and sold later as “frozen fish.”

Boston is the greatest fresh fish market in the East, and one of the greatest in the country. On its famous “Fish Pier” are cold-storage plants, the exchange building where buyers and sellers meet, office buildings, and stores. Fishing fleets bring millions of dollars’ worth of fish to this wharf every year. Dealers from every part of our country and from other countries as well come to Boston to buy fish. Owners of restaurants, fish markets, and *canneries* also come here to buy fish. A cannery is a factory where food is prepared to keep without spoiling and is packed in cans.

Portland, Maine, is a smaller fresh fish market. Its people pack and ship the lobsters and herring caught near Maine. Canned sardines, lobsters, and smoked and dried herring are also shipped from Portland.
As you can see, fishing is an important occupation in New England.

THE RECREATION INDUSTRY

Many people come to New England for summer and winter recreation. The beaches along the coast of New England are popular resorts. Many artists spend their vacations painting at Cape Cod, and on the islands of Martha's Vineyard and Nantucket making sketches of the quaint fishing villages. The mountains, forests, lakes, and rivers of Maine, New Hampshire, and Vermont make these New England states popular resorts. Hunters and skiers vacation here in the winter. Campers and fishermen come here in summer. Tourists are year-round business.

Several large parks and forest areas have been set aside by the state and Federal governments. White Mountain National Forest in New Hampshire is a famous vacation area. Green Mountain National Forest in Vermont is another popular recreation place. Acadia National Park, on an island off the coast of Maine, gets many tourists in the summer. Bangor in Maine is the gateway to the hunting and fishing country of northern Maine.

Many people who are interested in the history of our country visit New England to see our national shrines. Many important events in the early history of our nation took place in this area. Many historical landmarks still remain, and furniture, tools, and costumes of early days may be seen in museums.

Every year many tourists come to Maine to enjoy the scenery and sports. In the background of this picture Mount Katahdin, the highest point in Maine, can be seen. It is in a state park which is part of a game preserve, or place where animals and birds are protected.

Maine Publicity Bureau
TO HELP YOU LEARN

Words and Terms You Should Know

exports  silo  dory
imports  tannery  cannery
capital  quarry  sterling
capitol  power loom  textiles

shellfish  deep-sea fishing

tannic acid  inshore fishing
mixed farming  specialized farming
spinning jenny  fishing banks

A Matching Game

Number a sheet of paper from 1 through 20. After each number write the word or phrase from the list above which matches the definition.

1. A tall building used to store away green corn for winter feeding
2. A place where hides are made into leather
3. Goods and products brought in from another country
4. A weaving machine run by water power
5. A rowboat carried by a fishing vessel
6. Woven cloth
7. A factory where food is prepared and canned
8. Goods and products which are shipped out of a country for sale or trading purposes
9. An open pit from which building stone is cut
10. Articles made of solid silver
11. A substance made from the juices drawn from the wood or bark of certain trees, used in making leather
12. A building where the state lawmakers meet
13. Raising many different kinds of crops and livestock on the same farm
14. Fish which have shells in which they live
15. An early machine which could spin many threads at a time
16. Raising special crops for sale in city markets
17. Fishing within two or three miles of shore
18. The city in which the laws of a state are made
19. Fishing in deep waters far from the coast
20. Shallow places in the ocean where many fish feed on the plants on the ocean floor

Can You Answer These?

1. Locate the chief manufacturing centers of New England. What does each produce?
2. Who was Samuel Slater? What part did he play in the development of New England as a manufacturing region?

3. Why are shoes one of the chief products of New England? How has the making of shoes changed since colonial times?
4. Name ten different kinds of articles made from metal in the factories of New England.
5. Where in New England is lumbering carried on? What are some important ways in which the people of New England use lumber?
6. Where is quarrying carried on in New England? What stones are quarried?
7. Why is specialized farming more profitable in New England than mixed farming?
8. What are some of New England’s special crops? Where are they raised?
9. Where are New England’s truck farms and dairy farms found? Why?
10. Why is fishing an important occupation of New England? What are the Grand Banks? Why are fish so plentiful here?
11. What is meant by inshore-fishing? What kinds of fish are the products of inshore fishing? How are fish prepared for market?
12. What are some of New England’s vacation spots? What attracts people to each?

Can You Finish This Story?

One of the first important industries to develop in New England was the ___ industry, which means the weaving of cotton, silk, and woolen materials. At first cotton and woolen threads were spun by hand. But machines called ___ ___ were invented and put into use in ___. A mechanic named ___ ___ came to New England and built one of these machines. A factory was set up at ___, ___, in 1793.

Later weaving machines run by ___ ___ were invented. Cotton or wool could then be ___ on one machine and ___ into cloth on another. Soon these machines were run by ___ ___ and then by ___.
LIVING AND WORKING IN THE MIDDLE ATLANTIC STATES

A tour of the Middle Atlantic States would show us many large cities (see population map, page 36). These cities make up important industrial regions.

Five Middle Atlantic regions

The five leading industrial areas in the Middle Atlantic States are (1) the district in and around New York City, (2) the Lake Plain cities in northern New York State, (3) Philadelphia and its neighboring cities, (4) the cities in eastern Pennsylvania, and (5) the Pittsburgh area on the Allegheny Plateau in southwestern Pennsylvania.

THE NEW YORK REGION

New York City is the heart of the greatest industrial region in North America. This region consists of northern New Jersey and southeastern New York State. The map on page 110 shows that it includes the land near the mouth of the Hudson River and around New York Bay. Long Island Sound separates it from industrial New England. New York City itself is the greatest manufacturing center in our country.

New York City’s trade and industries

Today New York City is the busiest seaport, air and railway center, and the greatest industrial and commercial city in our country. Ships and airplanes bring raw materials and manufactured goods from other lands. Products of our own country come to New York by train, truck, boat, and plane. They are then shipped by air and sea to the rest of the world. New York also ships throughout the United States and to the rest of the world great quantities of goods manufactured in the New York area.

Do you need a hat, a dress, or a suit? Does your father need a suit or overcoat? How about some fine chocolates or perfumes for your mother? Perhaps she would prefer some jewelry or a fur coat. All these articles and thousands of others are manufactured in New York City.

Some people in New York City work in companies that publish books, magazines, and newspapers. Thousands of people prepare foods such as cereals, meats, coffee, and sugar. Others manufacture machinery for factories, automobile and airplane parts, and other iron and steel goods. Electrical goods, rubber products, linens, furniture, cigars, and other articles too numerous to mention are manufactured here. The largest number of workers are employed by the factories which make ready-to-wear clothing. Making suits, coats, and dresses is New York’s most important industry. These factories make enough clothing to dress almost half the people in the United States.

New York City’s neighbors

Many products manufactured in New Jersey cities are sold in New York. The textile mills of Paterson supply New York City’s clothing factories with silk and other cloth. Sewing machines come from Elizabeth, and heavy machinery for New York’s factories from Jersey City and Newark. Newark is also noted for its paints and varnishes. Gasoline, fuel oil, and mineral oil are some important products of Bayonne. New York City gets much of its meat supply from Jersey City’s slaughter houses. Jersey City also has meat-packing plants where the meat is processed, or prepared for market. These cities owe their growth to their closeness to New York City. New York, in turn, depends upon its neighbors for many things. Thousands of people living in New Jersey work in New York City’s factories and business houses.

Early growth of New York City

During colonial times New York City was smaller and less important than Philadelphia.
NEW YORK CITY
A PICTORIAL MAP

- This sign marks places where important historical events occurred:
  - Hamilton-Burr duel (Weehawken, N.J.)
  - Nathan Hale hanged (near site of U.N. buildings)
  - Washington's farewell to his officers (Fraunces Tavern)
  - Washington inaugurated President (Sub-Treasury building)
  - First Quaker meeting house (Flushing)
and Boston. It became a trade center when settlers moved into the fertile Mohawk River Valley. These people soon had farm products, furs, lumber, and other raw materials to sell. It was easy to bring their products down the Mohawk and Hudson rivers to New York City. Look at the map on page 10 to see why. They returned with clothing, tools, furniture, and other manufactured goods shipped from Europe.

Then many skilled workers from Europe came to New York City. They began to manufacture things New Yorkers and the people farther inland needed. There were many jobs to be had, and people kept coming from many countries.

In the early 1800’s there arose the problem of how New York City was to continue to grow. The city and the factories had become too large. The Hudson-Mohawk region was not large enough to supply them with the food and raw materials they needed. The Lake Plain and the lands around the Great Lakes (see the map, page 10) were being settled by this time. The new settlers needed the goods manufactured in New York. In exchange, they had raw materials for the factories and farm products for people in the cities. But these inland regions were not connected with New York by water. There was no means of cheap transportation between the two regions. Transportation is the carrying or moving of people and goods from one place to another.

**The Erie Canal**

“...We should dig a canal between the Hudson River in New York and Lake Erie,” suggested Governor Clinton of New York State. “Then we would have a waterway connecting the Great Lakes with the ocean.”

Some people thought it would not pay to build a canal. But Governor Clinton knew the canal was needed. He put men to work. It took thousands of men working with picks, spades, and wheelbarrows eight years to finish this important canal which is still in use.

The first canal boat on the new Erie Canal carried a barrel of Lake Erie water which Governor Clinton poured into New York Bay.

The opening of the Erie Canal was a great day for New York. Governor Clinton was on the first canal boat to make the trip from Buffalo on Lake Erie to New York City. On July 4, 1817, thousands of people watched him empty a small barrel of water which he had brought from Lake Erie into New York Bay. This was to celebrate the “marriage of the Lakes and the Atlantic.” With the opening of the canal the transportation problem was solved. New York City grew rapidly.

**The early railroad**

People were trying to find still faster means of transportation. During the 1790’s hard roads had been laid to connect the cities of the Atlantic Coast with the lands west of the Appalachians. Along these roads vehicles pulled by horses carried passengers and freight. Still transportation was slow.

Then Englishmen invented a steam engine which could push and pull. It was called a locomotive. In 1829 such a locomotive was brought to the United States.

An American mechanic and businessman named Peter Cooper succeeded in improving the locomotive. He made a small steam locomotive which could pull a train of
The De Witt Clinton, one of the first steam engines, was named for the governor of New York. The coaches were copied from coaches drawn by horses. The engine made its first trip in 1831.

coaches. Cooper called this engine Tom Thumb. The Baltimore and Ohio Railroad Company had just been formed. Peter Cooper talked the new company into trying his locomotive.

Let us imagine it is the morning of August 18, 1830. The Tom Thumb is to be tried out for the first time. Forty passengers wait eagerly in the coaches. The little locomotive huffs and puffs as it gets up steam. With the creaking of chains and the jerking of coaches the Tom Thumb starts on its thirteen-mile run. The engine gets up steam and runs the thirteen miles in one hour and twenty minutes! The passengers sigh with relief when they reach the end of the run without an accident.

The Tom Thumb starts back to Baltimore. Its engineer is full of confidence and pride. On the way he meets a horse-drawn coach. “Want to race?” asks the driver of the coach.

“Too! Toot!” puffs the little locomotive. “We certainly do,” answers the engineer. So the race begins. At first the engine and the horse run at the same speed. Then the engine pulls ahead. The engineer and passengers are sure the Tom Thumb will win. They laugh and cheer as they leave the horse-drawn coach behind. No matter how the driver whips and shouts at his horse, he cannot keep up with the steam engine.

Suddenly the Tom Thumb stops dead on the tracks. The engineer feeds it more steam. He pushes and pulls levers. But a belt on the locomotive has slipped off its wheel. As the passengers wait helplessly, the horse-drawn coach catches up. “Get a horse to pull you in!” shouts the driver as his horse passes the train and wins the race.

But the Tom Thumb was a stout little engine. It gave the Baltimore and Ohio Railroad good service on later trips.

Peter Cooper and other inventors continued their experiments. In 1831 the De Witt Clinton, another steam locomotive, drew a train from Albany to Schenectady (skē-nēk’tā-dē), New York, a distance of seventeen miles.

Not long after this, short-line railroads were built along the Hudson-Mohawk valleys and the Lake Plain. These railways connected the inland cities with New York City. Boston, Philadelphia, and other eastern cities followed New York’s lead and began to build railroads. Soon railroads ran from city to city along the eastern coast. By 1861 most cities of the Atlantic Coastal Plain were connected with Chicago and other cities west of...
the Appalachians. In 1869 the Atlantic and Pacific coasts were joined together with iron rails. Today railroads connect all parts of the United States.

The New York State Barge Canal

Although trains are faster, it is cheaper to ship heavy goods by water. The chief means of shipping goods on rivers and canals was the barge. The barge is a boat with a flat bottom and plenty of room for freight. As time went on, New York City manufacturers needed a cheaper means of water transportation. The Erie Canal became part of a new improved waterway, called the New York State Barge Canal.

The Erie Canal reached from the Hudson River to Lake Erie, a distance of about three hundred and forty miles. The New York State Barge Canal is a vast system of canals and connecting waterways covering about nine hundred miles from Lake Champlain and the Hudson River to Lake Erie and Lake Ontario. Besides the Erie Canal, it includes three other canals and about three hundred and fifty miles of connecting lakes and rivers that have been deepened to be navigable.

The map on page 272 shows that goods from the Great Lakes and the St. Lawrence River can reach New York City by water. Many large manufacturing and shipping centers have developed on the Lake Plain and in the Hudson-Mohawk Valley.

LAKE PLAIN AND HUDSON-MOHAWK CITIES

The Erie Canal and the railroads brought many people and industries to New York State. At first the cities along the lakes were shipping and trade centers for products brought by lake boats, canal barges, and trains. Later they became manufacturing centers, too. Iron ore, wheat, and other raw materials from the North Central States, coal from Pennsylvania, and electric power from Niagara Falls have made this area a flour and steel center. Buffalo, in the heart of this industrial region, ranks first in our country in flour milling. Iron and steel, automobiles, and heavy machinery are also made in Buffalo's plants.

On the map on page 10 find the canal cities of Rochester, Syracuse, Utica, Schenectady, and Troy. Utica produces knitted wear and cotton goods. Schenectady manufactures heavy goods like electrical machinery and locomotives. The other canal cities manufacture the smaller electrical articles which people need in their daily lives, such as irons, carpet sweepers, toasters, and refrigerators. Rochester is noted for fine cameras and film and for the manufacture of men's clothing. The manufacture of shoes and gloves are important industries in several cities along the Erie Canal.

This oil barge and tugboat are going from one level to another in a canal lock. A lock is a section in a canal with solid gates at each end, in which boats are raised or lowered. Here the boats are lifted because water is allowed to flow in. As the water rises, the boats rise with the water to the next level.

*Standard Oil Co. (N.J.)*
The chief cities of the Northeastern states are shown here. Compare this map with the products map on page 100. What are the leading manufactures of each large city? Can you explain why?

Albany, on the Hudson River, is more important as a railroad center and port than as a manufacturing center. Goods from foreign ports and from New York City are shipped up the Hudson River to Albany. Albany then sends the goods by railroad or by the New York State Barge Canal to the lake ports. From these ports the goods are shipped to other cities in the United States and to Canada. Cargoes from the area west of the Appalachians and from Canada are shipped east to Albany and down the Hudson River to New York City. Albany is the capital of New York State.

**THE PHILADELPHIA AREA**

Philadelphia, Pennsylvania, is the center of a great industrial region which has grown up around Delaware Bay and the Delaware River. Settlers in this region began to manufacture in early colonial times. Many of them were skilled workers whom William Penn brought from England, Germany, Ireland, and Scotland. Iron ore was discovered in Pennsylvania soon after it was settled. These skilled workers made kettles, nails, and other iron articles that the colonists needed.

In the Philadelphia area most of the towns were on the Fall Line. Because they were at the head of navigation, these towns early became trading centers. When machines using water power came into use, factories were built at the falls. Later on electric power made the cities of the Fall Line important industrial centers. Philadelphia is the most important city of this area.

**Growth of Philadelphia**

Philadelphia early became an important seaport because of its excellent harbor on the
Manufacturing in Philadelphia today

Philadelphia manufactures a great variety of goods. Because its people are careful workers, Philadelphia is noted for the quality of its products. The leading industry in the Philadelphia area is the manufacturing of iron and steel goods and other metal products. Textiles and clothing are also important on the list of Philadelphia's products. Philadelphia imports almost as much raw wool as Boston does. The people of Philadelphia make men's clothing, stockings, carpets, and knitted goods. They manufacture cigars from fine imported tobacco. Refined sugar is the most valuable of the foodstuffs prepared in Philadelphia. Philadelphia also prints and publishes many books, magazines, and newspapers and makes the paper on which they are printed. Radios, television sets, and automobile parts are also manufactured in Philadelphia.

In the days when all locomotives were driven by steam, Philadelphia was the center of the locomotive industry. Because of their experience in making locomotives, Philadelphia manufacturers began to build other heavy machinery. Today much factory machinery and many locomotives are made in Philadelphia. Philadelphia also has a mint where the United States government manufactures money.

Building ships

Another important industry of the Philadelphia area is building ships. Shipbuilding, which is one of the oldest industries in our country, had an early start in all the colonies on the Atlantic Coast. When the Pilgrims had lived in Plymouth only four years, they built their first ship. The Puritans launched their first sailing vessel only one year after they founded Boston.

Colonial ships were soon carrying goods to and from England. Sometimes English merchants bought or rented the ships made in the colonies.

In early times the abundance of timber and its many skilled workmen made New England a leader in the building of ships. Because so many people in New England made a living by fishing, they were good sailors. Their land was thickly wooded so they had plenty of timber for building ships. However, other colonies were not far behind. Merchants in Philadelphia and Boston became rich through the trade they carried on in ships built in these two cities.

The swiftest and most beautiful of sailing vessels was the clipper ship, first built in American shipyards in the 1840's. Clipper ships were so called because they traveled at a fast "clip" or speed. They could travel fast because they had very large sails. The long slender shape of the ship made it easy for it to cut through the water. Many fine clipper ships were built in Boston, Massachusetts, in Portland, Maine, on Long Island in New York, and in Baltimore, Maryland. Clipper ships sailed to the West Indies, to Europe, to Africa, and to Asia. Ordinary sailing vessels took four to six months for a voyage between New York and China. Clipper ships could make it in three months.

Then steam engines began to be used to run ships. Even the fastest clipper ships could not keep up with the steamships. Next
In this large manufacturing plant in New Jersey chemicals and dyes are made. The river that you see is the Delaware, and across the river is Wilmington. Find Wilmington on the map.

Wooden ships were replaced by ships of steel. The steel ships could more easily be built near the coal and iron-ore fields. Because of this, the industry grew in importance in the Philadelphia area.

During World War II, we needed many ships in a hurry. Philadelphia, Camden, and other important shipbuilding centers on our Atlantic, Gulf, and Pacific coasts joined with New England in building the greatest wartime navy our country has ever had. Shipyards now are building ships for our navy, ocean liners, and freighters. They are also building small boats for pleasure, for fishing, and for trade.

Our merchant marine

During the time of the clipper ship the United States built up a very large merchant marine. A merchant marine is the commercial or cargo-carrying ships of a nation. Unlike a nation’s navy, its merchant marine is used for trade, not for war. With the coming of the railroad our merchant marine lost its importance. Americans were then interested in building railroads to open the western lands for settlement.

Our merchant marine continued to be small until we were engaged in two world wars within twenty-five years of each other. Because of these wars we needed ships to carry our men and materials of war. During this time the United States built up a huge navy and merchant marine.

Philadelphia’s neighbors

The cities around Philadelphia, like those near New York City, share some industries with Philadelphia. Yet each has one or two industries for which it is especially noted. Camden, New Jersey, which is joined to Philadelphia by a great steel bridge, is an important center for the building of ships. It is the home of more than three hundred and fifty different industries. The products of its factories include canned soup, phonograph records, and steel pens. Its shipyards are among the largest in the world. The people of this city boast that “Camden makes everything from a pen to a battleship.”
Below Philadelphia on the Delaware River is Chester, Pennsylvania, the oldest city in the state. Chester is important as a shipbuilding center and for the locomotives and automobiles made there. It also has factories where cotton, silk, and woolen goods are made.

Farther down the river is Wilmington, the largest city in Delaware. It is the home of a giant company which in peacetime produces chemicals, plastics, and dyes and in wartime produces huge amounts of explosives used by our armed forces. Dover, the capital of Delaware, is the center of a rich farming region. The principal industries of Dover are canning, airplane repairing, and the manufacture of rubber goods.

Thirty miles northeast of Philadelphia is Trenton, the capital of New Jersey. Trenton is a center for heavy industries with more than three hundred manufacturing plants. Its most important industry is the making of wire rope and steel cables, used in building bridges. Trenton is also well known for its pottery and for its rubber mills.

These pictures show how pottery dishes are made. Above, pieces of clay are weighed.

Below, the clay is being shaped into dishes. Each piece is then trimmed, sponged, and dried.

Next, enough water is added to moisten the clay until it can be kneaded as shown above.

When thoroughly dry, the dishes will be fired, or baked, in large brick ovens called kilns.

Fulper Stangel Pottery
Like New York City, Philadelphia owes its early growth to its fine harbor and rich land. Today the New York and the Philadelphia areas are the greatest industrial centers in North America.

MINING IN THE APPALACHIAN HIGHLAND

In the Appalachian Highland are beds of iron ore, coal, limestone, and slate. Natural gas and oil are found here, too. Early settlers in Pennsylvania discovered the iron and used it to make horseshoes. Later coal was discovered not far from the beds of iron ore.

The story of coal

Two pioneers had gone hunting near where Wilkes-Barre (wilks ’ bär ’) and Scranton now are. When night fell, they decided to sleep in the woods. They built a small fire between two black stones.

“This will scare wild animals away and keep us warm,” they said. “The stones will keep the fire from spreading.”

During the night the hunters began to feel very warm. “This is strange,” they thought. “Our fire should be out by this time.”

They got up. Instead of a small fire they saw a large one! Puzzled, they went closer. “The stones are burning!” they said. “Those black stones must be coal.”

There are two important kinds of coal, bituminous, or soft coal, and anthracite, or hard coal. The map above shows where coal is found in our country. Which do you find more of, bituminous fields or anthracite?

How anthracite coal is mined

Anthracite lies in seams separated from each other by layers of rock. A deep hole, called a shaft, is cut down through the rock to the seams of coal. Elevators are built in the shafts to lower miners and machinery to tunnels, which lead to the seams where they work. Small trains drawn by electric engines run on tracks in these tunnels and carry men, tools, and coal to and from the elevators. This kind of mining is called shaft mining.

Most of the work in the mines of the United States is done by machinery. A large machine run by electricity cuts the coal in the seam into squares. Holes are then made with an electric drill, and dynamite is put into them. The dynamite blasts the coal out in lumps. Usually machines load the lumps into cars, and the electric train hauls them to the elevator shaft. Sometimes the loading is done by men and the hauling by mules.

When the coal reaches the surface, it is separated from the rock, washed, and broken up. The lumps are next sorted according to
Uses of anthracite coal

Anthracite burns with little soot or smoke, so city people like to heat their homes with it. Because it is excellent for making steam and electricity, factories too like to use hard coal. But there is much less anthracite than bituminous coal in our country (see map, at the top of page 114).

How bituminous coal is mined

Bituminous coal too lies in seams between layers of rock. The seams are not so far below the surface of the earth as anthracite. Shafts are sunk to reach the seams of coal. Some bituminous seams are formed so that their ends can be seen in the walls or sides of valleys. Tunnels can be cut from the sides of the valleys along the exposed seams. This

Hundreds of feet down in the earth these miners are drilling holes in the coal bed.

The lumps of coal are then loaded into cars by means of the loading machine shown here.

Next, dynamite is put in the holes. When the dynamite explodes, the coal breaks into lumps.

Below, the miners can be seen riding up out of the mine at the end of their day's work.

Bureau of Mines
The first oil well was dug, or drilled, in Pennsylvania in 1859. Are derricks like this one used today?

kind of mining is called drift mining. Drift mining is easier and cheaper than shaft mining.

The buildings to which bituminous coal is brought when it reaches the surface are called tipples. Tipples are built on railroad tracks at the mine opening. In the tipples coal is sorted, then emptied into coal cars.

Uses of bituminous coal

Most of the manufacturing plants of the Northeast are supplied by the bituminous coal fields of the Allegheny Plateau. Bituminous coal makes much more soot and smoke than hard coal. But we have more of it, and it is cheaper. So it is in great demand as fuel for factories and homes, and because other things such as tar, pitch, and dyes can be made from it.

Oil and gas production

Oil and gas are also found below the surface of the Allegheny Plateau. The first oil-producing well in the United States was drilled at Titusville, Pennsylvania, in 1859. For many years after this the Allegheny Plateau furnished more oil and gas than any other part of our country. Today, however, only a small part of the oil and gas used in the United States comes from this region.

Manufacturing in the Appalachian Highland

Iron ore, from which steel is made, and coal help to make this a manufacturing area. The many streams also provide water power.

Textile manufacturing

Textile manufacturing is one of the chief industries of the eastern part of Pennsylvania. The textile mills of this area produce silk, cotton, and woolen goods. The textile mills grew up here because fuel was close at hand and wives of the iron and steel workers furnished labor.

There was a market for textiles in the crowded industrial areas east of the Appalachians. The railroads and rivers made transportation easy. Manufacturers knew it would pay them to import raw silk, cotton, and other raw materials. Textile mills were built in Allentown, Reading (rē’dën’g), Wilkes-Barre, Scranton, and Harrisburg. Besides being an important industrial city, Harrisburg is also the capital of Pennsylvania and a great railroad center.

Making cement

The making of cement has become an important industry in Pennsylvania because
much limestone is found in the Great Valley. The limestone is crushed and made into cement. Cement, mixed with sand, small stones and water, forms concrete, a fine building material. Concrete is used for bridges, subways, dams, tunnels, and roads. It is also used for large buildings, water tanks, grain silos, and storage bins.

**Iron and steel milling**

The manufacture of iron and steel and of iron and steel products is the leading industry of the highlands of Pennsylvania. Bethlehem, Wilkes-Barre, Scranton, and Harrisburg make steel framework for buildings and bridges, steel plates for ships, locomotives and machines, tools, and other articles of iron and steel. They make so many things that the mines of Pennsylvania can no longer supply their factories with the iron ore they need. Much of the iron ore comes from the region around Lake Superior in the North Central states. Large amounts of iron ore also come from the western part of South America.

**THE PITTSBURGH AREA**

The greatest industrial region in Pennsylvania is the Pittsburgh area on the Allegheny Plateau. Nature has given this plateau fuel, raw materials, and rivers. Man has built railroads and factories here. It is a region of dense population.

On the map on page 10 find Pittsburgh and its neighboring cities. Pittsburgh is the heart of the greatest iron and steel manufacturing region in the world. Sometimes we want to say a city is known for its huge output of iron and steel and things made from these metals. Then we call it a "Pittsburgh."

The map shows that Pittsburgh is a river port. It is situated on a point of land where the Monongahela (mō-nōng’gä-hē’lə) and Allegheny rivers join to form the Ohio River. This was seen to be an important site even in early times, for the French built a fort there. The fort was taken from them by the English, who named it Fort Pitt.

"This ought to be a good location for a trading post," the Englishmen said. "We can supply the goods needed in the wilderness and set up business on that point of land." A few blacksmiths, boatmakers, and traders joined them. Here pioneers exchanged their horses and covered wagons for flatboats, blankets, tools, and food. The trading post which grew up near the fort was named Pittsburgh after the Revolutionary War had driven out the Englishmen.

*Pittsburgh Chamber of Commerce*
Hot, liquid steel is poured into molds. The steel masses, when molded, are called ingots.

Coal, iron ore, and limestone were early discovered on the Allegheny Plateau. The people of Pittsburgh began to make guns, axes, and plows of iron. The town changed from a trading post to a manufacturing city. Then towns grew up near it and the people worked in the mines and factories.

Iron ore was later discovered in the Lake Superior region. This new supply of ore caused the poorer mines on the Allegheny Plateau to be closed. But Pittsburgh's steel industry continued to grow because ore from the Great Lakes region could be brought cheaply to its mills. Today Pittsburgh's plants for making iron and steel are among the largest in the world. Pittsburgh's iron and steel are used to make many products, from locomotives to needles and pins.

**The story of iron and steel**

*Smelting* iron ore and making steel are really two different industries. Smelting means melting the iron ore and separating the iron from the impurities or other minerals. *Coke* and limestone are used for smelting ore. Coke is made by slowly heating soft coal in air-tight ovens. This takes the ammonia, gas, tar, and oil out of the coal. What is left is known as coke.

Smelting takes place in tall, round buildings called blast furnaces. Iron ore, coke, and limestone are poured into a blast furnace. As these minerals slowly pass down the furnace, blasts of hot air are blown into the furnace. The terrific heat makes the coke burn and the iron and limestone melt. The impurities join with the limestone forming slag. Liquid slag is lighter than liquid iron, and it floats on top of the melted iron. The liquid iron is drawn from the bottom of the furnace and poured into molds called "pigs." As the iron is cooled in the pigs, it hardens into bars. These bars are called *pig iron.* Pig iron can be made into other forms of...
iron that are more usable and into steel. Steel is tougher and harder than iron.

To make steel the pig iron is melted or the hot liquid iron is used before it hardens into pig iron. Small amounts of other minerals are added, limestone is mixed with it again, and it is all melted in a large furnace. The hot liquid steel is run off into molds to harden into ingots, or bars. Sometimes steel bars and steel sheets are sent to distant cities to be manufactured into steel products. Often these products are manufactured right where the steel is produced.

The steel industry is one of the most important in the world. Can you imagine what would happen if all the steel mills in our country were to be shut down? The manufacture of automobiles, airplanes, ships, and locomotives would end. No skyscrapers could be made. Trains would have to stop running if there were no steel for rails. No electric irons, toasters, radios, refrigerators, and other electrical goods could be made. The closing of factories that use steel would throw millions of people out of work. Today we depend on steel for so many necessary things that we often say we live in the Steel Age.

Other products of the Pittsburgh area

Besides iron and steel, plate glass is made in the Pittsburgh area. Glass is made from sand, and the sand found in this area is exactly right for making glass. Dishes, bricks, and tile are manufactured from the clay found near by. Aluminum goods and products from oil, coal, and gas are also made here.

The towns around Pittsburgh have become industrial centers too. Johnstown manufactures many of the same products as Pittsburgh. Altoona, a little farther east, is noted for making and repairing locomotives and railroad cars. As you can see, the Pittsburgh

To make glass, sand is mixed with chemicals. The mixture is then melted in a furnace. The hot mass goes next to water-cooled rollers. Pittsburgh Plate Glass Co.

When cooled, the mass is rolled into sheets. The sheets are heated again and polished before they are cut. How are sheets of glass used? Pittsburgh Plate Glass Co.
area is one of our country’s leading industrial regions. (See the map on page 110.)

**FARMING IN THE MIDDLE ATLANTIC STATES**

Crops grow well on the Atlantic Coastal Plain, in the Hudson Valley, on the Piedmont, and the Lake Plain. These regions in the Middle Atlantic States have rich soil and a milder climate than New England. The cities in the Middle Atlantic States, like those in industrial New England, receive fresh food from farms near by.

**Dairy farming**


**Fruit growing**

Peaches, pears, and apples are grown in New Jersey and Delaware. The Lake Plain in New York State specializes in orchard fruit and grapes. More grapes are grown on the Lake Plain than anywhere else east of the Mississippi River. The farmers of the Great Valley in Pennsylvania raise fine apples.

**Truck farming**

The sandy soil and mild climate of the Atlantic Coastal Plain are well suited to truck farming, or the raising of vegetables and fruits for markets. The melons, strawberries, tomatoes, and other vegetables of New Jersey, Delaware, and Long Island in New York are famous throughout the Northeast.

**Special crops**

The truck farms of Long Island produce cabbage and other vegetables for use in the industrial area of New York. Long Island is also famous for its potatoes. Cranberries are grown on New Jersey marshes. Eastern Pennsylvania specializes in fine tobacco.

**FISHING IN THE MIDDLE ATLANTIC STATES**

The shallow, quiet waters of Long Island Sound and Delaware Bay are noted for their oysters. Oysters bring in one third of all the money earned by fishing in our country. When oysters are first hatched, they swim...
These fishermen are planting baby oysters in shallow water. In these warm waters they will be allowed to grow. In two to four years' time they will be ready to be marketed for oyster stew. But it is manufacturing and mining which make the Northeast the chief industrial and commercial region in the United States.

About until they find something to which they can cling. Baby oysters fasten themselves to rocks and shells under the quiet waters. At times thousands of them are found growing close together at the bottom of a bay or sound. Such places are known as oyster beds.

Some oystermen go out in small boats and gather the oysters with long-handled rakes. Other have boats which are fitted up with strong iron dredges run by machinery. These dredges scoop up great bagfuls of oysters at a time. The oysters are then shipped on ice to many of the inland cities and towns.

Because there is a large market for oysters, some people make a business of raising them. Thousands of eggs are collected in large tanks on shore. After they hatch, the baby oysters are put into shallow water where they find rocks to cling to. Other shellfish found in abundance in this region are scallops from Long Island and clams from New Jersey.

Fishing, lumbering, quarrying, and farming are important in the Northeast. But it is manufacturing and mining which make the Northeast the chief industrial and commercial region in the United States.
Words and Terms You Should Know

- coke
- pig iron
- clipper ship
- bituminous coal
- transportation
- drift mining
- ingot
- smelting
- shaft mining
- blast furnace
- slag
- tipples
- processing
- anthracite
- steel
- barge
- lock
- merchant marine

A Matching Game

Number a sheet of paper from 1 through 18. After each number write the word or term from the list above which matches the definition.

1. Coal from which gases have been removed
2. Soft coal
3. A way of mining coal through tunnels cut from the side of the valley and leading directly into the seam of coal
4. Melting ore to separate the metal from other materials
5. Iron which has been melted and hardened into bars
6. Ways in which people and goods are carried from place to place
7. Furnace through which air is forced, especially used in smelting iron
8. A flat-bottomed boat usually used to carry freight on canals and rivers
9. Preparing for market by means of several changes or operations
10. What is left after iron ore is smelted
11. A bar or other shape into which metal is cast
12. A fast-moving sailing vessel
13. A building where coal is sorted
14. Ships which carry on the trade of a nation
15. Hard coal
16. A form of tough, hard iron
17. A way of mining coal through a deep hole
18. The part of a canal in which ships are raised or lowered by letting the water in or out

Can You Answer These?

1. How do the climate and surface of the Middle Atlantic States compare with those of New England? Which natural regions are found in both of these areas?
2. The population map on page 36 shows that the Middle Atlantic States form the most densely settled region in our country. Can you explain why this is true?
3. Which industrial area of this region is famous for making clothing? Make a list of its manufactured products.
4. What are some of the things which made New York grow until it became the largest city in our country?
5. What are some of the important products of the Philadelphia area?
6. Which industrial area owes its growth to the large fields of anthracite coal in the neighborhood? Name the chief products of this area?
7. What area grew rapidly in industry because of the building of canals? What are some of the products manufactured in this area?
8. How and why did Pittsburgh become the heart of the greatest iron-and-steel manufacturing region in the world?
9. What three materials are necessary in the manufacture of steel? Why has the iron-and-steel industry grown so rapidly?
10. What minerals are found in the Northeast? Name two ways of mining used in this area?
11. How did the position of Buffalo make it a milling center and an iron and steel center?
12. Why is it easier to farm in the Middle Atlantic States than in New England?
13. In what do farmers of the Middle Atlantic States specialize? Can you tell why?
14. Locate the truck farms and the dairy farms which supply each of the great industrial areas. Which states are noted for truck farms? For dairy farms?
15. What are some of the important fruit-growing regions in the Northeast? What fruits does each raise?
16. What city is the largest seaport and greatest commercial center in the United States?
17. What are some of Philadelphia’s imports? Make a list of its important exports?
18. What is the largest city and chief seaport of New England? List its exports and imports.
Can You Choose the Right Answer?
Only one of the four endings after each sentence below makes that statement true. Copy each sentence and after it write the name or phrase that makes it true. To check your answers, you may exchange your paper with another pupil.

1. The greatest industrial region in North America is the: (a) New York area (b) Philadelphia area (c) Pittsburgh area (d) Hudson-Mohawk Valley
2. The canal connecting New York City with the Great Lakes was planned by: (a) Peter Cooper (b) Peter Stuyvesant (c) De Witt Clinton (d) Robert Fulton
3. This canal connected the Atlantic Ocean with: (a) Lake Erie (b) Lake Ontario (c) Lake Champlain (d) Lake George
4. The industrial center which grew rapidly as a result of the Erie Canal was: (a) Philadelphia (b) Pittsburgh (c) Boston (d) New York City
5. The first steam locomotive used by the Baltimore and Ohio Railroad was the: (a) De Witt Clinton (b) Tom Thumb (c) Griffin (d) Fulton’s Folly
6. The mills and factories of Buffalo get much of their power from: (a) Niagara Falls (b) Lake Erie (c) Lake Ontario (d) Mohawk River
7. The city on the Fall Line which became the most important industrial center is: (a) Trenton (b) Wilmington (c) Chester (d) Philadelphia
8. The chief minerals in the Northeast are found in the: (a) Lake Plain (b) Hudson-Mohawk Valley (c) Appalachian Highland (d) Great Valley
9. The greatest iron-and-steel center of the Northeast is: (a) Pittsburgh (b) Bethlehem (c) Wilkes-Barre (d) Scranton

Can You Complete These Sentences?
On a sheet of paper write the words which will make each sentence complete.

1. The center of the greatest industrial and commercial area in the United States is __________ __________.
2. Today the most important ship-building center of the Northeast is __________.
3. Ready-to-wear clothing and foodstuffs are products of the factories in __________ __________.
4. Two important kinds of coal mined in the Appalachian Highland are __________ and __________.
5. The Allegheny Plateau is rich in such minerals as __________, __________, and __________.
6. Pittsburgh is noted for the __________ and __________ it produces.
7. Farmers near large cities specialize in __________ and __________.
8. Many of the vegetables and fruits eaten in New York and Philadelphia are raised on the __________ __________.
9. Grapes and other fruits grow especially well on the __________.
10. Much of the shellfish caught in the Middle Atlantic region comes from __________ __________ and __________.

Using a Time-line
Continue the time-line which you began in Unit 2 (see page 71). The first date on your time-line for this unit will be 1620, the founding of the first colony in the Northeast. Reread the text to find other dates and place them on your time-line. The pictures on the opening spread on pages 72 and 73 will help you.

Using Maps
1. The map on page 10 has a key in the lower right-hand corner which shows the natural regions. Study this key to learn what region each color represents. Now name the natural regions. Notice which extend through the whole section and which do not.
2. On the map of the United States on pages 250–251 locate the Northeastern States. Name the states. Which are called New England? Which are the Middle Atlantic States? Between what parallels of latitude do the Northeastern States lie?
3. What country lies north of the Northeastern States? What ocean is at the east? Which of the Great Lakes border this region?
4. If you cannot get a large outline map of the United States, make one by tracing the map on pages 250 and 251. Write in the names of the Northeastern States and the important rivers and lakes. Label the Atlantic Ocean. Decide on a key to show the natural regions. Make a dotted line to represent the Fall Line.
Save this map for use as you study other sections of the United States.
5. Put important cities on your outline map as you study about them.
6. Study the map on page 100 which shows the products of this section. In your notebook make a list of these products, state by state.
7. Study the diagram on page 27. What large city of the Northeast is shown on this diagram? Make a diagram showing the surface of the Middle Atlantic States.
8. Study the maps on page 20. What do these maps teach you about the size of Pennsylvania in comparison with the whole United States? What is the difference between the map in the lower left-hand corner and the map just above it? How does the map in the upper right-hand corner compare with the one in the lower left? How does the size of Independence Square at the bottom right compare with the size of this square in the map above it?

**Interesting Things to Do**

1. Perhaps some of you have visited the Northeast. If you have any pictures or souvenirs of the places you visited, bring them to school to show to your classmates. Tell about the places you visited. As you talk, locate the places on a classroom map.
2. Divide the class into groups or committees. Let each group choose a colony about which to tell in some way. You can make up a play, a puppet show, or a movie. The other members of the class will be your audience.
3. Divide into groups or committees to give special reports on how people now live in the Northeastern States. Each committee may choose one kind of work to tell about. Your reports will be more interesting if you make pictures to show the industries of this area.
4. Ask the librarian for books about life in the Northeastern States. There are many interesting books about explorers, early settlers, Indians, heroes of the Revolutionary War, the clipper-ship period, important inventions, and other topics of interest. These stories will help you understand the history and geography of this section better. You may wish to dramatize some of the stories, or to read exciting passages to the class.
5. With the help of your teacher or art teacher plan and make a frieze. Let the frieze show the different groups which settled the Northeast and the story of each settlement.
6. Ask your teacher or your art teacher to show you how to make a large wall painting called a mural. Then make a mural showing how people live and work in the Northeast.
7. Pretend that you are a boy or girl who lived in early colonial times. Write a letter to one of your cousins in the Old World telling about your voyage to America and your new home.
8. Find out how the people who lived in the different colonies dressed. Cut figures, and dress them in colonial costumes.
9. Your teacher or your art teacher can also tell you how to make dioramas, or scenes showing settlements in the different colonies. For example, make a scene showing Cape Cod or Plymouth Rock. Put figures of the Pilgrims and the Mayflower in these dioramas.
10. Make up a play about the First Thanksgiving and give it for your parents or for another class.
11. The library or museum in your city may have movies or film strips about colonial and modern life in the Northeast. Borrow them to show to the class. Your teacher will tell you how to go about this.
12. Collect pictures of different boats, machines, and trains used from earliest colonial days to the present. Put them on the bulletin board.
13. Look through magazines and newspapers for pictures of famous and scenic spots of the Northeast. You can also write to the Chamber of Commerce of the cities for such material. Put these pictures in your scrapbook.
14. Give a pageant or other type of program using the ideas suggested above.

**Things to Think About**

1. Americans owe a debt to men like Roger Williams and William Penn. What freedoms do we have today which they helped us gain?
2. The Mayflower Compact, the Connecticut constitution, and the town meeting helped to give us another freedom. Can you explain?
3. From these examples can you see why history, which is the story of what has happened in the past, is so important to us today? As you read this book, look for other examples which show our debt to the past.
**Making a Chart**

1. Make a chart which will contain the most important facts about each of the colonies of the Northeast. The most important facts have been filled in for the early history of Massachusetts. Copy the headings and add the other colonies of the Northeast.

<table>
<thead>
<tr>
<th>State</th>
<th>Date Settled</th>
<th>By Whom</th>
<th>Purpose</th>
<th>First Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>1620</td>
<td>Pilgrims</td>
<td>Freedom of worship</td>
<td>Plymouth</td>
</tr>
</tbody>
</table>

2. Make a chart on the New England States in which you supply the information called for below. You will find population figures in the table on page 485. Reread the text to make sure your information about occupations is correct.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Largest City</th>
<th>Chief Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine</td>
<td>Augusta</td>
<td>Portland</td>
<td>Farming, fishing, lumbering</td>
</tr>
<tr>
<td></td>
<td>20,913</td>
<td>77,634</td>
<td></td>
</tr>
</tbody>
</table>

3. Make another chart like the one above for the Middle Atlantic States.

**Making an Outline**

An outline is a listing of the different parts, or headings, of a subject. An outline helps you to see the plan of a book or a unit or a part of a unit. An outline also helps you review materials. Below is an outline of the first part of Unit 3 which has been started for you. Copy this outline in your notebook, reread the text, and complete the outline.

I. What the Northeast Is Like
   
   A. The Lowlands
      1. The Atlantic Coastal Plain
      2. 
      3. 
   
   B. The Uplands
      1. New England coastal plains
      2. 
      3. 
      4. 

II. Settling the Northeast
   
   A. The Settlement of Massachusetts
      1. The Separatists
      2. 
      3. 
      4. 
      And so on
   
   B. The Settling of Rhode Island
      1. Roger Williams
      2. 
   
   C. The Settling of Connecticut
      1. Thomas Hooker
      2. 
   
   D. Pioneering in New Hampshire and Maine
   
   E. The Settling of Vermont
   
   F. Building New Netherland
      1. New Netherland
      2. 
      3. 
      And so on
   
   G. The Settling of New Jersey
   
   H. The Settling of Delaware
      1. The Founding of Pennsylvania
      2. 
      3. 
      And so on
   
   J. How the Colonists Earned a Living
      1. Farming, Hunting, and Fishing
      2. 

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The United States, of course, is not really separated into sections. It is one united nation. But for many years people thought of it as divided into the North and the South. The dividing line was the one which Mason and Dixon drew between Pennsylvania and Maryland in colonial times. South of the Mason and Dixon Line and east of the Mississippi River lie eleven states. We call them our Southeastern states. They are Virginia, West Virginia, Maryland, North Carolina, South Carolina, Kentucky, Tennessee, Georgia, Alabama, Mississippi, Florida.

An air view would show us that our Northeast and our Southeast are alike in many ways. We would find that our Southeast, like our Northeast, has an irregular coastline. This gives the Southeast excellent harbors which are protected from storms in the Atlantic Ocean. Some of these harbors are also river ports. There are many large rivers in this section of our country. Some of these are the James, Ohio, Kentucky, Tennessee, and
The Southeast

Cumberland rivers. The Mississippi River forms the western border of the Southeast.

We would also find that the natural regions of the Northeast extend into the Southeast. The narrow coastal plain gets wider in the Southeast until it covers all of Florida and most of Mississippi. Going inland from the Atlantic Coast, we would see the Fall Line, the Piedmont, the Appalachian Highland, and the Appalachian Plateau.

For hundreds of years Indians wandered across the lowlands, plains, and highlands of the Southeast. As you know, they built no towns and made few changes in the land.

The two Spaniards, Ponce de León and De Soto, explored this land. Then in 1565 the Spaniards founded St. Augustine (ə'gəstən') in Florida. St. Augustine is the oldest city in our country today.

Then groups of English people came. The first permanent English settlement in our country was also made in the Southeast at Jamestown in what is now the state of Virginia. Not long after Jamestown was founded, settlements were made in the present states of Maryland, North Carolina, and South Carolina. Georgia was the last of the thirteen original colonies to be founded. Some settlers came to the New World for gold. Some wanted religious freedom. And others hoped to build a better life.

More settlers kept coming. As the country along the coast became more thickly populated the newcomers had to settle farther and farther inland. Pioneers pushed west to Kentucky and Tennessee. Cotton and tobacco planters needed fresh land and moved into Alabama and Mississippi. Then we bought Florida, and our Southeast was complete.

By reading this unit, you will learn the answers to the following questions:

1. What is the Southeast like?
2. How was the Southeast settled?
3. What was life like in these colonies?
4. How did the westward movement begin?
WHAT THE SOUTHEAST IS LIKE

The Southeast is a beautiful, rich land. Its fertile soil and sunny climate make it a land where people can live comfortably and happily. You will find the Southeastern states on the map on page 11.

THE LOWLANDS

A large part of the Southeast is lowland. This lowland is made up of three large, flat plains. They are the Atlantic Coastal Plain, the Gulf Coastal Plain, and the Mississippi flood plain. A flood plain is land that a river flows over when it gets very high and spills over its banks.

The coastal plains

The Atlantic Coastal Plain is narrow in Maryland. It becomes wider and closer to sea level the farther south it goes. In Florida it joins the Gulf Coastal Plain. These two lowlands, the Atlantic Coastal Plain and the Gulf Coastal Plain, really form one plain. This large plain stretches along the eastern and southern coasts of the Southeastern states. The soil of most of this lowland is light and easy to cultivate. Parts are so low that rainwater will not drain off. That is where swamps are found on both the Atlantic and Gulf coastal plains.

The only way we can tell where one plain ends and the other begins is by the direction in which the rivers flow. On the map find the Potomac, the James, and the Savannah rivers. Their waters reach the Atlantic Ocean, so they flow across the Atlantic Coastal Plain. The Chattahoochee (chă-tá-hō’chē) and Alabama rivers flow into the Gulf of Mexico. They drain part of the Gulf Coastal Plain. The Mississippi River is the largest of the rivers which flow into the Gulf. The western half of our Southeast is in the Mississippi River Valley. Now look carefully at Florida on the map on page 11. Notice that the St. Johns and other rivers along Florida’s east coast flow into the Atlantic Ocean. Unlike most rivers in the southern part of our country the St. Johns River flows north instead of south. Notice also that the rivers along Florida’s west coast flow into the Gulf. The Atlantic Coastal and Gulf plains meet in central Florida.

The Mississippi flood plain

Just east of the Mississippi River, the Gulf Plain extends as far north as the Ohio River. The soil of this low, flat plain is especially rich and deep. It has been built up with silt. Silt, you will remember, is mud and sand that have been carried down by rivers. For centuries the Mississippi has been overflowing its banks and leaving silt on its flood plain. This silt has come from as far west as the Rocky Mountains and as far east as the Appalachian Highland.

The Nashville Basin and the Bluegrass Country

Find the Nashville Basin of Tennessee and the Bluegrass Country of Kentucky on the map on page 11. They are different from the other lowlands of the Southeast. These low, fertile areas are surrounded by higher lands. Such low regions are called basins. These basins are separated from each other by the western stretches of the Appalachian Plateau. The farms in both produce a great variety of products with tobacco as the leading crop. The Bluegrass Country is especially famous for its fine horses.

River valleys of the Southeast

You have already noticed that this is a land of many rivers. Name the largest of them. Settlers liked to make their homes in river valleys. Can you tell why? The valley of the James River was the first to be settled. As colonists moved west, farms began to dot the valleys of the Ohio, Kentucky, Tennessee,
and Cumberland rivers. As more people came, they spread into the other river valleys of the region.

The Great Valley

This lowland is in the heart of the Appalachian Highland. It extends from southern New York to central Alabama. It is one of the longest valleys in the world. In some places the Great Valley is wide, in other places narrow.

The beauty and rich soil of the Great Valley attracted settlers from the Atlantic Coast and from Europe very early in our history. Today the southern part of the Great Valley is famous for its fine orchards, good farms, and beautiful scenery.

THE UPLANDS AND HIGHLANDS

As in the Northeast, colonists in the Southeast settled first on the low, flat Atlantic Coastal Plain. When the plain grew crowded, they moved westward and found themselves on the Piedmont. See the map on page 11.

The Piedmont and Fall Line

On the Piedmont the settlers found the land was higher and no longer level. The Piedmont, as you know, is made up of rolling land broken by hills. It rises as it stretches westward toward the Appalachian Highland.

Pioneers were delighted with the Piedmont. Its soil is richer and deeper than that of the Coastal Plain. Spring comes earlier in the southern Piedmont than farther north. The Piedmont in Maryland, Virginia, and North Carolina is suited to the growing of tobacco. The climate and soil of the Piedmont lands of South Carolina, Georgia, and Alabama are just right for cotton raising. Vegetables, grains, and other crops grow well here.

When traveling by boat from the Coastal Plain to the Piedmont, pioneers were stopped at the Fall Line. You remember that the Fall Line is the eastern edge of the Piedmont. Here pioneers found falls and rapids. They had to transfer their goods from boats to backs of mules or horses if they were going farther west. Some colonists decided to make their homes near the falls. Here they could set up trading posts or mills. Small towns grew up around these trading posts and the mills which were built on the waterfalls.

The Appalachian Highland

For the most part the slopes of the southern Appalachian Highland are steeper than those in the Northeast. These mountain ranges form an almost unbroken chain from Maryland to northern Alabama. After a while hardy pioneers tried to cross these mountains, but at first they did not succeed. Then they found a gap (a low valley or pass) in the southern Appalachians. This group of the Appalachians is called the Cumberland Mountains, and the gap came to be known as
the Cumberland Gap. Through it the pioneers could make their way to the fertile plains beyond the mountains.

Another group of the Appalachians is the Blue Ridge Mountains. The Blue Ridge Mountains are famous for their beauty, their caverns, or large caves, and the Natural Bridge. Near by are the Great Smoky Mountains, part of which have been set aside as a national park. Mt. Mitchell, the highest peak in the Appalachians, is found in the Great Smoky Mountains. It is 6,684 feet above sea level. Each year thousands of people spend their vacations in the Great Smoky Mountains National Park. (Find the Blue Ridge and Great Smoky mountains on the map.)

**The Appalachian Plateau**

The Appalachian Highland separates the Piedmont from a higher, more rugged upland which is part of the Appalachian Plateau. You remember that the northern part of the Appalachian Plateau is sometimes called the Allegheny Plateau. The map on page 11 shows that part of the Allegheny Plateau extends through West Virginia and northeastern Kentucky. The southern part of the Appalachian Plateau is often called the Cumberland Plateau. The Cumberland Plateau begins in southern Kentucky and ends in Alabama. The Cumberland Plateau is higher and more rugged than the Allegheny Plateau.

**SETTLING THE SOUTHEAST**

Sir Walter Raleigh, as you know, tried to build an English colony in America. But he failed. After that it looked for a while as if England would have no colonies in the New World such as Spain had built in Florida.

**THE FOUNDING OF VIRGINIA**

But English businessmen wanted the products of America. The furs and lumber in North America and the fish off its coast attracted them. They believed that they could make a great deal of money by trading with the New World.

**The London Company**

A group of such men decided to form a company to found, or build, a colony in Virginia. “Each man can put in as much money as he is willing to risk,” they said. “If the colony is successful, we will all share in the profits. If it fails, no one man will lose much.”

King James gave them a charter and a plan of government for a colony. The charter was a paper which gave them the right to form the company, to carry on trade, and to make settlements in Virginia. They called their company the London Company.

Their next step was to get settlers. The London Company offered to pay the passage of any man who would go to Virginia to live. They promised to give him clothing, tools, weapons, livestock, and food for a year. In return, settlers had to promise to send the company all the gold, silver, and other raw materials they found for seven years. After that the land and all its products would belong to the colonists and they would then work for themselves.

One hundred twenty men set out for Virginia, but sixteen of these died on the voyage. Only twelve of the colonists were workingmen. One was a soldier, about whom we shall hear later. Many of the men were gentlemen, that is, men who were not skilled at any job. The gentlemen considered it a disgrace to do any work with their hands. They were not the kind of men to build homes and to endure the hardships of life in a wilderness.

Just before the ships sailed, the president of the London Company gave Captain Newport a sealed box. “Do not open this box until you reach Virginia,” he said. In the box were the laws for the colony and a list of the men who were to be its officers.
The first English settlers in Virginia saw Indians like these. This picture is a copy of a painting by an artist who came to Jamestown with the first group of settlers. The artist did not stay, for life was hard in the new colony. He returned to England with Captain Newport.

The building of Jamestown

Early in the spring of 1607 the colonists reached North America. They sailed up Chesapeake Bay until they reached a broad river. They named the river the James in honor of their king. On the map on page 129 find Chesapeake Bay. Its broken coast line forms many excellent harbors. Now find the James River. The people sent out by the London Company built their settlement on the peninsula near the mouth of the James. They named it Jamestown.

The James River is one of the many wide, deep rivers of the Atlantic Coastal Plain. The tide from the ocean extends upstream for many miles often causing these rivers to overflow their low banks for some distance inland. That is why this part of the Atlantic Coastal Plain is known as the tidewater region. The peninsula, or piece of land extending far out into the water, on which Jamestown was built, is in tidewater Virginia. Tidewater land is low and swampy.

Trouble in Jamestown

The fertile soil, deep forests, warm climate, and wide river pleased the settlers. But trouble arose because few of the men were willing to work. And there was much work to be done. They did not want to clear the land, to plow, to plant, or to build houses. They had to be forced even to help build a fort for protection against the Indian attacks.

The men had heard stories about cities in the New World whose streets were paved with gold. "There must be great wealth in this beautiful land," they said. They wandered about looking for gold or silver and enjoying the warm summer weather.

They would not work, but they were always ready to eat. The food which the London Company had supplied was kept in a common storehouse. Everybody received an equal share.

"This is not fair," complained the workingmen. "Those who do not work get as much as we do." Then they too refused to
work. There was real trouble in the Jamestown settlement.

The settlers did not get along well together. They quarreled about food and work. They did not like the laws the company made. They drank water from the muddy stream. This made many settlers sick. To make matters worse the Indians were causing trouble. The settlers had been attacked by Indians the day they landed in Virginia.

Then John Smith, a young English soldier who was one of the officers of the company, made himself leader. Captain Smith took charge of the little settlement and forced the colonists to follow his orders. First he got rid of the common storehouse. He believed it caused laziness. "Only those who work shall eat," he said. The gentlemen grumbled, but they had to work.

But they had started too late. When winter came, their homes were not ready and they had little food. Captain Newport had had to return to England for more supplies. Meanwhile the settlers were suffering from hunger. Luckily Smith was able to persuade an Indian tribe to sell him some corn and deer meat.

At last ships from England arrived. They brought more supplies and more colonists. But the new colonists were no better than the first. They too wanted easy riches, and they refused to work. Their food supplies ran out again. In order to save the colony John Smith used guns to force the Indians to sell him corn.

One of the persons who helped John Smith was Pocahontas (pō'kā-hōn'tās), the daughter of the Indian chief Powhatan (pou'hā-tān'). Pocahontas was only twelve when she first met John Smith. She became the friend of the Englishmen. She showed them how to raise corn, potatoes, and other crops. Many a time she saved the settlers by warning them of Indian attacks. When Pocahontas grew up, she married an English settler named John Rolfe.

If John Smith had stayed in America, the colony might have got along well. But Smith was badly burned when some gunpowder exploded. He had to return to England for treatment. After he left the Indians became dangerous again.

With their leader gone, the colonists again used the common storehouse and went back to their old ways. The winter of 1609–1610 was so bad that it is still known as the "starving time." When Smith left, there were about five hundred Englishmen in Virginia. Only sixty colonists remained alive at the end of that horrible winter. They decided to return to England. It looked as though the English had again failed to build a colony.

The saving of Jamestown

The members of the London Company were not willing to give up. They had spent a great deal of money on the colony and did not want to lose it. They said, "When Captain Smith was in Jamestown, he told us to
send farmers, builders, and laborers. This time we will send that kind of settler. We will also send a governor to rule them," they decided.

A fleet of nine ships with five hundred settlers and a large supply of food set out for Virginia. As the governor and the new settlers were sailing up the mouth of the James River, they met the ship carrying the poor starved settlers on their way back to England. The governor persuaded the settlers to return to Jamestown with him. And the colony was saved. When he returned to England the next year, the new colony was firmly on its feet.

Governor Dale, the new governor, was a strict but wise ruler. "This colony will succeed if I can make the men want to work," he thought. He immediately did away with the common storehouse. Then he gave the colonists farms of their own. Each colonist got three acres of land to plow and plant. Each colonist now had to work for himself. He knew that unless he raised food on his land, he would starve. Each man began to do his work. Jamestown never again had a "starving time." No one talked of leaving. England at last had a permanent settlement in America!

Things in Jamestown did not always run smoothly. There were Indian attacks and trouble between the settlers and their governors. During one quarrel between the people and their governor, Jamestown was burned. The town was rebuilt, but it was again destroyed by fire. Then Williamsburg, another settlement farther up the James River, became the capital of Virginia.

**Tobacco growing in Virginia**

About five years after Jamestown was settled, a settler named John Rolfe discovered how the colonists could make money. He learned that tobacco would grow well in the colony. Smoking had become popular in Europe after Sir Walter Raleigh and others had learned to use tobacco. Europeans would buy all the tobacco that the colonists could raise. The colonists planted tobacco everywhere. Some say it even grew in the streets of Jamestown. Soon there were tobacco plantations, or large farms, where nothing but tobacco was raised. Because the settlers became rich, others wanted to join them. By 1619 there were eleven thriving settlements in Virginia.

**Virginia in 1619**

"Things have improved in Virginia," said a member of the London Company. "How can we thank the colonists for what they have done?"

"Englishmen always like to help make their own laws. Why not let them do that?" said another member.

It gave the colonists great satisfaction when, in 1619, they learned that they were to have a part in their government. With the help of their governor they organized an assembly called the House of Burgesses. This assembly met in Jamestown, which had become the capital of Virginia. All the settlers from the eleven towns could not attend the meetings of the House of Burgesses. There were too many people for that. So each settlement sent two men to represent, or speak for, the town. This was the beginning of representative government in our country. Today our country is so large that most of our government is carried on by representatives.

Also in 1619 the first Negro slaves were brought to Virginia from Africa. Colonists who owned large plantations needed workmen. They could hire none because other settlers had their own work to do. The Indians would not work for the white men. So planters in Virginia bought Negro slaves when a Dutch ship brought them. This was the beginning of slavery in America.

The third important event of 1619 was the coming of a ship which brought ninety young women to Virginia. Until then life in the colony had been so hard that almost no women had come to Virginia.
How happy the settlers were to find wives to make real homes for them! With wives and families the men did not miss their old homes in England. The settlements in Virginia continued to grow. Virginia, the first permanent English colony in the New World, became one of the richest and most important of the thirteen colonies.

THE FOUNDING OF MARYLAND

Pilgrims, Puritans, and Quakers were coming to America so that they could worship as they pleased. Catholics, too, were unhappy during the reign of Charles I. At this time there seemed to be room in England only for members of the Church of England.

The Catholics were fortunate to have a friend among the wealthy members of the king’s court. George Calvert, the first Lord Baltimore, who had himself become a Catholic, set about finding a way to help.

Lord Baltimore had been a member of the governing council of the London Company which sent settlers to America. He knew that several of the colonies were getting along well. “Why not build a colony in the New World where Catholics will be welcome?” he thought. He told the king about his idea.

King Charles liked to have his friends build colonies. In this way he could build up his nation at little expense to himself. He gave George Calvert six million acres of land north of Virginia. This colony was to be called Maryland in honor of the queen. According to the charter, Calvert was the owner and the ruler of Maryland. He could coin money, collect taxes, and set up courts. But the laws of the new colony had to be made with the consent of the colonists. All the king asked in return was two Indian arrows a year and one fifth of any gold and silver which the colonists might find. Quite suddenly George Calvert died. But the king gave the charter to Calvert’s son, Cecil, the second Lord Baltimore.

Cecil Calvert immediately began to make plans. “Colonies often have trouble with the king or with the English government,” he told his brother Leonard. “I will stay here to look after the interests of our colony. You go to Maryland with the settlers.” The owner stayed in England. Leonard Calvert became the first governor of Maryland.

Lord Baltimore had heard of the hard time the first settlers at Jamestown had had. He made up his mind to send the kind of men
who would be good pioneers. Almost all of the settlers he sent were farmers, builders, mechanics, and workers of all kinds. They could cut down forests, build houses, plow, plant, and fight Indians if necessary. They were supplied with enough of everything that pioneers in the New World needed. Among the colonists there were also Protestants.

**Settling St. Mary’s**

Leonard Calvert and the colonists reached Maryland in the spring of 1634. At the mouth of the Potomac River they founded the town of St. Mary’s. Then they explored the Potomac River and Chesapeake Bay. On the map on page 129 find the peninsula between the Potomac River and Chesapeake Bay.

The settlers chose to build their town on a bluff overlooking the surrounding country. The land had already been cleared by the Indians. These Indians wanted to move because they were having trouble with a neighboring tribe. They gladly sold their village and fields for some axes, hoes, and brightly colored cloth. The Indians stayed long enough to show the settlers how to plant corn and tobacco.

Lord Baltimore’s colonists were fortunate. Most of Maryland lies on the Atlantic Coastal Plain. This was a good place for a settlement. Fertile soil, broad rivers, good harbors, and a warm climate made life in this colony pleasant. The growing season, which is six months long, made raising food and tobacco easy. The settlers found oysters in Chesapeake Bay.

The colonists lived in the Indian village while they planted their crops, and planned and built St. Mary’s. There was no “starving time” or terrible winter in the Maryland colony. Even that first year the settlers were able to send corn to New England in exchange for fish.

The first meeting of white settlers with the Indians in Maryland was friendly. Maryland was founded as a home for Catholics in the New World, but its laws gave religious freedom to all.

*Maryland Historical Society*
Maryland did not become a colony of many towns like Massachusetts. The climate and soil were suited to the raising of tobacco. Tobacco brought high prices in England, and land in Maryland was cheap. The settlers took large sections of land along the rivers which flowed into Chesapeake Bay. Ships could sail right up to their plantations to load the tobacco. Maryland became a colony of large tobacco plantations. For about sixty years St. Mary’s was almost the only town in the whole colony of Maryland.

**Saving religious freedom in Maryland**

Life in this colony was pleasant for a while. Governor Calvert allowed everyone to attend the church of his choice. Maryland had an assembly something like Virginia’s House of Burgesses. This assembly and the governor ruled the colony. Everybody who owned land could vote and help make laws.

Some Puritans had settled in Virginia. But the governor of Virginia did not like Puritans. So he drove them out. These Puritans and some from other places came to Maryland. Lord Calvert welcomed people of different religions. However, the arrival of so many Puritans worried him. “If they become too powerful,” he thought, “they will make the Puritan church the only church in the colony.” To avoid this Governor Calvert asked the assembly to make a law saying that all Christians were always to be welcome in Maryland. This was a move toward real freedom of religion.

Lord Baltimore’s worst fear came to pass. At one time the Puritans did gain control of Maryland. While they ruled, life was not comfortable for anyone who was not a Puritan. But they remained in power only four years. When the colony was returned to Lord Baltimore, the colonists had religious freedom again.

**COLONIES IN THE CAROLINAS**

Both England and Spain claimed the land between Virginia and Florida. Both knew that whoever settled it first would hold it. In 1663 eight English noblemen asked the king to grant them this land. He gladly gave them the land from Virginia to Florida and “from sea to sea.” This grant included the settlements already made in northern Carolina. The eight noblemen became the owners of Carolina.

At one time all the land between Virginia and Florida was called Carolina. Some early settlers from Virginia settled near Albemarle (ăl’bĕ-märl) Sound in what is now North Carolina. A *sound* is a channel of water which connects the ocean with another body of water or which separates an island from the mainland. On the map, page 129, find Albemarle Sound. What does it connect? For a long time the long, sandy islands along the coast and the shallow waters around them kept ships from entering the sound. Sand bars kept the Spaniards and French from attacking the settlements south of Virginia.

**Settling northern Carolina**

West of the swampland hills the settlers found the land covered with pine forests. Tall and straight masts for ships could be made from these pine trees. Pitch, tar, turpentine, and resin are also products of the pine. The climate was mild and the forests were full of wild animals.

Pioneers in what is now North Carolina did very little farming. Some cleared a few acres on which to grow corn, wheat, and vegetables for their families. A few, near the northern border, raised tobacco which they took to Virginia to sell. They hunted and trapped. They did not bother much with their livestock. Their hogs ran wild and dug for acorns in the forests. Their few cattle also had to find their own feed.

After a time people from other colonies and from Europe joined the early settlers in the northern part of Carolina. They lived in crude cabins in small clearings in the forest. There were few schools and churches, no slaves, and little money in this land. They
had no fine clothing. Their hard life made them strong and independent. All were free and equal. There were neither masters nor slaves in these settlements.

**Settling southern Carolina**

The southern part of Carolina is warmer than the northern. Much of the Atlantic Coastal Plain is low and wet, but it has no great swamplands. The first colonists who went to Carolina built a settlement on the best harbor south of Virginia. They called it Charles Town. Later its name was changed to Charleston.

The settlement in southern Carolina grew. More people from England, the West Indies, and other countries settled near Charleston. Several French Huguenot (hū'gē-nō't) families arrived. They had been driven out of Catholic France because they were Protestants. Most of the settlers in the southern part of Carolina had wealth and were educated.

**Rice and indigo in southern Carolina**

These settlers tried to raise tobacco for a living. They soon learned that this crop would not grow well in their hot, damp lowlands. They began to look around for another kind of crop. One day a sea captain from Africa gave a Charleston planter a bag of rice. The seeds were planted. The land proved to be just right for growing rice. Rice became the chief crop in southern Carolina.

Raising rice was hard work. Workers in rice fields had to stand knee-deep in water under the hot Carolina sun. White men could not stand the dampness and heat. They refused to work in the rice fields for any price. Slaves had no choice. Rice planters bought slaves from the West Indies and from colonies farther north. Before the end of colonial times there were three Negro slaves to every white man in South Carolina. Most of them worked in the damp rice fields.

Planters hired *overseers*, or managers, to look after their slaves and to run their plantations. The overseers were often rough, cruel
men. Some of them made the life of a slave who lived on a rice plantation very hard to bear.

A second money crop was brought to the Carolinas by a young girl. Eliza Lucas was the daughter of the governor of one of the islands in the West Indies. She had seen indigo (in'də-gō) growing in the islands. A rich blue dye, much in demand at that time, was made from the indigo plant. "Our climate is hot and damp like that of the West Indies," she thought. "I'm sure indigo will grow well in Carolina." Because her father was away and her mother was ill, Eliza managed the Lucas plantation. She had indigo seeds planted on their land. The first crop was a failure. But she tried again and this time the plants grew well. In time indigo became the second most important crop in the Carolina colony.

**Life in Charleston**

The wealthy planters spent only a few months a year on their plantations. Most of the time they lived comfortably in large, beautiful homes in Charleston. Their days were spent in visiting, hunting, and horse racing. In the evenings they went to balls, parties, or plays. Charleston had a theater where actors from England gave fine plays. One of the first public libraries in America was founded in Charleston. Most planters sent their children to England to be educated. But Charleston had a few schools which were supported by private families. People who could afford it sent their children to these private schools. Life in Charleston was much like life in England.

**Pirates and Indians in Carolina**

For many years pirates had been coming to Carolina. The small, sandy islands along the coast served as fine hiding places for them. At first the settlers in both parts of Carolina had welcomed the pirates. They had been glad to buy the many articles the pirates smuggled, or brought secretly, into the colony. But the pirates became too bold. They attacked and robbed English ships carrying manufactured goods to the colonies. Virginia and Carolina joined forces and drove out the pirates. That put an end to the robbing and smuggling.

Meanwhile the people of Carolina were having trouble with the Indians. Time and again the Indians had tried to drive the settlers out but failed. With the help of the Spaniards they made a last attempt to get their lands back. Indian tribes attacked the settlements in both northern and southern Carolina at the same time. Again all the colonists in Carolina banded together. After bloody fighting they defeated the Indians and drove them out of the colony.

**Dividing Carolina**

The eight owners of Carolina drew up a plan of government which gave the colonists very few of the rights they had had in England. The colonists objected. They said they were still Englishmen and demanded a part in the government. The owners had to let
When General Oglethorpe and his settlers landed in Georgia, they were met by Indians who were friendly. The first town that they built was at Savannah.  

Bettmann Archive

them have an assembly and help make laws. Still the settlers were not satisfied. When the quarreling continued, the owners became discouraged. They sold Carolina back to King Charles, and the colony became a royal colony.

Up to this time Carolina had been considered one colony. Most of the time it had been ruled by one governor. But the land and the people of the north were different from those of the south. The northern settlements were far from those of the south. They were separated by great swamp lands. For these reasons, when the region became a royal colony in 1729, it was divided into North Carolina and South Carolina.

South Carolina soon became the leading Southern colony next to Virginia. North Carolina grew more slowly. The sturdy, liberty-loving pioneers of North Carolina later played an important part in winning American independence.

THE FOUNDING OF GEORGIA

By the time Englishmen had been in America one hundred years, some colonists had become wealthy. All could make a good living. But in England hundreds of people could find no work.

Debtors in England

Many Englishmen were too poor to buy food or clothing or to pay rent. Because they owed money, they were put into prison. This was a foolish practice because they could earn no money in jail with which to pay their debts. Some spent many years in a debtors' prison, a jail for people who owed money.

In the cold, damp, dirty prisons they lived on bread and water. Diseases of all kinds spread among them. Some people died in these horrible jails.

There were wise men who thought this way of punishing people was wrong. Among them was General James Oglethorpe. A friend of his had died in a debtors' prison before Oglethorpe had been able to help him. "If these people could find work, they could pay their debts," Oglethorpe said.

Oglethorpe's colony for debtors

Then the idea of a colony for debtors came to him. "In America there is plenty of work," he thought. "In the New World these people could have a second chance."

As yet there were no English settlements south of South Carolina. Spaniards and Indians in great numbers were moving up into this region from Florida. And the king of England wanted Englishmen to settle there. But General Oglethorpe knew that the English king would not be interested in a colony for debtors. So he tried to persuade the king in another way. "Your Majesty," he said, "I would like to build a colony between Florida and South Carolina. Such a
The Georgia colonists worked hard to build homes and farms. They all helped each other, and the settlement grew. This picture of Savannah, the first settlement in Georgia, was made in 1733. Can you tell why the Georgia settlers worked hard to make their colony succeed? Georgia was the last English colony founded in America. When was the first English colony founded?

The settlement of Savannah

For the new colony General Oglethorpe chose the kind of debtors who would make good settlers. He searched the prisons for men who were willing to work for a living. Among the colonists who sailed to Georgia with General Oglethorpe were farmers, shoemakers, carpenters, mechanics, and other kinds of workers. They took with them supplies of food and clothing. They also took seeds, tools, and farm animals.

Oglethorpe wisely chose a place several miles up the Savannah River for his settlement. He called this settlement Savannah. Its location on ground a little higher than the river made Savannah a healthful place in which to live. The mouth of the river formed a good harbor.

Some people also settled on the lowlands near the coast. The coastal plain in Georgia is low, hot, and swampy.

Georgia was the last of the English colonies. It was founded in 1733. Virginia and Massachusetts were more than one hundred years old by that time.

Farms and plantations in Georgia

Governor Oglethorpe wanted to save his colony from Indian attacks. He made friends of the Indians by paying them for their land. He was kind and just in all his dealings with them.

The land in the new colony was divided among the settlers. Each received land for a house in town and for a farm outside. Georgia had been planned as a workers' colony, so there were to be no slaves. Because each man was expected to work his own land, the farms were small. Seeds to plant, tools for farming,
farm animals, and food to last until his first harvest were given to each colonist. But it was not long until the settlers wanted large plantations so that they could raise rice and indigo. These crops grow very well in a hot, damp climate.

Plantations were laid out. Slaves were brought in to do the farm work. The settlers began to plant large crops of rice and indigo. Later they raised cotton. While there were still many small farms, Georgia became a colony where large plantations were common.

Trouble with the Spaniards

The Spaniards in Florida were not pleased to have such close English neighbors. When war broke out between Spain and Great Britain, the Spaniards wanted to get rid of the English settlers. They gave weapons to some runaway slaves and sent them north to attack the settlers in Georgia. But there were too few slaves to cause much harm. Then the Spaniards tried to get the Indians to attack the settlers. Because Governor Oglethorpe had always treated them justly, the Indians remained friendly. In the fighting between the English and the Spanish neither side won. But Oglethorpe built forts close to Spanish territory to defend his new colony, and the Spaniards stayed in Florida.

The government of Georgia

James Oglethorpe was a wise, kind man. For twelve years he was judge, ruler, and military leader in Georgia. At first Oglethorpe's military rule was for the good of the colony. But after a time the settlers wanted a part in the government. Then new laws were made for the colony. But still the settlers were not allowed to have a council or their own assembly. This led to serious quarrels between the colonists and the owners. Eighteen years after Georgia was first settled, the owners turned it over to the king. Like other colonies which belonged to the king, Georgia was then permitted to have its own council and assembly. The last of the English colonies had grown up.

By 1733 England had thirteen colonies along the Atlantic Coast of North America (see left-hand map, page 159). North of them were the French. The Spanish were to the south. The colonists knew little about the land to the west. For many years they were content to live near the coast facing their mother country across the Atlantic Ocean.

LIVING IN THE COLONIAL SOUTHEAST

Most of the people in the thirteen colonies came from England. They spoke the same language. When they first arrived, all made a living in the same way. They farmed, hunted, and fished. But as time went on, Southern colonists developed a different way of living from those who had settled farther north. The climate, the surface, and the natural resources of their land caused this change.

Settlers in the Southeast quickly learned which crops grew best on their farms. After this they raised only enough grains and vegetables for their own use. The rest of their farm land was planted in a special crop. The special crop came to be known as the *money crop*. They raised the money crop, not for their own use, but to sell.

As you know, tobacco was the money crop in the cooler, drier parts of Maryland, Virginia, and northern Carolina. Tobacco uses up much plant food in the soil and wears out land rapidly. That did not worry the colonists. They could buy more land cheaply. But they did not know how to replace the plant food that tobacco used up. We call that process fertilizing. Instead of fertilizing their fields, they left them and moved on. Acres and acres of trees were cut down or killed to make room for tobacco. Enormous amounts of lumber and soil were wasted through this poor method of farming.
You will remember that in southern Carolina and Georgia rice and indigo were the money crops. Later, farmers in these states discovered that cotton grew well, especially in the Piedmont. Cotton is easier to raise than indigo or rice. Planters of the South began to specialize in growing cotton, especially after the invention of the cotton gin, about which we shall read later.

Like tobacco, cotton robs the soil. As their soil wore out, cotton growers bought more and more land. It was not unusual for a Southern planter to own two or three thousand acres of land. As you know, such large farms on which one or two crops are raised are called plantations.

Let us imagine that we are paying a visit to a Southern tobacco plantation in colonial days in Virginia.

**Life on a Southern plantation**

"Time to get up, Mr. Charles. The ship is ready, and Captain Robinson wants to get an early start. The men are already taking the tobacco to the wharf," said Joshua. He set the basin of warm water on the stand near the bed. Then he drew aside the bed curtains.

"I promised the children they could watch the men load the tobacco," said Charles Page as he dressed. "They are going with Captain Robinson as far as Williamsburg. Mrs. Page and I will join them at their grandmother's next week. As a member of the House of Burgesses I must be in the capital when the assembly opens."

When Charles Page entered the drawing room, he found his family, Captain Robinson, and the servants waiting. Charles Page read the morning service from the Bible and the prayer book. Because the church was very far away, it was his custom to hold church services in the drawing room for everyone on the plantation. After the services Mrs. Page led the way to the dining room.

Captain Robinson came to the Page plantation every year to get their tobacco, which he took to the London market. He had been with the Pages for a week. Now he was ready to sail for England. Naturally the talk at breakfast was about tobacco and London.

"Your tobacco crop has been unusually good this year, Mr. Page," said Captain Robinson. "Is there anything special you'd like me to bring when I return?"

"My wife has a long list of things that she and the children want," Charles Page answered. "And I'd like more skilled workers. I need a shoemaker, a tailor, and two or three carpenters. It is impossible to hire any trained workmen in the colony."

"London has many men out of work. But they are too poor to pay their way to America," said the captain.

"I shall be glad to pay the passage of the workmen that I need."

"If you pay their passage they will be indentured servants, won't they, Father?" asked Susan.

"Yes, and they will work for us until they can repay me," replied her father.

"How did the last group which I brought turn out?" the captain asked.

"Fine, thank you. They are good spinners, weavers, and cabinet makers. We are especially happy with the Whitesides."

"She is the cleverest needle woman I ever had!" said Mrs. Page. "She has made me a fine dress from the silk cloth you brought."

"It's beautiful!" said Susan. "Mother is going to wear it at the governor's ball when the House of Burgesses meets."

"I like Mr. Whiteside more than any teacher I have ever had," said young Charles.

"The children are having their lessons at home now that we have such a fine teacher," explained Mrs. Page.

"Mrs. Whiteside is teaching us to dance," added Susan.

"You can see that we are pleased with your choice," said Mr. Page. "But good indentured servants leave as soon as their time of service is up."
“It’s right that they should,” his wife reminded him. She then took her basket of keys and started on her daily round of household duties.

“Come, Captain,” said Mr. Page, “we can finish our business in my office.” The office was at the end of a hall which ran through the middle of the house.

In the office Charles Page gave Captain Robinson the list of things the captain was to buy in London for the Page family. “The new glass for the windows and the china dishes are to be a surprise for my wife. Do you think you can get them?”

“If there are any to be had in London, you’ll have them. And I’ll bring more indentured servants too when I return in the spring,” promised the captain.

At the back door a servant waited for them with horses. From the kitchen, a few feet away, came the good smell of bread baking. It made the captain wish he could stay for another meal. They passed through Mrs. Page’s flower gardens. Behind the planter’s large house they could see the homes and shops of the indentured servants. Beyond them were the slave quarters where the slaves lived. Here also were the barns, carriage houses, and the blacksmith’s shop. Vegetable gardens, wheat and corn fields, pastures and tobacco fields stretched far off into the distance.

“How much like a village your plantation is!” remarked the captain.

“A self-supporting one,” answered the owner of the plantation. “We produce everything we eat, the servants’ shoes and clothing, and most of our furniture and tools.”

At the wharf the Page children watched the busy scene. Slaves were carrying boxes and barrels of tobacco to the water’s edge. Sailors were storing them in the ship’s hold.

“Only a few left, sir,” said the overseer when he saw Mr. Page.

By eleven o’clock the tobacco was stored, the decks were cleared, and the ship was ready to sail. It would stop at Williamsburg to leave the children with their grandmother. Then it would start on the long voyage to England.

“All aboard,” sang out the mate. “Good-by,” called the captain as he led his young passengers up the gang plank. Everybody waved until the ship was out of sight.

Charles Page spent the rest of the day riding over his plantation with his overseer. They inspected fences and buildings, looked over fields and woodland. They decided when the last few crops should be harvested. They also decided where to build new fences and which part of the forest to clear for more tobacco. In the slave quarters they found cabins which needed repair. By nightfall they had ridden over one third of the land.

Mrs. Page also had a busy day. She planned meals with the cook. With the housekeeper she inspected the pantry, the linen closet, and other storerooms. She gave orders and advice to the spinners, weavers, and dressmakers. A sick slave needed medicine and Mrs. Page saw that he got it.

After supper Charles Page went to his office. “We shipped more tobacco to England this year than ever before,” he thought to himself. “Captain Robinson said our tobacco would bring a good price at the London market. We have done well this year.” The planter went on with his plans. He wanted to leave everything in order before going to Williamsburg.

At her desk in the living room Mrs. Page was busy with her own accounts. “It takes a great deal of planning to keep so many people busy in my absence,” she thought.

Both Mr. and Mrs. Page worked until they finished all their plans and instructions. The next day they were to journey to Williamsburg, the capital of the colony.

A colonial capital — Williamsburg

Let us imagine that we are to pay a visit to Williamsburg, today. You recall that Williamsburg became the capital of Virginia when Jamestown was burned.
As soon as we arrive in Williamsburg, we realize that we are not only in another capital, but we seem to be in another century. We do not have to pretend that we are in the city George Washington knew. We can walk down the streets he walked on and visit places familiar to him. We actually are in Williamsburg as it was in colonial days. Williamsburg is a restored city. All the modern buildings were torn down, and the buildings of colonial Williamsburg were built again where they used to stand. This is how it happened.

Three hundred years after its founding, it was decided to restore the old capital of Virginia. What a search for records and for articles from colonial times followed! From attics in old houses in every part of our country came furniture, dishes and kitchen utensils, and clothing, all from colonial days. In a library in England the first plans used in building the governor’s palace and other public buildings were found. Lists of the furnishings turned up. Then builders set to work.

Sometimes the builders were lucky enough to find the earliest foundations. Then it was easy to put up buildings just the size and shape of the first buildings. Government buildings, shops, taverns, inns, and even the jail were rebuilt. Streets were given their old names. In a short time a town which had been built in the 1600’s and 1700’s appeared in the United States of today.

We walk down the Duke of Gloucester Street early in the morning, we hear the sound of horses’ feet. We see coaches drawn by fine, sleek horses and driven by coachmen in costume. No, that is not Martha Washington and her friends whom you see in the coaches. Nor are those men whom you see members of the House of Burgesses. These are modern Americans on their way to work in colonial shops and mansions. They wear colonial costumes and ride in coaches as they would have three hundred years ago.

We enter a fine brick building. “This is the Capitol,” says our guide. “Here the House of Burgesses met to make laws for Virginia. Washington, Jefferson, Patrick Henry, and other famous Americans came here daily when the assembly was in session.” We imagine ourselves at a meeting as our guide points out their seats. When he goes to the speaker’s platform and repeats part of Patrick Henry’s famous speech, we feel that he is Patrick Henry.

As we again walk down the Duke of Gloucester Street, our attention is attracted by swinging signs in front of the many shops. They have pictures, glassware, silver, pottery and furniture to sell. Some are real colonial pieces. Others are copies made by these skilled workers. They make everything by hand in these shops which are part of their houses.

Raleigh Tavern is our next stop. Beautiful china and silver in the dining room tell us that parties and gay balls were held here when the assembly met. A guide shows us a smaller room and a secret exit. Here the assembly held secret meetings when the colonists were having trouble with England. We feel like rebels as we step through the secret exit behind a clump of trees.

In the jail we see the cells in which wrongdoers were kept in colonial days. In the prison yard the jailer shows us wooden frames with holes for the prisoners’ feet, called the stocks. People who committed minor crimes like lying were put in the stocks. In spite of the warm sunshine we feel cold as he tells how crime was punished in colonial Williamsburg. We are convinced that crime did not pay even in colonial America.

Now we find ourselves on the street again walking toward the Governor’s Palace. Is the gracious lady in colonial dress who greets us at the door the governor’s wife? It is not hard to imagine that we are guests of the governor as we move through the stately rooms. We are astonished and delighted with the elegance of the furnishings, the beauty and charm of the house. We wander through the gardens behind the mansion.
Williamsburg today looks very much as it did in colonial times when it was the capital of Virginia. This is true because in the 1930's the old town was restored, or rebuilt. Duke of Gloucester Street, one of the main streets, is seen in the picture above. On the right is the governor's palace. Below is an inside view of a famous inn. The fourth picture is the great ballroom of the governor's palace.
We sit in the gardens and find them delightful. When a guard comes to tell us that visiting hours are over, we awaken to find that we have been daydreaming.

Except for Harvard University, in Massachusetts, the College of William and Mary, in Williamsburg, is the oldest college in our country. It was named for the king and queen who ruled England when the college was founded. One building was planned by Christopher Wren, the most famous planner and builder of his day. It has been in use since early colonial days. Thomas Jefferson and many other famous Americans attended classes here. Classes are still held in the Christopher Wren building.

Today the College of William and Mary stands where the old and the new meet. When we leave these college grounds, we are again in modern America. Find Williamsburg on the map on page 129. Notice that a short drive brings us to Richmond, the capital of Virginia today. Now find Washington, D.C. A few hours’ drive and we are in Washington, the most modern of all capitals, in the most modern of all countries.

THE BEGINNING OF THE WESTWARD MOVEMENT

By the year 1750 most of the Atlantic Coastal Plain from Maryland to Georgia was divided into large plantations. The few towns were located on bays or at the mouths of wide rivers. The settlers bought from Europe, and especially England, what they could not produce in their colony.

More people from England, Scotland, Ireland, and Germany kept coming. Settlers kept moving away from the coast. When they reached the Piedmont, they found good farm land, so they decided to stay. For about one hundred fifty years the colonists did not go beyond the Piedmont. The Appalachian Highland formed a wall between the English settlements and the wilderness.

 Hunters and trappers were the first to cross the Appalachians. “West of the mountains the land is rich and covered with great forests,” they reported. “The woods are full of wild fowl and fur-covered animals.” The great packs of furs which they brought with them proved that what they said was true.

Land companies became interested. They bought large areas of land west of the Appalachians from the government. Then they sent surveyors to measure it. The surveyors told of rich grass, fertile soil, and broad rivers. The land companies offered pioneers large sections for low prices. Some Northern farmers wanted better land. The Southern planters who had worn out their soil by planting tobacco or cotton wanted cheap land.

Pioneers packed their supplies on the backs of mules or horses or in covered wagons and started out. The women and children rode with the household goods. The older boys and the men walked along with their guns and their dogs. They drove their cattle, sheep, and pigs before them. They were moving westward.

Four Routes to the West

The Appalachians were hard to cross. There were no roads through the forests. Even Indian trails were few. But brave pioneers found four routes through the highlands. On the map on page 147 find these routes.

Unfriendly Indians kept people from using the two northern routes for a long time. Later, pioneers followed the Hudson and Mohawk rivers to the Lake Plain and crossed the Appalachians to the Ohio River. People in the Northern colonies used these routes.

The third route, although the most difficult, was the one that people from Virginia and North Carolina used earliest. They followed the tidewater rivers to their sources in the eastern ranges of the Appalachians. Then they followed the Great Valley until they
On this map trace the four early routes to the West. Which route was used first? Why?

came to a low gap, or valley, in the western ridge. This pass was the famous Cumberland Gap (see the map above). Hundreds of pioneers used this gateway to the West.

The route farthest to the south was the easiest to use. You can see that the Atlantic Coastal Plain joins the Gulf Plain south of the Appalachian Highland. There were no mountains to cross. But unfriendly Spaniards and Indians kept pioneers from using this fourth route for many years.

The first men to use the Cumberland Gap route were hunters and trappers. Next came men from small farms in Virginia and North Carolina. These farmers wanted larger farms. And they were attracted by cheap land in what are now Kentucky and Tennessee. The Coastal Plain, the Piedmont, and the Great Valley had become too thickly settled to please the hunters and trappers. They depended upon wild animals for a living so they had to live in the forests. They liked to live on the frontier. The edge of settled land where the wild country begins is called a frontier. Two famous pioneers in Kentucky and Tennessee were Daniel Boone and James Robertson. They led groups of settlers across the mountains in early times.

**DANIEL BOONE IN KENTUCKY**

Daniel Boone, the most famous of all American pioneers, was born in Pennsylvania. Young "Dan'l" loved the woods and learned to shoot and hunt while he was very young. When Daniel was sixteen, his father heard that there was rich land in the Great Valley of North Carolina. The Boones sold what they could not move, packed everything else, and traveled south. Daniel enjoyed sleeping outdoors, hunting for food, and eating beside a campfire.

In North Carolina Daniel Boone grew to manhood and married. He bought a small farm and settled down. But farming did not
appeal to him. He longed for the deep quiet of the wilderness. He began to go off on long hunting trips.

One day a lone hunter came to the Boone cabin. He told about a wonderful land across the mountains which he called "Kaintuck." Boone could no longer resist the desire to go west. He made several hunting trips into Kentucky. On one trip he was gone for more than two years. When he returned, he persuaded his wife and neighbors to sell their farms and go as pioneers to Kentucky. Boone and several men left first to blaze or cut a trail through the wilderness. The rest were to follow later along this trail.

Boone and his scouts made a path through Cumberland Gap to the Kentucky River. Sometimes they only cut notches in the trees. People coming later could follow the trail by these white notches. That is why we say he "blazed a trail." Later the Wilderness Road was built through Cumberland Gap along the path Boone had cut. Today an auto road from the Atlantic to the Pacific follows Boone's trail part of the way.

On the bank of the Kentucky River the pioneers started their settlement. They called it Boonesboro. They built a stockade around it to keep out the Indians. Tobacco, corn, and wheat were soon growing where buffalo and deer had recently roamed. The blue grass and salt licks made this region fine for raising livestock. A salt lick is a place where salt is found on the surface of the earth. Animals can lick this salt up.

The Indians of Kentucky were angry when they saw the white men destroying their hunting grounds. Time and again they attacked Boonesboro. Once they captured Boone's daughter. Another time Boone himself was made a prisoner. Both times Daniel Boone outwitted the Indians. His bravery and quick thinking saved the people and the town many times.

As time went on, many settlements were made west of the mountains. "I need elbow room," said Daniel Boone to his wife one day.

"Where are we going now?" she asked.

"Missouri," answered her husband. "West of the Mississippi a man can still draw a deep breath."

Again the Boones packed and moved westward. Daniel Boone spent his last days in Missouri. But we remember him as the great scout and pioneer in settling Kentucky.

JAMES ROBERTSON IN TENNESSEE

James Robertson was among those who followed Boone. He was a daring pioneer of North Carolina. While Kentucky was being settled, Robertson was leading another group through Cumberland Gap. Nashborough
was built on the banks of the Cumberland River in what is now Tennessee. Robertson’s settlement grew and grew. It is now called Nashville and is the capital of Tennessee. Find it on the map on page 11.

Leaders like Robertson and Boone helped settle the land west of the Appalachian Highland. At first these new settlements were claimed by Virginia and North Carolina. Soon after our country became independent, Kentucky and Tennessee became states and were added to the United States.

Moving into Alabama and Mississippi

Planters from all along the seashore began to move westward. The farmers of Georgia and Carolina had discovered that cotton grew better on their land than did rice and indigo. The factories of old England and of New England needed all the raw cotton these farmers could grow. So a great many Southerners planted cotton on most of their land. Because they did not fertilize their soil, their land wore out. Their search for new cotton lands led them westward into what is now Alabama and Mississippi.

People from South Carolina and Georgia went westward by the easy route south of the Appalachian Highland. Planters from North Carolina, Virginia, and Maryland crossed the mountains through Cumberland Gap. They floated down the Cumberland and Ohio rivers to the Mississippi River. They then floated down the Mississippi and joined the other planters in Mississippi and Alabama.

The fame of this cotton-growing region spread. Thousands of people moved to the territory between Georgia and the Mississippi River. These territories were ruled by Congress until more than sixty thousand people lived in each. Then two new states, Alabama and Mississippi, were formed. These new states had equal rights with the older ones.

The Buying of Florida

When the United States first became an independent nation, it did not own East Florida or West Florida. The Floridas included what is now the southern part of Alabama and Mississippi and all of what is now Florida (see map on page 129). Spain owned this region. Spain did not like to have American pioneers settle close to its territory.

The Creek and Seminole (sēm'ə-nōl) Indians also lived in Florida. They too were angry at the coming of the new settlers. The Office of Indian Affairs

The Seminole Indians in Florida today live in the same kind of homes as they did when white explorers first visited them.
Spaniards gave the Indians guns and gunpowder, and the Indians attacked the frontier settlements as far north as Tennessee.

General Andrew Jackson was sent south to drive the Creeks and Seminoles out of our territory. General Jackson succeeded in driving the Indians back into Florida. But he did not stop there. He led his troops across the border and seized several Spanish forts! This was against the law and might have caused a war between our country and Spain. Fortunately for our country Spain was too weak at that time to fight the United States. Instead Spain decided to sell Florida to us.

In 1819 the United States bought East and West Florida for five million dollars. The settlers in Alabama and Mississippi now used the mouths of the rivers which flowed through their land as ports. Now no unfriendly neighbors lived south of the United States.

**Eli Whitney was the first to make a machine which would separate the seeds from the cotton bolls. This machine was the cotton gin. After the cotton gin was invented, the South began to grow and to sell great quantities of cotton.**

**THE STORY OF COTTON**

The colonists found that cotton grew well in South Carolina and Georgia. Most farmers there began to plant a great deal of it. Raising cotton did not take much skill or care. The rough farming tools of those times could be used for plowing and planting. Negro slaves could work in the fields. Even women and children could help.

Manufacturers of England and New England needed all the cotton Southerners could grow. Yet the planters were unhappy. Before cotton is sent to market the seeds must be removed. Often a slave worked ten hours to clean one pound. "At this rate it does not pay to raise cotton," the planters complained. "A machine for separating the seeds from the cotton would make us all rich."

**Eli Whitney’s cotton gin**

In 1793 Eli Whitney, a young New England school teacher, was visiting on a Georgia plantation. Whitney was interested in machinery, and he was clever with tools. "I believe I can invent a machine which will remove the cotton seeds," he said to himself. He gathered the tools and materials he needed and set to work. After many trials young Whitney invented a cotton engine, or cotton gin. This cotton gin could separate as much cotton in one day as fifty men.

What a change that invention caused in the South! Planters as far north as Virginia turned to the growing of cotton. Still the factories wanted more. Then cotton planters began to move West for fresh land. With their many slaves and their household goods they moved to cotton land west of the Appalachian Highland. The cotton-growing land became known as the Cotton Belt.

**"King Cotton"**

In the Cotton Belt good times depended on good crops and the demand for cotton. If his harvest was good and factories needed raw cotton, the planter had plenty of money.
The planter could then afford many slaves, rich clothing, and a new coach. He could send his children to Europe to school. But a poor crop or low prices left the planter in debt. His family had to do without many things. He had to sell some of his slaves. Because cotton ruled the lives of people in the South, we say "Cotton was king" there.

About one hundred years ago seven eighths of the cotton produced in the world came from our Southern states. It took thousands of workers to raise so much cotton and prepare it for market. White labor was scarce in the South, so planters depended on slaves.

**Slavery in the United States**

You recall that the early settlers had much hard work to do, but there were few laborers in America to hire. As you know, in 1619 Dutch merchants brought several Negroes to Jamestown. The Virginia planters welcomed these workers. Soon more of them were brought in. At one time slaves were used in every English colony in America.

When the first hard work of pioneering was finished, people in the North needed few slaves. Their small farms could be run by the farmers and their sons. It was expensive to clothe slaves in the cold climate and to feed them on small farms. So Northern farmers began to sell their slaves or set them free.

Some Southern planters also began to feel that owning slaves did not pay. Tobacco growers in Virginia sold some of their slaves to the rice and indigo planters farther south. There was not enough work on a tobacco plantation for many laborers. If it had not been for the invention of the cotton gin, slavery might have disappeared slowly.

**The cotton gin and slavery**

The cotton gin made the cotton grower wealthy. As cotton plantations grew in size, more and more workers were needed.

Owners of cotton plantations believed they could not get along without slaves. When a law against bringing more slaves into our country was passed, some planters had the slaves smuggled in, or brought in secretly. Some large cotton plantations might have as many as one or two thousand slaves. Southern planters depended on cotton for their living. Cotton depended on slavery. This situation led to trouble, as we shall learn in a later chapter.

**TO HELP YOU LEARN**

**People and Places to Remember**

<table>
<thead>
<tr>
<th>Jamestown</th>
<th>Pocahontas</th>
<th>Wilderness Road</th>
<th>James Robertson</th>
<th>Cotton Belt</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Rolfe</td>
<td>Eli Whitney</td>
<td>Andrew Jackson</td>
<td>Lord Baltimore</td>
<td>Cumberland Gap</td>
</tr>
<tr>
<td>John Smith</td>
<td>Daniel Boone</td>
<td>St. Augustine</td>
<td>James Oglethorpe</td>
<td></td>
</tr>
</tbody>
</table>
Words and Terms You Should Know

basin  salt lick  plantation
gap  overseer  peninsula
indigo  frontier  money crop
sound  smuggle  burgess
cotton gin  debtor’s prison  tidewater region
flood plain  representative government

A Matching Game
Number a paper from 1 through 18. After the number write the word from the list above which matches the definition.

1. A large farm which specializes in one crop
2. A jail for people who owe money to others
3. A machine which separates seeds from cotton
4. The place where settlements end and the wilderness begins
5. A manager hired by planters to run their plantations
6. A place where salt is found on the surface of the earth and where animals go to lick it up
7. A low, fertile region surrounded by higher lands
8. A farm product raised to be sold
9. Part of the coastal plain where the rivers overflow because of the ocean tide
10. A person who signs an agreement to work for another person for a certain length of time
11. A long passage of water which connects the ocean with another body of water or which separates an island from the mainland
12. Lowland which is often covered by flood waters
13. A plan of government in which a few persons are chosen to act or speak for many
14. A low valley or pass in the mountains
15. A body of land surrounded on three sides by water
16. To bring goods into or to take them out of a country secretly without paying the taxes required by law
17. A plant from which a blue dye is made
18. A representative in the colonial assembly at Jamestown

Can You Answer These?

1. Name the states of the Southeast. In what ways is the Southeast like the Northeast? In what ways is it different?
2. Why did England want colonies in the New World? What benefits could it get from colonies?
3. Why was it necessary to form a company to found Jamestown, the first English colony?
4. Was Jamestown a good location for a colony? Why or why not? Why did the colony have such a hard time at first? What part did John Smith play in saving the struggling colony?
5. What crop brought real success to the colony?
6. What was the House of Burgesses? Who attended the meetings? What kind of problems could the burgesses, or representatives, consider?
7. When were the first slaves brought to Virginia?
8. What is the difference between a plantation and a farm? Why did many Southern farms grow into plantations?
9. What two kinds of servants did the work on a plantation? Explain the difference between them.
10. Why is the Piedmont better suited to growing tobacco than the Atlantic Coastal Plain? What climate and soil does tobacco like best?
11. How did Lord Baltimore protect religious freedom in Maryland?
12. How was Carolina settled? Why was Carolina divided into North Carolina and South Carolina?
13. How did General Oglethorpe settle his troubles with the colonists in Georgia? With the Indians?
14. What caused the first English settlers to cross the Appalachian Highland? What part did Daniel Boone and James Robertson play in this westward movement?
15. How were Alabama and Mississippi settled? By whom were these states settled?
16. How did Florida become a part of the United States? What part did Andrew Jackson play in this event?
17. What did Eli Whitney do to make cotton a money-making crop for Southerners?
18. What is the “Cotton Belt”? Why is it well suited to cotton growing?
Can You Complete These Sentences?

On a sheet of paper write the words which will make each sentence complete.

1. The first permanent English settlement in America was _____.
2. _____ saved the colony by allowing only those who worked to eat.
3. The Indian girl who helped the settlers was _____.
4. Real success came when _____ discovered tobacco grew well in Virginia.
5. The London Company allowed the colonists to meet and help make laws in an assembly called the _____ _____.
6. In recent years, the colonial capital of Virginia, _____, was restored.
7. _____ founded a colony for Catholics. He named it _____.
8. The people who made the first settlement in Georgia were brought to America by _____.
9. Eight friends of the English king founded the first colony in _____ to claim the territory for England.
10. _____ discovered that indigo grew well in Carolina.
11. One of the first pioneers to cross the Appalachians was _____. The trail which he made went through the _____ in the Appalachians. This trail later became known as the ______.
12. _____ led the first group of settlers into Tennessee.
13. The cotton gin was invented by _____.
14. _____ led an army into Florida to punish the Indians and Spaniards for attacking the English settlements.
15. We bought _____ from Spain in 1819.

Can You Choose the Right Answer?

Below is a list of statements with four possible endings. Choose the correct ending for each statement.

1. The famous boundary line which later formed part of the dividing line between the North and the South was drawn by: (a) Smith and Dale (b) Mason and Dixon (c) Hooker and Williams (d) Standish and Bradford
2. The largest river in North America, which also forms the western boundary of the South- east, is the: (a) James (b) Potomac (c) Mississippi (d) Ohio
3. The Atlantic Coastal Plain and the Gulf Coastal Plain meet in central: (a) Florida (b) Virginia (c) Tennessee (d) Georgia
4. Rivers of this section which flow south empty into the: (a) Atlantic Ocean (b) Pacific Ocean (c) Gulf of Mexico (d) Gulf of California
5. Many rapids and falls are found in rivers where the Coastal Plain meets the: (a) Piedmont (b) Great Valley (c) Nashville Basin (d) Allegheny Plateau
6. Pioneers to the west crossed the southern Appalachians through the: (a) Bluegrass region (b) Cumberland Gap (c) Nashville Basin (d) Tidewater region
7. The highest peak in the Appalachian Highland of the Southeast is: (a) Mount Washington (b) Mount Mitchell (c) Kings Mountain (d) Mount McKinley
8. The first important money crop to be raised in the Southeast was: (a) tobacco (b) corn (c) cotton (d) soy beans
9. Tobacco grows best in the soil of the: (a) Appalachian Mountains (b) Great Valley (c) Great Smoky Mountains (d) Piedmont Plateau
10. The state which extends farther south than any other state in our Union is: (a) Florida (b) Alabama (c) Georgia (d) South Carolina
11. The climate of the Southeast is warmer than that of the Northeast because it lies near the: (a) Gulf Stream (b) Tropic of Cancer (c) Arctic Circle (d) Antarctic Circle
12. The oldest city in our country is located in the Southeast. It is: (a) Charleston (b) St. Augustine (c) Jamestown (d) Williamsburg

Using Maps

1. On the map of the United States on pages 250–251 find the states of the Southeast. Name them.
2. Turn to the map of the Southeast on page 11. Look at the legend or key in the upper left-hand corner. What does the key tell about the natural regions? How are lowlands marked? Plateaus? Highlands? Use the key to locate the lowlands, the uplands, and the highlands.
3. Which of the natural regions does the Southeast share with the Northeast? See the map on page 10. Which natural regions do not extend into the North?

4. On the map on page 11 find the largest rivers in the Southeast. Which flow across the Atlantic Coastal Plain? Which flow across the Gulf Coastal Plain? Where does each empty?

5. What do the many rivers in this region tell about its rainfall? Turn to the rainfall map on page 36 to see how many inches of rain different areas receive a year.

6. On the outline map of the United States which you made for Unit 3 write the names of the states of this section. Label also the important rivers, bays, and sounds. If you have colored crayons, you may color the natural regions or mark them in some other way.

7. Look at the map on page 147. This shows four routes that a pioneer could take to cross the Appalachian Highland. Which was used by Daniel Boone? Which was the easiest? Find the Cumberland Gap.

8. Near what parallel is the southernmost part of Florida? How does this affect its climate?

**Interesting Things to Do**

1. Make a frieze showing the story of the settlement of the Southeast.

2. Pretend you are one of the following persons and tell your story to the class.

   - Andrew Jackson
   - Daniel Boone
   - Eli Whitney
   - Eliza Lucas
   - James Oglethorpe
   - James Robertson
   - John Smith
   - Leonard Calvert
   - Pocahontas

3. In the library find a book which shows how some of the Southern plantations were laid out. Draw a plan of one of these plantations, showing where the master's house was, the slave quarters, the barns, the gardens, the fields, and the woodland. If it is near a river, show the river and the wharf.

4. Build a plantation on a sand table or in a corner of your classroom. For this you will need cardboard and paper. If you can get crayons or paints you may color your buildings, grass, etc. Ask your art teacher to help.

5. Make a model of a pioneer village. You can use pictures of Boonesboro or Jamestown for suggestions. Be sure to show the homes of the people, the stockade, the fields, etc.

6. Visit the nearest museum to see a colonial exhibit or display.

7. Dramatize the story of Life on a Southern Plantation. Have the following scenes:

   - Mr. Page's bedroom — Early Morning
   - The Page dining room — At Breakfast
   - At the wharf — That Afternoon
   - Mr. Page's office — That Night

8. Williamsburg is a rebuilt city which hundreds of Americans visit every day. Invite someone who has visited Williamsburg to tell about it. Collect pictures of the city. If possible, show a motion picture of Williamsburg. Your teacher will probably be able to borrow or rent a film which shows life in the old capital. Motion pictures of Jamestown have also been made for classroom use.


10. Many stories dealing with the history of this section have been written. You can get these books at the library.

11. Learn songs sung in the South or about the South like "Dixie," "My Old Kentucky Home," and "Swanee River."-

12. Bring in any objects your family or friends have which date back to colonial days. Find out all you can about these objects. Hold an exhibit and tell about them.

**Things to Think About**

1. Why did the cotton and tobacco growers have to buy more and more land? What could they have done so that they could go on using the same land?

2. After the invention of the cotton gin slavery developed rapidly. If the gin had not been invented, do you think slavery might have gradually disappeared? Why or why not?

3. The House of Burgesses in Virginia and the town meeting in New England were both very important in the history of our country. Can you tell why?
**Using a Time-line**

In this unit the first event to be noted on your time-line took place in the year 1607. The last took place in 1819. Find the dates for these events and put them on your time-line.

- Carolina was founded
- Slaves were first brought to English colonies
- Daniel Boone led settlers to Kentucky
- Georgia was founded
- Eli Whitney invented the cotton gin
- General Andrew Jackson stopped attacks by Spaniards and Indians in Florida
- Maryland was founded
- Tobacco brought success to Jamestown
- Florida was added to the United States
- Jamestown was settled
- Representative government began in America
- Carolina was divided into North and South Carolina

**Making a Chart**

Make a chart which will contain the most important facts about each of the colonies of the Southeast. The most important facts have been filled in for the early history of Virginia. Copy the headings and add the other colonies of the Southeast.

<table>
<thead>
<tr>
<th>State</th>
<th>Date Settled</th>
<th>By Whom</th>
<th>Purpose</th>
<th>First Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>1609</td>
<td>London Company</td>
<td>To carry on trade</td>
<td>Jamestown</td>
</tr>
</tbody>
</table>

**Making an Outline**

An outline is a listing of the different parts, or headings, of a subject. An outline helps you see the plan of a book or a unit. An outline also helps you review materials. Below is an outline of Unit 4 which is partly filled in. Copy this outline in your notebook, and complete it.

I. What the Southeast Is Like
   A. The Lowlands
      1. The coastal plains
      2.
      3.
      And so on
   B. The Uplands and Highlands
      1. The Piedmont and Fall Line
      2.
      3.

II. Settling the Southeast
   A. The Founding of Virginia
      1. The London Company
      2.
      3.
      And so on
   B. The Founding of Maryland
      1. Settling St. Mary's
      2.
   C. Colonies in the Carolinas
      1. Settling northern Carolina
      2.
      3.
      And so on

D. The Founding of Georgia
   1. Debtors in England
   2.
   3.
   And so on

III. Living in the Colonial Southeast
   1. Life on a Southern plantation
   2.

IV. The Beginning of the Westward Movement
   1. Four routes to the West
      A. Daniel Boone in Kentucky
      B.
      C.
      D.
   E. The Story of Cotton
      1. Eli Whitney's cotton gin
      2.
      3.
      4.
The thirteen English colonies in North America were really the beginning of our country. In 1750 Englishmen held only the narrow strip of land between the Atlantic Ocean and the Appalachian Highland. They were hemmed in by Frenchmen to the north and west and by Spaniards to the south.

The English colonists stayed close to the ocean. They depended on the mother country for everything that they could not raise or make. The colonies carried on some trade with each other and talked the same language but they were not united.

Today the United States reaches from the Atlantic Ocean to the Pacific Ocean and from the St. Lawrence River to the Gulf of Mexico. We are an independent nation, united and strong. English is the language spoken in all parts of our country. All this did not come about without struggle.

First came the war between the French and the English. It decided that the English were to be master of most of North America.
How We Became a Nation

The struggle for independence followed. This started as a quarrel between the colonies and their mother country. The colonists wanted certain rights which they said were theirs as Englishmen. The quarrel became a rebellion, or an organized, armed effort to throw off English control. The War for Independence, or the Revolutionary War, as it is also called, lasted eight years. The colonies won their freedom.

Under their first form of government the states were not closely united. They did not work together well. But wise men met in Philadelphia and planned a better form of government. Then our country began to grow bigger and stronger.

We soon had to fight another war against England, or Great Britain, as the nation is often called. In this war neither side won many battles on land. Our naval victories showed the British that they could not seize our ships and men. This was the War of 1812. It gave Americans freedom of the sea.

As our country grew in size, sectionalism grew. That is, the people living in the North and those living in the South each came to believe that their own section of the country and their own way of life was best. Quarrels arose. It took a war which lasted four years to settle the most bitter of the quarrels between the sections. After the War Between the States our country became a truly united nation.

As you read this unit, find the answers to the following questions:

1. How did England win most of North America?
2. How did the thirteen English colonies become an independent country?
3. How did the United States establish itself on a firm foundation?
4. How did our nation win freedom of the seas?
5. How did the United States become a truly united nation?
How England Won Most of North America —

For about one hundred fifty years the English colonists lived on the eastern coast. Then small groups began to cross the Appalachians. You have seen that hunters and trappers led the way. Their tales of uplands covered with forests, fertile lowlands and valleys led farmers and planters to move westward.

The English in the Ohio Valley

The Ohio Land Company of Virginia sent many pioneers to settle land along the Ohio River. The king of England had granted them thousands of acres in the Ohio Valley.

English pioneers who crossed the Appalachians about the year 1750 expected to find only wild animals and angry Indians. They were surprised to find other white men — Frenchmen — in the Ohio Valley. "What are Frenchmen doing on land which belongs to Great Britain?" they asked.

The French believed that the Ohio Valley belonged to them. La Salle had explored the land and claimed it for France. Frenchmen had already built trading posts and forts in the region. They were unwilling to give it up.

For many years Great Britain and France had been enemies. Their first quarrel in North America was over the fishing banks which both nations claimed. When English farmers began to settle in the fertile valley of the Hudson River, French fur traders tried to drive them out. Then English pioneers met Frenchmen in the Ohio Valley. This began the last struggle between the two nations for the continent of North America.

French forts in the Ohio Valley

There were few French in the New World in comparison with the number of English. Because they were spread over a huge area, Frenchmen built forts for protection against their enemies. They had begun to build forts in the Ohio Valley when Englishmen crossed the mountains into this region.

When the English settlers sent word to the Ohio Company that the French were in the Ohio Valley, the governor of Virginia became alarmed. He made up his mind to ask the French to leave the region peacefully. The governor sent twenty-one-year-old Major George Washington from Virginia to carry the message to the French.

It was midwinter when George Washington, with a guide and several Indians, left Williamsburg. Few men would have attempted that two-hundred-mile journey through pathless forests. But young George Washington had spent much time surveying, or measuring, land in the wilderness. He knew the region. After being caught in a snow storm, in which they almost froze to death, the men finally reached the French fort.

The French commander saw to it that Washington and his men had food and a place to rest. Then he politely refused to leave the Ohio Valley. "We French have explored the land and built forts here. We shall not give it up," he said.

Major Washington reported this to the House of Burgesses. Virginia decided to build its own forts and to drive the French out of the Ohio Valley. But the army it sent against the French met with several defeats.

The French and Indian War

Then Great Britain decided to take part in the fighting. General Braddock and a well-trained army were sent to America. George Washington and soldiers from Virginia were to help them drive the French from the Ohio Valley. Because many Indians helped the French this war is known as the French and Indian War.

Braddock's defeat

Braddock was an excellent leader for fighting in the European style. But he knew nothing about Indian warfare. Washington
In 1750, how many European countries claimed land in the New World? Which one claimed the largest area? Which had the smallest claim?

In 1763 four European countries claimed land in North America. Name these countries. Which had the largest claims? The smallest?

Washington was made commander of the British and Virginia forces.

During the next few years Great Britain sent more troops to the New World. Then the British succeeded in capturing the French forts on Lake Ontario and those south of Lake Champlain. The French in Fort Duquesne ('doo-kan) realized that their fort was in danger, so they blew it up. The British rebuilt this fort and named it Fort Pitt in honor of one of their wise leaders. (As you know, we call the city built on this site Pittsburgh.) Then the British captured all the French forts except Quebec and Montreal.

**The fall of Quebec**

Meanwhile the British general, James Wolfe, was on the St. Lawrence River trying to take Quebec. In this fort at the top of the high bluff were huge guns and many French
soldiers. Wolfe knew he had to capture Quebec before he could sail up the St. Lawrence to take Montreal.

Day after day General Wolfe studied the steep rocky cliff on which Quebec was built. "There must be some way of reaching that eagle's nest," he thought. Finally his eye caught something that made him start. He peered eagerly through the telescope. "Yes, that is a trail going up the side of the cliff," he said to himself.

All that day boats carried soldiers from Wolfe's ships to the shore. Even to General Montcalm (mōnt-kām'), the commander of the French fort, it looked as if the English were preparing to attack them from that point. The French were sure that it was impossible to climb that steep, rocky cliff. Only a few soldiers were left on guard that night at the top of the cliff.

Under cover of darkness Wolfe and a large part of his army rowed up the stream past Quebec and crept ashore. Midnight came. Slowly, quietly, they began to climb the steep cliff. Weary and exhausted, they finally stood on the Plains of Abraham behind Quebec.

A fierce battle followed. Both General Montcalm and General Wolfe met death on the Plains of Abraham. Quebec fell to the English a few days later, and the proud old city became an English possession.

France's loss of the New World

The English captured Montreal a few months later. That really ended the French and Indian War. Then Great Britain and France signed a treaty, which is a contract or agreement. This peace treaty was signed in Paris in 1763. It changed the map of North America. Great Britain now owned New France and, except New Orleans, all the country east of the Mississippi River. France gave New Orleans and Louisiana, its land west of the Mississippi, to Spain. In a war that was going on in Europe at this time, Spain was an enemy of Great Britain and a friend of France.

The French and Indian War had decided that Great Britain was to control most of North America. It had also decided that English was to be the language spoken by most of the people in North America.

HOW THE ENGLISH COLONIES BECAME INDEPENDENT

After the war Great Britain owned millions of acres of land in North America. Yet Great Britain was so poor that it could not pay its debts. Englishmen had been fighting in North America, Europe, and Asia. Carrying on a war is very expensive.

Nations usually pay for wars and other expenses through taxes. A tax is money which people pay to their governments. Taxes are collected to pay the expenses of running a government. The people in England had been paying high taxes for a very long time.

EVENTS LEADING TO THE REVOLUTION

"The colonists ought to pay part of the cost of the war," said one member of the British government. "Sending soldiers, ships, and war materials to America put us in debt."

"Without our soldiers they could not have defeated the French and Indians," agreed a second member.

The Molasses Act

The British government decided the colonists must help pay the cost of the war. It also wanted the colonists to pay the cost of keeping soldiers in America for their protection. It decided to collect the taxes called for by an old trade and navigation law. Until this time the colonists had been paying no attention to this law. One of the taxes under this law was on molasses. Instead of paying this tax the colonists had been smuggling in molasses from the West Indies. They kept right on smuggling, and the British government still could not collect taxes on molasses.
The colonists in Boston refused to buy tea with a tax on it. One night some of them dressed as Indians boarded the ships which were in the harbor and threw the tea into the water. This was called the “Boston Tea Party.”

Bettmann Archive

The Stamp Act

But the British government needed money badly, so it passed a new tax law. This law provided that government stamps had to be bought and put on all newspapers, wills, and other business papers. It was known as the Stamp Act.

Never had there been such excitement in the colonies! The colonists talked about nothing but this new law. The colonial assemblies called special meetings to decide what to do about it. The colonists felt that Great Britain had no right to tax them because they had not had a voice in making the law. They said that it was “taxation without representation.”

In Williamsburg Patrick Henry addressed the House of Burgesses. It was a stirring speech in which he told the colonists to stand up for their rights. The people refused to buy tax stamps. When British officers tried to sell the stamps, mobs seized and burned the stamps. The officers were beaten or driven out of the colonies.

Leaders from several colonies met in New York. “We will buy nothing from Great Britain until the Stamp Act is repealed,” they said. By this they meant that the tax would have to be removed.

The British government repealed the Stamp Act, but it refused to understand what the colonists really wanted. It would not let the colonists decide how and when they should be taxed. After repealing the tax on stamps, a tax was laid on glass, paper, paint, and tea.

When the colonists refused to buy these articles, British manufacturers and merchants began to lose money. They begged to have the tax removed. “We will take the tax off everything except the tea. The stubborn colonists must pay the tax on tea,” decided the king. The tax on tea was very small. But the colonists stopped buying tea. They held meetings to decide what to do.

The Boston Tea Party

When ships loaded with tea arrived in New York and Philadelphia, they were not allowed to dock. In Charleston the tea was put in storerooms. There it remained for more than three years. In Boston the ships lay in the harbor for days. The colonists would not let the captain unload his cargo. The governor refused to give him a pass to return to England. He wanted to force the colonists to buy the tea.

One evening when the captain tried to get a pass, crowds gathered outside the governor’s
This portrait of Samuel Adams, the Boston patriot, was made by John Singleton Copley. Copley was the first great American artist.

They saw the captain come out looking more worried than ever. A signal passed between some of the colonial leaders.

Suddenly about fifty men dressed as Indians and with painted faces appeared. They ran swiftly toward the wharf and quietly boarded the ships. They broke open box after box and dumped the tea into the harbor. Soon the ships were emptied, but the waters were full of tea. Then the “Indians” disappeared as suddenly as they had come. The famous “Boston Tea Party” was a short, silent affair. It was the colonists’ way of telling the king they would not pay the tax on tea.

The closing of the port of Boston

When King George, the British king, heard what had happened to the tea, he ordered the closing of Boston as a port until the tea was paid for. “I’ll take their charter,” he stormed, “and send soldiers to rule them.”

British ships blockaded, or closed, the port of Boston. The blockade kept all except English warships from entering or leaving Boston harbor. The city’s trade was ruined. Food could not reach Boston by water. Would the people in Boston have to give in or starve?

Committees of Correspondence

In those days news had to be carried by word of mouth or as a written message. Samuel Adams, John Hancock, and their friends formed clubs called “committees of correspondence.” The members wrote news of their colonies to each other regularly. When Boston’s port was closed, the Massachusetts Committee of Correspondence sent special messengers to the other colonies.
While Benjamin Franklin was serving the United States in France, a French artist made this picture of the famous American. George Washington's portrait was painted many times. This picture, painted by Gilbert Stuart, is probably the best known.

People in Virginia, New York, and other colonies sided with the people in Boston. Food and clothing began to arrive in Boston from many colonies. "Do not pay for the tea! We will send help," wrote members of the committees. By this time the colonists were beginning to co-operate, or work together. They realized that they must work and plan together to get their rights. They arranged for a meeting in Philadelphia. Representatives from all the colonies were to attend this meeting.

The First Continental Congress

All the colonies except Georgia sent representatives to a congress, or meeting, in Philadelphia. This congress, which met at Carpenter's Hall on September 5, 1774, is known as the First Continental Congress. It was called a continental congress because all the English colonies on the continent of North America were invited to send representatives to it.

The men who met in Philadelphia drew up a letter to King George. They asked him to open the port of Boston and to let them decide about their own taxes. They agreed not to trade with Great Britain until a favorable answer arrived.

Some of King George's advisers urged him to do what the colonists asked. But he refused to give them a voice in making their own laws and in deciding what taxes they would pay.

No answer came from the king. Another meeting was set for May 10, 1775. Americans hoped that the Second Continental Congress would be able to patch up the quarrel.
THE WAR FOR INDEPENDENCE

Meanwhile things in Boston were growing worse. British soldiers were stationed in the city. British warships under the command of General Gage were anchored in the harbor. Colonial leaders like Samuel Adams, John Hancock, and others encouraged the people to disobey English laws and officers.

Fighting at Lexington and Concord

In April, 1775, General Gage learned that the colonists had stored supplies and ammunition at Lexington and Concord. He heard also that Adams and Hancock were hiding in Lexington. He determined to surprise the colonists. "We will destroy the stores and send Adams and Hancock to England to be hanged as rebels," General Gage said. By "rebels" he meant those colonists who planned to free the colonies from Great Britain. We call the colonists who were working for independence patriots.

Somehow the British plans reached the ears of the colonists. Paul Revere and another patriot were sent to warn the people. They rode all night calling the colonists to wake up and to arm. Samuel Adams and John Hancock escaped during the night. The story of this famous midnight ride is told in a poem called "Paul Revere’s Ride," by Henry W. Longfellow.

When the British arrived in Lexington early the next morning, they found a little band of minutemen waiting for them in the square. Minutemen were colonists who were ready to fight at a minute's notice. "Disperse, you rebels!" ordered the British officer. The minutemen did not move. No one knows who fired the first shot. But on this April day war between Great Britain and its colonies really began. The few minutemen could not win. Several were killed before the enemy marched on toward Concord.

At the bridge in Concord the British were met by more minutemen. A short but bitter battle followed. This time the British fell back. They had to retreat to Boston without capturing either the colonial leaders or the stores.

That retreat was like a bad dream for the British. Bullets came from behind fences, trees, and walls. All along the road the minutemen aimed at the red coats of the British soldiers. The British would have been cut to pieces if more soldiers had not joined them. Even then almost three hundred men were killed or wounded before the British got back to Boston.

Many years later a statue of a minuteman was put up in front of the Concord bridge to honor the men who took part in this battle. Ralph Waldo Emerson wrote a poem called "The Concord Hymn" which was sung at the celebration when this battle monument was completed.

News of the battles of Lexington and Concord spread. Colonists from other parts of Massachusetts joined the minutemen outside Boston. Inside the city General Gage waited for more men and supplies from England.

The Battle of Bunker Hill

One morning in June General Gage received an unpleasant surprise. During the night the colonial troops had occupied one of the hills about a mile away from Boston. They had dug trenches and had set up cannon and other defenses to fortify the hill. Boston and the British ships in the harbor were in danger of capture. "Drive those
rebels from that position!” ordered General Gage.

Three thousand British soldiers started up the hill. “Don’t fire until you see the whites of their eyes,” cried the American general. “We cannot afford to waste powder and ball.”

Twice the British advanced almost to the top of the hill. Twice they were met with a heavy rain of shots and driven back. The third time they charged up the hill and only a few shots met them. The patriots had used up their ammunition! They had to give up.

This battle is known in history as the battle of Bunker Hill. It was really fought on Breed’s Hill, a smaller hill just east of Bunker Hill. Although the colonists lost, this battle proved that they had a chance to win against the British. They needed training, arms, ammunition, and a good leader.

Washington as Commander of the Continental Army

Meanwhile the Second Continental Congress had received no answer from King George. They sent him another letter and waited for a reply. Some of the representatives began to say that the colonies should win their independence, or freedom, from Great Britain. Others still believed that the quarrel between the mother country and its colonies could be patched up. Among these was George Washington from Virginia.

The news of two important events reached Congress at Philadelphia. One was that Ethan Allen’s “Green Mountain Boys” had captured a British fort on Lake Champlain. Allen’s men got their name from the Green Mountains of what is now the state of Vermont. They had taken a rich prize in cannon, guns, and ammunition. The other news event was the battle at Bunker Hill. “We need a commander for our little army,” wrote the leaders from Boston.

George Washington had proved his ability to lead in the French and Indian War. The Continental Congress now appointed him commander in chief of the Continental Army. General Washington left almost immediately for Massachusetts.

At Cambridge he took charge of what was called the Continental Army. There were few trained soldiers among them. But every man was a sharpshooter and ready to give his life for liberty.

Still some colonists said, “It is wrong to take up arms against our mother country.” Others were completely in favor of the fight for liberty. Then Patrick Henry made the most famous of all his speeches.

A great crowd gathered in a church in Richmond, Virginia, on that day. The audience listened breathlessly. Patrick Henry told again the story of what the colonists had suffered from the king and the government. We do not know his exact words for no one present wrote them down. But it was a ringing speech, and he is said to have closed with these fiery words, “I know not what course others may take, but as for me, give
John Hancock was the first to sign the Declaration of Independence. Do you know why? Can you name other men in the picture?

me liberty or give me death!” The colonists now knew they had to fight!

King George did not answer the second letter sent to him by the Congress. Instead he hired foreign soldiers to put down the rebellion.

“The king has hired foreign soldiers to fight us,” said members of Congress. “Let us declare ourselves a free and independent nation — free of England and the king.”

The Declaration of Independence

A committee of five men was chosen to write this declaration. All the men worked hard on it, but a young Virginian, Thomas Jefferson, wrote most of it. It clearly stated the complaints the colonists had against Great Britain and why they wanted independence. This was our famous Declaration of Independence.

On July 4, 1776, the Declaration of Independence was adopted, or accepted by vote, by the Second Continental Congress. A few days later the people gathered at the State House in Philadelphia to hear the Declaration read. Church bells rang! People cheered. They sang and danced in the streets. They changed the name of the old State House to Independence Hall. That day they celebrated the birth of a new nation, the United States of America.

Later the Declaration of Independence was copied on parchment. Parchment is the skin of a sheep or other animal. It is specially prepared to be written on. Parchment lasts much longer than paper. John Hancock, as the president of the Congress, was first to sign the important paper. “The king will need no glasses to see that,” he said as he wrote his name in large letters.

When independence was first proposed one man saw clearly what it meant. Benjamin Franklin said, “Gentlemen, we must indeed all hang together or most assuredly [certainly] we shall all hang separately.” Now all the representatives knew that Franklin was right. Signing the Declaration of Independence made them traitors to the king. Unless the colonists won their freedom, they would all be hanged for treason. This meant they had spoken against the king and had taken up arms against the British government.
Struggle of the new nation

George Washington had been trying to train an army which lacked everything an army needs. How happy he was to receive the cannon, guns, and ammunition Ethan Allen had captured from the British! His men fortified the hills overlooking Boston. The British then decided to leave Boston. The generals, the army, and the fleet sailed for New York.

Washington and his soldiers followed the British to New York by land. On Long Island they met the enemy in battle. The Americans were so badly defeated that it looked as if none would escape. Fortunately Washington succeeded in leading his army away from under the enemy's nose.

Then began a chase across New York and New Jersey. For two months the Continental Army fell back. For two months the British, led by Lord Cornwallis, kept right at their heels. The Americans managed to cross the Delaware River into Pennsylvania before Cornwallis could catch up with them. The American army seized every boat owned by the people who lived in the neighborhood. The British therefore had no way of crossing the river and had to camp where they were.

"Washington is badly beaten, and it is almost Christmas," thought General Cornwallis. "I will spend the holidays in New York." He left some troops in Trenton, New Jersey, and returned to New York. Most of the soldiers he left to watch the Americans were Hessians (hezh'anz). These were foreign soldiers whom King George had hired to help his British troops.

Washington's crossing of the Delaware

Washington's men were ragged and ill. They lacked food and ammunition. After two months of retreat he was worried. "I must win a battle or Congress and the people will lose confidence in me," he thought. He decided to attack the Hessians in Trenton.

In Trenton, on the east bank of the Delaware River, the Hessians were celebrating Christmas. They felt sure that the Americans would not move on Christmas Day. But they were wrong.

All night long boatloads of American soldiers fought through the icy waters of the Delaware. They met heavy winds and chilling snow. But they struggled on. Early the next morning they surprised the Hessians and captured Trenton. A few days later they won another victory at near-by Princeton.

In the Revolutionary War battles were fought in most colonies. How far north did the war extend? How far south did General Greene's army go? What did George Rogers Clark do to help win the war?
At Valley Forge the men were often cold and hungry. This was the darkest hour of the Revolution. But Washington's bravery gave them courage and they remained loyal.

For most of the next year fighting did not go well for the Americans. The British came down from New York to capture the city of Philadelphia. Washington and his brave little army fought well but finally had to give up the city. The British then settled down comfortably in Philadelphia for the winter while Washington's army went into winter quarters at Valley Forge.

Valley Forge

That winter at Valley Forge was made horrible by cold, hunger, sickness, and fear. The weather was bitterly cold. The troops had too little clothing, and they were starved and sick. Congress sent no money, no food, and no clothing. What comfort could Washington offer his men? To add to his sadness, he knew that English officers and soldiers were living comfortably in Philadelphia while Americans froze in huts and tents a few miles away.

In spite of everything the Continental Army drilled daily. Baron Steuben (stuˈbĕn), a great lover of liberty, came from Germany to help them win their freedom. By spring the group of farmers, workingmen, hunters, and trappers had become a well-trained army.

Battle of Saratoga

Good news reached General Washington just before he went to Valley Forge. Another American army had won an important battle at Saratoga in New York. At Saratoga the Americans had met and defeated a British army led by General Burgoyne (bûr-goin').

Until October 17, 1777, the Americans had been losing battle after battle. The important victory at Saratoga gave them confidence. "We have a chance to win!" thought the people.

Help from France

Soon after the Declaration of Independence, Congress had sent Benjamin Franklin to France to ask for help. All these months the French king had not been able to decide what to do. "If the colonists lose, our money will be wasted," said his advisers. "Besides, we might start another war with England."

Then news of Burgoyne's defeat at Saratoga reached France. "The Americans may win their independence yet!" said Frenchmen. The French king then decided to send an army and a fleet to America and to lend money to carry on the war. The future of the
struggling little nation looked much brighter after the American victory at Saratoga.

One French nobleman had already come to the help of the Americans. This twenty-year-old nobleman, whose name was Lafayette (lā’fâ-yet’), was thrilled by the fight the colonists were making for independence. He hired soldiers, bought a ship, and arrived in America in April, 1777. With Washington’s army he suffered hunger and cold at Valley Forge. The love and admiration that Lafayette felt for Washington lasted throughout his life.

When the British general in Philadelphia heard the news of Burgoyne’s defeat, he hurried back to New York with his army. Washington followed and camped on the west bank of the Hudson. For the next three years neither army moved far from its position. Each watched every move that the other army made during all that time.

**George Rogers Clark**

The war which started in Massachusetts spread to the other colonies. Soon pioneers west of the Appalachians were having trouble with the Indians and the British in the Northwest Territory. This was a huge area that stretched from the Ohio River to the Great Lakes and as far west as the Mississippi River. There were strong British forts in the Northwest Territory. On the map on page 167 find the forts at Detroit, Kaskasia (kāskā’ky-ā), Cahokia (kah-ō’kī-ā), and Vincennes (vīn-sěnz’).

American pioneers had been settling south of the Ohio River in what is now Kentucky. Life there was made horrible by Indian attacks. The Indians were often given guns and ammunition by the British. Then they would swoop down upon the settlements, kill people, burn their homes, and destroy their crops. The American pioneers fought bravely. But the Indians continued to raid the villages.

Captain George Rogers Clark was a famous hunter and surveyor who had fought bravely against the Indians. Clark wanted to capture the British forts to help stop the Indian attacks. At that time the land south of the Ohio belonged to Virginia. Clark decided to ask Patrick Henry, then governor of Virginia, for troops, food, guns, and ammunition to carry out his plan.

“I’d like to surprise the British forts and capture them,” he told the governor. “Two scouts whom I sent into the Northwest say that only a few soldiers are stationed at each fort. I am sure that we can capture the forts and also put an end to the Indian raids.”

Governor Henry got the House of Burgesses to furnish money for the supplies. But Clark had to raise his own troops.

The men who met Captain Clark at Fort Pitt in the spring of 1778 were strong, brave men. They could endure hardships of every kind. Each had a deadly aim. Because of the long, sharp knives they carried, they earned the name of “Long Knives.”

The little band floated down the Ohio until they reached the falls near where Louisville now stands. After spending some time in training, the men continued down the Ohio almost to the Mississippi. Then they marched overland. They reached Kaskaskia without the British knowing it.

Some stories say that on the evening of July 14, 1778, the British commander was holding a ball for all the people in the village. French, British, and Indians, men, women, and children were at the fort. Dancing was at its merriest, when suddenly an Indian cried out, “Look! Long Knives!”

The dancers stopped. They saw American backwoodsmen, as the pioneers living on the frontier were called, at every door. Every way of escape was blocked. The people were filled with fear. “Do not be alarmed, good people,” said Captain Clark in a low, calm voice. “Go on with your dancing. But remember that you are now dancing under the American flag.”

We are not sure that this is just the way it happened. We do know that Clark’s men
took the fort without firing a shot. The other forts, Cahokia and Vincennes, also surrendered without a battle. Clark had captured the most important forts in the Northwest Territory. But could he hold them with his handful of men?

The British commander in Detroit marched south with a large force to take back the forts. He succeeded in taking Vincennes again. But then he decided to wait until spring before marching against the other two.

Captain Clark knew that his only chance was to surprise the British again. The march across the swampy, flooded plains that February was one of the worst in history. For sixteen days the men waded, often up to their shoulders, in icy streams. They slept in flooded fields. They surprised and captured the fort at Vincennes.

Thus Clark and a handful of backwoods-men saved the land for Americans. When the treaty of peace was signed in 1783, Great Britain had to give up the whole Northwest Territory. The map on page 171 shows the western boundaries of the United States at the end of the War for Independence.

Fighting in the Southern Colonies

Neither side had won many great victories in the Northern or Middle Colonies. The British knew that many wealthy colonists in the South sided with the mother country. These colonists were called Tories. General Cornwallis felt sure that the Tories would help him. He decided to carry the war to the South.

The British fleet sailed to Savannah, Georgia. It had no trouble taking Savannah. The handful of Americans holding the port of Charleston, South Carolina, also had to surrender. One after another, the important places along the coast of Georgia and South Carolina fell to the British. As Cornwallis marched inland, Tories joined his army. They furnished him with food and other supplies for his soldiers.

There were no large armies in the South to stop Cornwallis. But small bands of patriots made life unpleasant for the British. They hid in swamps, forests, and mountains. These bands would appear suddenly from nowhere, kill British soldiers and horses, and take their supplies. Then they would disappear as suddenly as they had appeared. While such bands could not win the war, they helped to wear the British down.

Still Cornwallis's army swept northward and westward until it reached North Carolina. On Kings Mountain it was surprised and badly cut up by a band of backwoods-men. This was the first real defeat the British had met in the South.

General Greene's plan

Washington sent General Nathanael Greene to help the Southern patriots. "I have too few men to defeat Cornwallis in a pitched battle," decided Greene. "But I will wear him out by making him chase me over North Carolina."

Time and again Greene led his army close to the British camp. Cornwallis would prepare for battle, only to find the Americans gone. What a chase Greene led Cornwallis through the mountains of North Carolina! Finally the British commander realized that he had been tricked. He was miles from the coast where his ships lay. He marched north to Virginia in the hope that he could conquer that state.

General Greene's plan had worked. In three months Greene recaptured Georgia and all of South Carolina, except the city of Charleston and a few other points.

The trapping of Cornwallis

Lafayette had come down from the North to command the American forces in Virginia. "I will have no trouble capturing that boy," said Lord Cornwallis.

Lafayette was a born soldier. He had also learned much about warfare from Washington, in whose army he had been for four
years. Like Greene, Lafayette planned to wear out Cornwallis's army. He did it by making the British general chase him all through Virginia. At last Cornwallis gave up the chase. He fortified Yorktown and settled down to rest and wait for help from New York. Yorktown, as the map on page 167 shows, is on a peninsula in Chesapeake Bay between the York and the James rivers. "This is a perfect place to trap Cornwallis!" thought the Americans.

Lafayette's men surrounded Yorktown. Washington learned that the French fleet was about to sail from the West Indies to Chesapeake Bay. So he and his army quickly marched from New York to Virginia. They took their position north of Yorktown. The British troops were trapped on the peninsula!

The Americans and the French moved in on Yorktown late in August. They began firing on the city on October 6. Two weeks later the British gave up.

On October 19, 1781, Lord Cornwallis, the commander of the proud British army, was forced to surrender to General Washington, the leader of an army of colonists. With the help of France, the thirteen little American colonies had defeated powerful England!

A free and independent nation

The struggle for independence really ended at Yorktown but the peace treaty, or agreement, was not signed until 1783. When Americans and British met in Paris to settle the terms of peace, Great Britain gave up its claim to the thirteen colonies. By 1783 the United States of America was recognized by the world as a free and independent nation.

After 1783, what countries held territory in North America? Look at the map, page 159, to see what changes had taken place since 1763.

Look at the map on this page to see how large the new country was that the Americans had won. The new country was far richer than anyone at that time realized. The kind of nation that would grow up here depended upon the people themselves.

TO HELP YOU LEARN

Persons and Places to Remember

Wolfe
Saratoga
Yorktown
Paul Revere
Bunker Hill
Braddock
Samuel Adams
John Hancock
Patrick Henry
Valley Forge
Lafayette
King George III
Kings Mountain
Carpenter's Hall
Nathanael Greene
Cornwallis
George Washington
George Rogers Clark
Northwest Territory
Benjamin Franklin

171
Words and Terms You Should Know

adopt dates Tory blockade minuteman backwoodsman
repeal treaty patriot congress rebellion independence

A Matching Game
Number a paper from 1 through 12. After the number write the word or term from the list above which matches the definition.

1. A colonist who was ready to fight at a minute’s notice
2. Money paid to help run a government
3. To accept by vote
4. A person living on the frontier away from settled regions
5. A colonist who worked for our country’s independence
6. To remove or recall a law after it has been passed
7. Self-government or freedom from British control
8. The shutting up of a place by troops or ships to keep people and ships from moving either in or out
9. An agreement between two governments
10. A meeting of representatives to do government business
11. The organized armed effort of the colonists to throw off British control
12. A colonist who took the side of Great Britain in the war

Can You Answer These?
1. How did Englishmen and Frenchmen happen to meet in the Ohio Country? What claims did the French have to this land? Why did the English also claim the land?
2. What parts did Braddock and Washington play in the fight for the Ohio Country? Which was the better soldier?
3. How did the English gain control of the land along the St. Lawrence?
4. Who won the French and Indian War? What did this war decide?
5. What were the Navigation Acts? Why did Great Britain begin to enforce these acts after the French and Indian War?
6. Why did the colonists refuse to obey the Navigation Acts and the Stamp Act even though Britain had helped them win the French and Indian War?
7. What happened when the British government tried to force the colonists to buy tea on which there was a tax?
8. What means did the people take to keep each colony informed about what was happening in the other colonies?
9. What was the First Continental Congress? How did it attempt to patch up the quarrel between the American colonies and their mother country?
10. How and where did the War for Independence begin? Who was chosen to command the Continental Army? Why?
11. What was the Declaration of Independence? Who wrote most of it? When was it adopted? Where?
12. What part did each of the following play in the quarrel between King George III and the colonists:
   Benjamin Franklin    John Hancock
   Thomas Jefferson    Samuel Adams
   Patrick Henry    Paul Revere

13. Where did General Washington and his army spend their worst winter? What good news brought hope to him and his men?
14. Tell the story of the winning of the Northwest.
15. How was the war won in the South?
16. What were the terms of the Treaty of Peace we signed in 1783? How large was the United States at that time?

Who’s Who
Choose the correct name for each sentence.

1. The British general who took Quebec was
   Braddock    Wolfe
   Montcalm    Gage
2. The man who headed the Committee of Correspondence was
   Samuel Adams    John Adams
   Ethan Allen    Patrick Adams
3. The man who made a midnight ride to warn the people that the British were coming was
   Samuel Adams    John Hancock
   Paul Revere    James Otis
4. The man who wrote most of the Declaration of Independence was
   James Madison    Thomas Jefferson
   Samuel Adams    John Hancock
5. The man who said, “Give me liberty or give me death” was
   George III    Patrick Henry
   John Adams    James Monroe
6. The foreign soldiers hired by George III to fight against the colonists in the War for Independence were
   Green Mountain Boys    Hessians
   Burgesses    Tories
7. The turning point of the War of Independence came when Burgoyne was defeated at
   Valley Forge    Saratoga
   Kings Mountain    Bunker Hill
8. The Northwest Territory was won through the leadership and courage of
   George Rogers Clark    Patrick Henry
   Benjamin Franklin    Nathanael Greene
9. The Frenchman who came to America to help the colonists fight for liberty was
   Lafayette    Champlain
   Montcalm    La Salle
10. The British general who surrendered to Washington at Yorktown was
   Gage    Burgoyne
   Wolfe    Cornwallis

Can You Make These Statements True?
Choose the word or phrase which makes each statement true.

1. The first meeting of delegates from the thirteen colonies was called the: (a) Constitutional Convention    (b) First Continental Congress    (c) Committee of Correspondence    (d) Boston Tea Party
2. The document which the colonies adopted to free themselves from Great Britain was the:
   (a) Mayflower Compact    (b) Stamp Act    (c) Declaration of Independence    (d) Navigation Acts
3. The home of George Washington was called:
   (a) Independence Hall    (b) Mount Vernon    (c) Valley Forge    (d) Carpenter’s Hall
4. Washington’s army spent its worst winter at:
   (a) New Orleans    (b) Valley Forge    (c) Boston    (d) Lexington
5. The French and Indian War started when Englishmen and Frenchmen met in:
   (a) Ohio Country    (b) Fort Duquesne    (c) Kentucky    (d) Canada
6. George Washington took charge of the Continental Army after the battle at:
   (a) Concord    (b) Lexington    (c) Saratoga    (d) Bunker Hill
7. Cornwallis surrendered to Washington at:
   (a) Philadelphia    (b) Valley Forge    (c) Boston    (d) Yorktown
8. The Declaration of Independence was signed on:
   (a) October 12, 1492    (b) July 4, 1776    (c) December 26, 1620    (d) April 18, 1775
9. The statesman who persuaded the Virginian colonists to fight for their liberty was:
   (a) Samuel Adams    (b) George Washington    (c) Paul Revere    (d) Patrick Henry
10. The German nobleman who helped train the American army was:
    (a) General Wolfe    (b) Baron Steuben    (c) General Braddock    (d) Lafayette
11. The French nobleman who came to America to help fight for liberty was:
    (a) La Salle    (b) Samuel de Champlain    (c) Lafayette    (d) General Montcalm
12. The Virginian hunter and surveyor who captured the British forts in the northwest was:
    (a) Patrick Henry    (b) Ethan Allen    (c) George Rogers Clark    (d) General Gage
13. The American general who tricked Cornwallis and won back Georgia and South Carolina was:
    (a) Nathanael Greene    (b) George Washington    (c) Ethan Allen    (d) George Rogers Clark
14. The Second Continental Congress met in:
    (a) Valley Forge    (b) Boston    (c) Saratoga    (d) Philadelphia
HOW THE UNITED STATES ESTABLISHED A FIRM FOUNDATION

As colonists, the Americans had been allowed to have assemblies which made some of their laws. But their real rulers were the king of Great Britain and the British government. All the English people had to obey their laws no matter where they lived. When Americans declared their independence, each state kept its assembly, but there was no central government to hold them together.

The new nation needed some form or plan of government. Laws, courts, police, and judges are necessary so that people and property may be safe. A group of men drew up a plan of government called the Articles of Confederation. This plan of union went into effect in 1781.

Life under the Articles of Confederation

Americans had rebelled against their mother country because its central government had too much power. Under the Articles of Confederation, Congress, made up of representatives from all the states, was the central, or National Government. Congress was given too few powers. It could declare war and peace but could not force men to join the army. It could make treaties with and borrow money from other countries, but it could not lay or collect taxes to pay its debts. Congress could ask the states for money but could not force them to pay it. It could not control trade either between the states or between the United States and a foreign country. Congress had no power to keep the states from making paper money even when they had no gold or silver to back the paper. Congress could pass laws but had no way of making people obey them.

The state legislatures, or law-making bodies, were given too much power. They began to use these powers against each other. New York made people from other states pay duty on goods which they sold in New York. New Jersey would not accept paper money made in Pennsylvania. Maryland and Virginia quarreled over who could use the Potomac River. States quarreled about roads, bridges, boundaries, and debts.

A WISE PLAN OF GOVERNMENT

Under this first plan of government the thirteen states acted like thirteen jealous, quarreling little countries. During the war they had worked fairly well together. Now that they were independent they could not agree on anything.

Washington and other leaders were afraid that the new nation would fail. They knew that a foreign army could conquer one quarreling little state after another. The states had to stop arguing and work together. Something had to be done to save the country.

Meetings were called, but many states refused to send representatives. Things seemed hopeless. Finally twelve states were persuaded to send delegates, or representatives, to a meeting in Philadelphia. They hoped to find a way of changing and improving the Articles of Confederation.

The Constitutional Convention

The convention, or meeting, opened on May 25, 1787, when fifty-five representatives had arrived. They came from all the states except Rhode Island. Among them were the wisest men in the United States. Most of them had fought to make our nation free. Now they were determined to put it on a firm foundation.

George Washington was chosen chairman of the convention. Then the men set to work. They decided to plan a new and better form of government. "Make one that will have a Congress strong enough to control the states," suggested Alexander Hamilton.

"Make one that can deal with foreign nations," added another delegate.
From May until September these wise men worked behind closed doors. They did not want others to know how hard it was for them to agree on a plan of government. Each suggestion was discussed carefully to see if it was for the good of the nation. There were many heated arguments. Benjamin Franklin, the oldest and one of the wisest men at the convention, often stepped in to make peace.

As the weeks became months, some of the men had to return to their homes or their business. The rest worked on through the hot summer months. At last the new plan of government had been completed and put into writing. A written plan of government is called a constitution.

On September 17, 1787, Independence Hall was again the scene of an important event. On a table in front of George Washington lay the new Constitution of the United States. Thirty-nine weary delegates were ready to sign it. They knew that the Constitution was not perfect, but it was the best they could do. They felt that with it the United States had a chance to become a great and successful nation.

One after another stepped to the table. Each wrote his name on the Constitution. Then the new form of government was ready for the states to adopt.

Adopting the Constitution

At least nine states had to ratify, or agree to, the Constitution before it became the law of the land. Each delegate took a copy to his state legislature. What a time some of them had getting their legislatures to ratify it! The assemblies objected because many powers had been taken from the states and given to the National Government. Many people objected because some of the rights for which Americans had fought were not clearly promised in the Constitution. The delegates agreed that at its first meeting Congress would amend, or change, the Constitution. These rights would be added to the Constitution in a Bill of Rights. Under these conditions most people were willing to adopt the Constitution.

Delaware was the first state to ratify the Constitution. By June, 1788, nine states had approved it, making the Union sure. By 1790 all the states had come under the sheltering roof of the Constitution.

Our National Government

According to this plan our National Government is divided into three parts or branches. Congress, which makes our laws, is made up of two parts. One is called the Senate. The other is called the House of Representatives. Every state sends two members to the Senate. Members of the Senate are called Senators. Members of the House of Representatives are called Representatives. Representatives are chosen according to the

In 1787 fifty-five men met at Independence Hall, Philadelphia, to write a constitution for the new nation. The statue that you see is of John Barry, a hero of the Revolution.

Philadelphia Convention and Visitor's Bureau
John Jay was the first Chief Justice of the United States Supreme Court. This court was set up by the new Constitution.

number of people in a state. A state with a large population has more Representatives than a state with a smaller population.

The President chooses a group of persons to help him carry out his duties. This group is called the Cabinet. The Cabinet meets when the President wants the advice of its members. It is the duty of the President to see that the laws are carried out. He may also suggest to Congress any laws that he thinks will help the people.

The third part of the National Government is the Supreme Court. Sometimes there are questions about the laws that Congress passes. Are they in keeping with the Constitution? The judges of the Supreme Court decide these questions.

The delegates to the Constitutional Convention in Philadelphia had hoped to draw up a permanent form of government. Their hopes came true. The Constitution which they planned that summer of 1787 is still our form of government. The government that it set up is a republic. A republic is a nation where the people choose their own officials.

Putting the Constitution to work

George Washington had led our fight for independence. When a better form of government was needed, he had helped plan it. Now that the new government was being set up, he was chosen to be our first President.

It was decided that for a while the capital should be New York. That meant that the President would live in New York. Congress and the Supreme Court would meet there.

Inaugurating the first President

In the middle of April, 1789, George Washington set out for New York. Since the Revolution he had been living in his home at Mount Vernon, Virginia. He loved his home and had hoped to spend the rest of his life there with his family. Now he was on his way to New York. He was to be inaugurated, or put into office, as the first President of the United States.

He had to make the journey on horseback or by coach. All along the way people came out to cheer the new President. Every town wished to honor the great Washington. A group of his former officers went with him as far as the Hudson River. They were dressed in splendid uniforms and mounted on fine horses. He was rowed across the Hudson to New York in a beautifully decorated barge. It was rowed by sailors in white uniforms. People cheered, and the guns from the ships fired a salute as he stepped ashore.

On April 30, 1789, crowds gathered to see our first President inaugurated. How they cheered for George Washington, Vice-President John Adams, and Chancellor (or Judge) Robert R. Livingston. These officers of the new government appeared on the balcony of Federal Hall. Federal Hall was a building that New York had given to the nation. Federal means national. The chancellor
stepped forward. A deep silence fell over the crowd. Livingston read the President’s oath of office. An oath of office is a solemn promise to carry out the laws of the nation.

The people saw Washington bow and kiss the Bible. They heard his deep voice say, “I swear, so help me God!”

Then cheer after cheer burst from the throats of the people. The first President of our country had been inaugurated! We were ready to take our place as a nation.

The story of George Washington

George Washington was born on February 22, 1732. During his boyhood he lived at Wakefield, a farm in Virginia. He learned to ride, shoot, and do all the other things a colonial boy needed to know.

His father died before George was twelve years old. Since George was good in arithmetic, he decided to become a surveyor.

George Washington, our first President, took the oath of office at Federal Hall in New York in 1789. Can you find the place on the picture map of New York, page 106? *Bettmann Archive*

Surveying was a good way to make a living in those days. Much of the land in the colonies still had to be measured.

After his father’s death George lived most of the year at Mount Vernon with his oldest brother, Lawrence. Here he met the educated and wealthiest men of tidewater Virginia. Among them was Lord Fairfax, a wealthy owner of land in Maryland. The king had given Lord Fairfax a large area of land west of the Blue Ridge Mountains.

Lord Fairfax became interested in young George. When George was sixteen years old, Lord Fairfax hired him to survey his western land.

On surveying trips George Washington learned how to live in the wilderness. He became interested in the West and knew more about it than any other man in Virginia. You can see now why the governor chose the young Washington to carry an important message to the French fort.

When George was twenty years old, his brother Lawrence died and left him Mount Vernon. For the next twenty years, except when he was fighting the French and Indians, George lived at Mount Vernon. His crops, cattle, and fine horses were famous throughout Virginia.

He married Martha Custis, a widow who brought her two children to live with them. George Washington had no children of his own. But he loved his wife’s children dearly, and they loved him in return.

After the French and Indian War Colonel Washington was an important man in Virginia. The people elected him to the House of Burgesses. They wanted this wise man to help make laws for the colony. Once a year the Washington family journeyed to Williamsburg. They stayed in the capital while the assembly held its meetings.

When delegates were sent to the First Continental Congress, Virginia sent Colonel Washington. Later he was sent to the Second Continental Congress too. Like most colonists he still thought they ought to try to get
Mount Vernon today looks very much as it did when Washington lived there. Every year thousands of persons visit the home of our first President.

along with their mother country. After the battle of Bunker Hill, however, he accepted the command of the Continental Army because he believed in liberty.

The war lasted eight long years. These years were the hardest in Washington’s life. He met many defeats, but he never gave up. In the end he was victorious. Through it all his men loved and respected their great leader. It was this loyalty which kept them in the army in spite of everything.

After the Revolutionary War General Washington expected to spend the rest of his days peacefully at Mount Vernon. He soon had the plantation running well again. He invented a new plow, developed new fruit trees, and improved his breed of cattle. People from all parts of the world visited the great man at Mount Vernon. Then his country called him to serve it again.

As President, Washington served his country well for two terms. He refused to accept a third term and retired to his home. Less than a year later George Washington, the greatest American of his time, died. Americans deeply mourned his death. George Washington was “first in war, first in peace, and first in the hearts of his countrymen.”

OUR FEDERAL CITY

The people in the new nation wanted a Federal City. In such a city most people would be interested in the work of governing or running our nation. New York was our capital for only a few months. Then Philadelphia became our seat of government. These first two capitals were busy seaports. Their people were interested in commerce, manufacturing, and business. President Washington and other leaders decided to build a new city in which government would be the main business.

Location of our Federal City

Where should the Federal City be located? People in the South wanted the honor of having the capital in the South. People in the North thought it ought to be in the North. Two members of President Washington’s cabinet helped them decide. Members of the President’s cabinet are known as secretaries.

Alexander Hamilton of New York was Secretary of the Treasury. Thomas Jefferson of Virginia was Secretary of State. Both were brilliant men, but often they did not agree. It really did not matter to Hamilton where
our new capital was built. What he most wanted to do was to get our nation out of debt. He believed Congress ought to pay the money the states had borrowed during the War for Independence. Jefferson believed that each state should pay its own debts. But he wanted the capital to be in the South. They made a bargain.

Hamilton got the Northern Congressmen to vote for a Southern capital. In return, Jefferson got Southern Congressmen to agree that Congress should take over payment of the states’ debts. Both laws were passed.

Congress decided to build our capital on the Potomac River. President Washington chose the spot where the city, which is named for him, now stands. An area of land on both sides of the Potomac was set aside for the city. This area is called the District of Columbia.

Building our Federal City

Washington, D. C., was carefully planned. The Capitol, the building in which Congress meets, is the center of the city. From the hill on which it stands thirteen wide avenues run like the spokes of a wheel. These streets are named for the thirteen original states. The President’s home and other government buildings are not far from the Capitol.

The building went on very slowly. George Washington died before even one of the government buildings was finished. John Adams was the first President to live in the new capital city. When he moved there from Philadelphia, neither the Capitol nor the President’s House was finished. There were no houses which Congressmen could buy or rent. The streets were not paved. Red dust lay over the city on clear days. On rainy days the streets were sticky with mud. Washington, D. C., in 1800 was indeed different from the beautiful city of today.

Washington, D. C., today

Every year thousands of Americans and other people visit Washington. It has become the most beautiful city in the country. Its gleaming white buildings, its monuments, its wide avenues, and many parks have a beauty all their own. The cherry blossoms in bloom along the Potomac in spring are very beautiful.

The great dome at the top of the Capitol building can be seen from almost every part of Washington. Congress, which is made up of the Senate and the House of Representatives, meets here to make laws. Here each President of the United States takes his oath of office.

Near the Capitol is the Library of Congress. This is one of the finest libraries in the world. On the other side of the Capitol is the National Archives, where our nation’s records are kept. Here are the Declaration of Independence and the Constitution of the United States. They are locked in a case covered with a special kind of glass. This glass keeps the sun’s rays from fading the ink and paper.

For many years our Supreme Court met in a special room in the Capitol. Now our highest court meets in a white marble building with a beautiful dome and eight columns at its entrance.

On Pennsylvania Avenue about one mile from the Capitol stands the White House. This is where the President lives while he is in office. When it was first built, it was thought to be a fine house. But it was smaller then. It was not the gracious white mansion with deep porches, surrounded by rolling lawns and shady trees that it is today.

Everywhere in Washington we see huge Federal buildings. In them the work of our government is being carried on. Government is the main business of our capital.

Washington is also a city of monuments. The most famous of these are the Washington Monument and the Lincoln Memorial. Not long ago the Jefferson Memorial was finished. It is also a beautiful monument.

The Washington Monument is a simple shaft made of marble and granite. It rises more than five hundred feet above the
ground. From the windows near the top of the shaft we can see our capital city, with its white buildings, busy streets, wide bridges, and the winding Potomac River.

A wide lawn slopes from the Washington Monument to a pool. This pool acts like a mirror. In its waters we can see the Washington Monument and the building known as the Lincoln Memorial, which stands at its other end. Wide marble steps lead to a hall in this building. In the hall is a huge statue of President Abraham Lincoln. You will read a great deal about Abraham Lincoln later. A ray of light always seems to find the quiet marble figure seated on the marble chair. Few people talk as they look at this statue. Lincoln's eyes are kind and his smile friendly. He seems to say, "Come closer. I like people. Come and talk with me."

Not far away is the Jefferson Memorial. The huge statue of Jefferson which stands in the hall makes everything else seem tiny. The head of the statue almost touches the ceiling. As they look at the statue, people remember Jefferson's belief in democracy, or the idea that all men are created free and equal. They go away feeling that they want to make our nation a true democracy, or the kind of nation Jefferson meant when he wrote the Declaration of Independence.

These are only a few of the beautiful buildings and monuments found in our capital city. In this city the laws for the United States are made. The President, lawmakers, judges, and government employees who serve the American people live here. Washington, D. C., today is the Federal City its founders wanted it to be.

**HOW THE UNITED STATES WON FREEDOM ON THE SEAS**

After the United States became an independent country, American manufacturers and merchants needed new markets. They also wanted the products of distant lands. Our ships began to visit the important seaports in Europe and Africa. Still people missed the products that British ships had brought from the Far East in colonial times.

**GROWTH OF TRADE**

American merchants decided to open trade with Asia. Less than ten years after the United States became a nation, a ship from the port of New York reached China. Boston merchants then fitted up two ships for trade with the Far East. Captain Robert Gray was put in command of one of these vessels.

**Captain Gray's voyage to China**

Ships could not sail directly to Asia. They had to stop at different places to get food and water. They traded with the natives wherever they stopped.

From Boston Captain Gray sailed southward along the coast of North and South America and around Cape Horn. His was the first ship to carry the flag of the United States into the Pacific Ocean. On the west coast of North America he stopped for furs. Then on across the Pacific Ocean to Hawaii (hā-wiˈē) and China he went. After he had exchanged his furs for tea, spices, china, and silk, he was ready to return home with his cargo from the East.

Gray did not return by way of the Pacific. He followed Magellan's and Drake's route around Africa. Three years after he had left, Captain Gray returned to Boston harbor. He was the first American to circumnavigate the globe. He had also opened the door of China to Americans.

**United States trade and Barbary pirates**

Four small countries on the northern coast of Africa were known as the Barbary states. For years their warships seized the ships that entered the Mediterranean Sea and held their sailors for ransom. European countries paid these pirates to keep them from attacking their ships. To avoid war, the United
States also paid money to the pirates for a while. Then President Jefferson decided to send our warships to the Mediterranean Sea to punish the pirates. After a time the Barbary states were ready for peace.

A few years later the Barbary states began to attack our ships again. United States warships were again sent to the Mediterranean. Captain Stephen Decatur (dē-kā′tēr), who had won fame for his courage during the earlier trouble with the pirates, was in command. He forced the Barbary states to come to terms. Since then our trading vessels have been safe in the Mediterranean.

THE WAR OF 1812

After the War for Independence, Americans continued to trade with Great Britain. We also built up a valuable trade with France. Both European countries needed our food and raw materials. We needed their manufactured goods.

Then Great Britain and France went to war. Each planned to harm the other by cutting off its trade. The British began to seize our ships which were headed for France. The French threatened to capture our vessels bound for England. Through no fault of ours we were losing ships and goods.

To make matters worse, the British stopped our vessels in the middle of the ocean and searched them. They seized any English sailors they found. Sometimes they also took our sailors and forced them to work on British ships. Seizing our sailors, as the British did, is known as impressment.

Our government asked Great Britain and France to stop seizing our ships. It protested to the British government against impressment of United States sailors. “They are British sailors who have deserted our navy. We need them in our war against France,” was the reply. The British government refused to stop seizing American ships and men.

“This is an insult!” stormed a group of Americans known as the War Hawks. “We must punish Great Britain by taking Canada!” The United States was not prepared for war. Our army was small and poorly trained. There were only fifteen ships in our navy. The British fleet had about one thousand vessels. But the War Hawks got Congress to declare war against Great Britain in 1812. It is known as the War of 1812.

The saving of the Northwest

Early in the war Detroit fell into British hands. It looked as though the British might take our Northwest. A large British fleet lay on Lake Erie. What was to stop them from carrying soldiers to the south shore? They could move enough men across to capture the land George Rogers Clark had won during the Revolutionary War. A brave young naval officer, Oliver Hazard Perry, was ordered to stop the British.

Perry had no ships and no sailors. Congress sent him some ship carpenters and a few sailors. He hired men to cut down trees and help build ships on the southern shore of Lake Erie. He trained backwoodsmen to sail boats. In about three months Perry was ready to meet the British fleet on Lake Erie.

The battle which followed was a hard one. But Perry’s ships defeated the British fleet. “We have met the enemy and they are ours,” was the message Perry sent to Congress.

General William Henry Harrison then marched his American army into Canada and defeated the British. Perry’s victory on Lake Erie had saved the Northwest Territory for the United States.

Importance of the American navy

The Americans were doing better on water than on land. Even before the victory on Lake Erie they had won several battles in the Atlantic Ocean.

The few ships owned by the United States did not dare meet the strong British navy. So Americans developed a strange kind of sea fighting. Their ships would go out by ones or twos. If they met a group of enemy
The Constitution defeated the English ship, called the Guerrière, during the War of 1812. Later on, the Constitution was given the name of “Old Ironsides.”

The most famous of these fighting ships was the Constitution. The Constitution became the terror of the British navy. The United States was very proud of this ship. It was nicknamed “Old Ironsides” because it came through so many battles.

When the war ended, “Old Ironsides” was taken to the navy yards in Boston. There it stayed almost forgotten year after year. Time and again there was talk of wrecking the old ship. Each time some people remembered its deeds in the War of 1812, and it was spared. Then, in 1927, the school children of the United States gave their pennies to restore “Old Ironsides.” Today in Boston, visitors may see the old vessel just as it looked more than one hundred years ago.

The burning of Washington, D. C.

In the last year of the war the British made three attempts to invade the United States. A fleet carrying their soldiers from Canada was defeated on Lake Champlain. After that they did not try to enter our country from the north.

The British met with greater success in the East. Their ships brought an army to Chesapeake Bay. They landed and marched to within five miles of Washington before the Americans even tried to stop them. By that time it was too late. President and Mrs. Madison fled, taking as many valuables with them as possible. The enemy marched into our capital. They burned the President’s House, the Capitol, and other government buildings. Then they started toward Baltimore to capture that city.

By that time the Americans had recovered from their surprise. They dug trenches, threw up defenses, and prepared to fight for the city. The troops in Fort McHenry were determined not to let the British ships reach Baltimore.

Night fell, and the British tried to steal past the fort under cover of darkness. But the watchful Americans saw them. Fort McHenry’s cannon began to fire on the ships. The British fleet returned the fire. All night the battle raged.

All night long the people in Baltimore watched the battle anxiously. Could Fort
When the British invaded the United States at New Orleans in 1814, General Andrew Jackson with his army of backwoodsmen met and defeated them.

**Jackson and the battle of New Orleans**

The British fleet sailed out of Chesapeake Bay. Soon word reached Congress that it was headed toward the Gulf of Mexico. The enemy would next try to invade our country by seizing New Orleans. The task of stopping them was given to General Andrew Jackson, a famous Indian fighter.

Andrew Jackson was a good soldier. At the age of thirteen he had joined the army in the Revolutionary War. He fought the British for three years. His two brothers lost their lives in this war. When the War of 1812 broke out, he was glad to fight the British again.

General Jackson collected an army of backwoodsmen in Tennessee and started south. On the way he defeated a number of Indian tribes. He wanted to make sure they would not help the British.

The Americans beat the British to New Orleans. Jackson immediately ordered his men to build a wall and prepare to drive off the enemy. When the British landed, Jackson’s army was ready. A bloody battle followed. Hundreds of the enemy’s troops met their death. Jackson lost very few men. The British who lived were happy to return to their ships and sail away. General Jackson had won the only American land victory of this war. Never since that day have Great Britain and the United States met as enemies on the battlefield.

McHenry withstand the ships’ fire? Would the American flag continue to fly over it? Or would morning see the enemy holding the fort and the city?

An American who had watched the battle all night from a ship in the bay anxiously awaited the outcome. The first dim light of morning showed the American flag still flying over the fort. This watcher, Francis Scott Key, was filled with joy. He jotted down a poem which had been forming in his mind as he watched the fight. This poem, “The Star-Spangled Banner,” was later set to music. It was very popular with the people and was sung at patriotic celebrations. In 1931 Congress made it our national anthem. Here is the first stanza of this song.

```
Oh! say, can you see,
by the dawn’s early light,
What so proudly we hailed
at the twilight’s last gleaming?
Whose broad stripes and bright stars,
thro’ the perilous fight,
O’er the ramparts we watched
were so gallantly streaming?
And the rockets’ red glare,
the bombs bursting in air,
Gave proof thro’ the night
that our flag was still there.
Oh! say, does the star-spangled
banner yet wave
O’er the land of the free
and the home of the brave?
```
The waste of war

Jackson’s brilliant victory was not at all necessary. Actually the war had ended before the battle of New Orleans. A peace treaty had been signed in Belgium in December, 1814, more than two weeks earlier. Can you tell why news of the treaty had not reached Jackson sooner?

The War of 1812 accomplished little. But since that time, Great Britain and the United States have never again had to go to war. All their quarrels have been settled by peaceful means. In the last two World Wars they fought side by side.

During the War of 1812 our country had built up a navy which Britain and other countries had learned to respect. We had won the right to sail the seven seas and trade with whomever we pleased. The United States had proved to all the world that it was truly an independent nation.

Trade with the Far East

Some years after Captain Gray’s visit to China another officer of our navy, Commodore Matthew C. Perry, succeeded in opening up trade with Japan. Japan is an island nation across a narrow sea from China. The Japanese wanted to keep foreigners away. They refused to let our ships stop on their way to China for food, water, or fuel. Sometimes American whaling vessels were wrecked on Japanese shores. The shipwrecked sailors complained that the Japanese treated them cruelly.

One July morning in 1853 Commodore Perry’s fleet steamed into a Japanese port. The natives saw the commodore, his officers, and some of his men row to shore. The Japanese realized their fleet was powerless against the modern warships. A few months later their emperor signed a treaty, or contract, which allowed United States ships to stop in Japan. He also promised that our sailors would be treated well.

Three years later the United States and Japan signed an agreement, or trade treaty. With the signing of this treaty commerce between the United States and the Far East was in full swing.

When Commodore Perry came to Japan, he brought gifts to prove the Americans were friendly and wished to trade. The Japanese were eager to get more of these articles from the West.
TO HELP YOU LEARN

People and Places to Remember
Federal Hall      John Adams      James Madison
Mount Vernon     White House     Lincoln Memorial
Alexander Hamilton
Independence Hall
Washington Monument
District of Columbia

Words and Terms You Should Know
Capitol         federal         secretary
Senate          Cabinet         delegate
ratify           democracy       legislature
amend           republic        inaugurate

A Matching Test
Number a paper from 1 through 20. After the number write the word from the list above which matches the definition.

1. A group of people meeting for a common purpose
2. To put the President into office
3. To approve and accept
4. The body of laws of the whole United States
5. The building in Washington in which Congress meets
6. A solemn promise taken by an elected official to carry out the laws
7. A person who has been given the right to vote or to act for another
8. National, or having to do with a whole nation
9. The highest court in our country
10. The part of Congress which is made up of two members from each state
11. To change something, such as a law, for the better
12. A group of people, chosen by the President, who help and advise him
13. Central government, or government for the whole nation
14. The part, or house, of Congress which has the most members
15. A member of the President’s Cabinet
16. Government by the people through their chosen representatives
17. The first ten amendments to the Constitution
18. The body of persons responsible for making laws
19. A way of life in which all persons are considered free and equal
20. The seizing of American sailors by the British navy on the high seas

Can You Answer These?
1. In what ways were the Articles of Confederation a weak form of government?
2. Why did the Articles give the states so much more power than the central government had?
3. How did the weakness of the Articles of Confederation almost cause the new nation to fail?
4. How did some wise Americans set about strengthening our form of government?
5. What is the Constitution? Where was it written? When and where was it signed?
6. Tell the story of the making of the Constitution and what part each of the following played in its adoption: (a) Alexander Hamilton (b) Benjamin Franklin (c) George Washington (d) James Madison
7. What changes, or amendments, had to be promised before some states would adopt the Constitution? What are these amendments called?
8. What three branches, or parts, of government were set up by the Constitution? What are the duties of each?
9. Why did the people choose George Washington as the first President of the United States?
10. Why did Washington choose some men to help him run the government? What were these men called?
11. Why did Americans want a new Federal City?
12. What bargain between two of George Washington’s secretaries decided the location of our national capital?
13. What are some of the important buildings in Washington today? What government business is carried on in each?
14. Where is the Constitution of the United States kept? What other famous American document is kept in the same place?
The men who made the Constitution at Philadelphia knew that there were different opinions among them. They knew that in a representative democracy there would be much arguing. They knew that men would say to one another, "I do not agree with you." But they hoped men with different ideas would compromise, or give in a little, to reach an agreement that would be acceptable to most of them.

**STEPS LEADING TO WAR**

Even after the Constitution had been adopted, there were citizens who believed that the Federal Government had too much power. This difference of opinion continued in our country until it led to a war, the War Between the States. This war ended a long series of struggles over the power of the Federal Government. Each struggle before this time had ended in compromise. This last one, which ended in war, proved the Federal Government's power to hold the states of the Union together.

**The quarrel over slavery**

The first quarrel was about a tariff. A tariff is a tax paid on goods brought into a country. The manufacturers of the North wanted a high tariff. Such a tax would make imported products high in price. People in the South did little manufacturing. Because they bought goods from Europe they wanted no tariff which would raise the prices of the imported goods and make them much too expensive.

In 1828 Congress passed a tariff act which pleased the people of the North but which the South did not like. Southern states threatened to secede, or leave, the Union. Fortunately both sides were willing to compromise. Each gave up a little of what it wanted. Our nation was not split over the question of tariff.

The second quarrel was about slavery. By the time of the Revolution many Americans, even Southerners, were against slavery. It might have disappeared gradually from our country if it had not been for an important invention.

You have already learned that in 1793 the cotton gin was invented by Eli Whitney. The cotton gin could clean a hundred times more cotton in a day than could be cleaned by hand. Now raising cotton began to pay well. Southern farmers began to grow nothing but cotton on their large plantations. The more they raised, the more workers they had to have. Instead of getting rid of their slaves, cotton planters of the South began to buy more and more.

Many people in the North agreed that cotton growers could not carry on their work without slaves. They said planters in the cotton states ought to be allowed to keep slaves. They objected, however, to letting slavery spread into other sections of our country. For a long time Mason and Dixon's line and the Ohio River formed the boundary between "slave" states and "free" states. By slave states we mean states where slaves were kept. Free states were states where Negroes could not be bought, sold, or kept as slaves.

There were some people who believed it was wrong to own slaves. They wanted to abolish, or do away with, slavery altogether. These people were called abolitionists (āb’ō-lish’ān-ists). They believed that slaveowners everywhere should be forced to give up their slaves and that all slaves should be free.

**Efforts to compromise**

For many years there were as many free states as slave states in our country. That meant that there were as many Senators in
Congress from the South as there were from the North. Neither had more votes in the Senate, so they usually compromised.

In 1803 our country bought the Louisiana Territory from France. That purchase gave us a large region west of the Mississippi River reaching to the Rocky Mountains. Find the Louisiana Territory on the map on page 238. Settlers began to move into this region. Two new problems arose. Were people in the new territories to be allowed to keep slaves? Were new states formed from the territory to come into the Union as free states or slave states?

The United States continued to grow. The map on page 298 shows that Texas and an area from Mexico were added. Again the question about slavery arose. It was settled by a compromise. But a few years later Congress passed a law allowing each new state to decide for itself whether it wanted slavery or not. People in the North were furious! They said that this law opened all the territories to slavery.

Election of a Republican President

Many people in the North began to join anti-slavery, or abolitionist, groups. A new party called the Republican party was organized. The leaders of the new party asked the people to vote for it to keep our country united and the territories free from slavery.

People in the South were worried when the Republican party was formed. They felt that the abolitionist group was growing too strong in Congress. They were afraid they would be forced to give up their slaves. What would become of the Southern plantations then?

"If a Republican President is elected, we will secede," agreed the Southern members of Congress.

A Republican President was elected in the fall of 1860. His name was Abraham Lincoln.

The story of Abraham Lincoln

Abraham Lincoln was born on February 12, 1809, in a rough log cabin in Kentucky. Little Abe lived there until he was seven years old. Then his family moved to Indiana. The trip to Indiana by wagon and flatboat was fun for Abe and his sister Sarah. But the long journey and the hard work of settling in the wilderness were too much for Abe's mother. She became ill and soon died.

Abe, his father, and sister were very lonely after Mrs. Lincoln died. One day Thomas Lincoln, Abe's father, went back to Kentucky for a visit. After many weeks he returned with a new wife and her two children. The new Mrs. Lincoln brought furniture for the cabin, warm quilts and soft pillows for their beds. Abe and his sister were delighted. Their poor home had never been so comfortable before.

Abe's new mother was kind and good. She taught Abe to read and write. Later he went
to school whenever his father could spare him from work. He would get up before daybreak every morning to do his chores. Then he would walk several miles to school. He was an intelligent, hard-working pupil. Reading, writing, spelling, arithmetic — Abe loved them all.

After school Abe would hurry home to do the evening chores. When supper was over, he sat near the fire and eagerly did his schoolwork. He had nothing to write with except charcoal, and he used a shovel instead of a slate. When he finished, he wiped off the charcoal marks, and the shovel was ready for the next lesson.

Abe loved school, but he was able to attend only a short time. His father needed his help, so he could go to school only two or three months a year. Altogether he probably had about one year of schooling. But he loved to read and would walk miles to borrow a book.

So Abraham Lincoln grew to manhood in the backwoods of Indiana. He was more than six feet tall and lanky. He was always growing out of his clothes. But nobody could tell a funny story or a joke better than could Abe Lincoln. He was the best wrestler, the best rail splitter, and the best speller in all that frontier country. His homely face and kind smile were known and liked wherever he went.

When Abe was twenty-one, his family moved to Illinois. He helped the family pack their belongings and move. A year later he set out to make a living for himself. There were not many jobs to be had, so he took whatever work he could find.

Abe was twenty-two when he took a flatboat of goods to New Orleans to sell. There, for the first time in his life, he saw a slave market. His kind heart was heavy when he saw human beings bought and sold. He made up his mind that if he could ever help these people he would do so.

Abe worked as a clerk in a general store for several years. When this store went out of business, he looked for another job. Finally he bought a store of his own. One day a man who was driving through the country stopped at Abe’s store. He had no money. So he offered to trade a barrel full of odds and ends for the groceries he needed. Abe agreed. At the bottom of the barrel was a law book. Abe was delighted. After this he spent all his spare time studying this book.

After several months Lincoln’s store failed. He was appointed postmaster, and later surveyor, but he found it very hard to make a living. All the people of the community liked him, however, and when he decided to run for the Illinois legislature, they elected him. Lincoln, who was now twenty-five, began to study law in earnest. He sometimes walked miles to borrow the law books he needed. After two years of hard study, he received a license to practice law. He opened a law office in Springfield.

Lincoln served in the Illinois legislature for eight years. Then he was elected to the House of Representatives, in Washington, D. C., for one term.

When Lincoln came home from Washington, he began to practice law again. He never made a great deal of money. But many people knew him and respected him.

A few years later Lincoln ran for the office of United States Senator from Illinois. During the campaign he spoke out against the spread of slavery in new states and territories. Lincoln lost the election. But he made many friends and became well known in other states.

Two years later Abraham Lincoln was elected President of the United States. The boy who had been born in a log cabin had risen to the highest office in the land.

**Secession of the South**

All hope of saving the Union seemed lost after the election of 1860. In one of his speeches Lincoln had said, “A house divided against itself cannot stand . . . I do not expect the house to fall, but I do expect that it will cease to be divided. It will be all one thing or all the other.”
“He will abolish slavery as soon as he is inaugurated,” said Southerners. “It will ruin us!” Many Southerners, as you know, believed that a state had the right to leave the Union. “The South is not being fairly treated,” they said. “We must secede!”

The map on page 193 shows that all but four of the states south of Mason and Dixon’s line and the Ohio River seceded. Which did not?

South Carolina was first to carry out the threat. Soon six other states followed South Carolina’s example. These seven states formed a new nation called the Confederacy, or the Confederate States of America.

Four more states joined the Confederacy within a few months’ time. Notice that western Virginia did not secede. The part of Virginia which stayed in the Union became the state of West Virginia.

President Lincoln was inaugurated on March 4, 1861. Almost at the same time Jefferson Davis became President of the Confederate States of America.

The people of the North were not satisfied to let a part of our country break away. “The Union must be saved!” they declared. “If we must, we will fight to keep it from splitting in two.”

THE WAR BETWEEN THE STATES

Fort Sumter in Charleston, South Carolina, was held by troops who were loyal to the United States. The Confederate, or Southern, Army opened fire on the fort. The loyal troops fought bravely, but there were too few soldiers in the fort to hold it. War between the North and the South had started.

The Confederate soldiers wore gray uniforms. Federal, or Union soldiers, wore blue. Confederates were fighting for the right of a state to secede. Federals wanted to save the Union. There was civil war in our land. Both sides were sure the war would not last long. Each was sure it could defeat the other in a short time. But, as it turned out, the two sides were fairly evenly matched.

The Confederate Army had better training. But the Confederacy had several problems. Because it was a new nation, there was no money in its treasury. It had no navy and few factories. At first, ships from England and other European countries brought the Confederacy weapons and manufactured goods in exchange for raw cotton. But after a while foreign ships could no longer reach Southern ports. The North cut off this source of supply with a blockade.

Blockade of Confederate ports

On the map on page 193 find Charleston in South Carolina, Savannah in Georgia, and New Orleans in Louisiana. These were the chief ports of the South. President Lincoln ordered a blockade of all harbors. Federal warships patrolled the waters near these cities. They fired on any ships which tried to enter or leave the harbors. Foreign captains did not care to risk having their ships blown up or seized.

As the war went on, Southerners ran out of clothing, tools, and war materials. Some bold men tried to smuggle shiploads of goods through the blockade. Usually they were caught. So these blockade runners could do little to help their people.

Failure to capture Richmond

Northern leaders wanted to capture Richmond, the Confederate capital. They felt that this would end the war. The map on page 193 shows how close Richmond is to Washington, D. C. Again and again the Union Army advanced toward Richmond. Thousands met their death in battle. Their defeat was due to the clever leadership of General Robert Edward Lee.

Robert E. Lee, a great general

Robert Edward Lee’s earliest memories were of a plantation with a large house and sloping lawns. This was Stratford, in Virginia, where he was born on January 19, 1807. Robert’s playmates were the children
of great landowners whose grandparents and
great-grandparents had founded Virginia.
His bedtime stories were tales about George
Washington and how he had led our country
to independence. For Robert’s father, Henry
Lee, was one of Washington’s officers whose
daring deeds had won him the nickname of
“Lighthorse Harry Lee.” Robert grew up
with a deep love for his native state and for
his country. George Washington was his
hero and his model.

The Lee family moved to Alexandria when
Robert was still very young. Alexandria is
just across the Potomac from our capital.
It is also near Mount Vernon, Washington’s
old home. Here the boy felt closer than ever
to his hero because he attended the same
church Washington had attended. Here also
he met Mary Custis, the great-granddaughter
of Martha Washington. When he grew up,
he married Mary and lived in a beautiful
house near Washington, D. C.

No one was surprised when young Robert
chose to enter the army. At the age of eight-
een he entered West Point, the great school
where our nation’s army officers are trained.
He was a good student and graduated near
the top of his class. During the war with
Mexico, which you will read about later, Lee
served our country well. He was promoted to
be a colonel before the war ended. Colonel
Lee was put in charge of building up our na-
tional defenses. He was also superintendent
of the United States Military Academy for
three years.

As you know, people of the North and peo-
ples of the South had been disagreeing about
a number of matters. One of these was the
question of slavery. Robert E. Lee was a
Southerner who believed that keeping slaves
was not right. The time came when he could
no longer keep out of the quarrels which
threatened to divide our nation.

At this time Lee held one of the highest
positions in the United States Army. When
Confederate soldiers fired on Fort Sumter,
the war began. President Lincoln asked Gen-
cral Lee to take charge of the Union army.
General Lee loved the United States and
wanted to serve it. But he loved his native
state too, and Virginia had seceded from the
Union. What was he to do? He was torn
between loyalty to his country and loyalty to
his state. To choose between them would be
hard for any man. For Lee the choice was
hard. Should he take command of the Union
forces and fight against relatives and friends?
Or should he join his fellow Virginians and
help destroy the nation his father had fought
to build? At last he decided that it was his
duty to serve Virginia.

In his letter to President Lincoln, Lee ex-
pressed his deep regret at having to refuse
the honor of commanding the Union forces.
He said he could not “possibly take part in
an invasion of the Southern States.” Then he
resigned his commission in the United States
Army.

As soon as General Lee left the Union
Army, Jefferson Davis offered him the com-
mand of the Army of Northern Virginia.
Later he was made Commander-in-chief of
all the Confederate forces.

All through the War Between the States
Lee did his best to bring victory to the South.
He was a splendid leader. For two years he
never lost a battle. His men loved him.
When he rode among his troops on his gray
horse Traveler, the soldiers crowded about
him. He inspired them with confidence. But
the forces of the North grew stronger. They
invaded the South. For four years Lee was
able to keep the Union army out of Virginia.
Then Virginia too fell into Union hands.
Lee realized that the South was beaten. To
avoid further bloodshed he surrendered.
After four years of bitter fighting, the Union
armies had won.

When the war was over, Lee set himself
the task of helping to unite the North and the
South. He became president of Washington
College (now called Washington and Lee
University) in Virginia. He urged the stu-
dents at the college to forget the war and
In the war General Robert E. Lee often rode among his men on his horse Traveler. They think of themselves as Americans, not as citizens of any particular state.

Robert Edward Lee died in 1870. The South deeply mourned his passing. As time went on, Northerners began to recognize Lee’s great qualities. Many Americans are sorry that he felt it his duty to fight on the side of his native state. All are glad that he lived long enough to set an example of how to accept defeat, proving that he was a great American.

General Lee is considered one of the greatest generals who ever lived. His army was often ragged, hungry, and without weapons. But again and again he was able to lead it to victory. Lee later met defeat at Gettysburg and Antietam (an-tē’tam). But for four long years the gallant leader was able to hold Richmond in spite of repeated attacks.

**Cutting the Confederacy in Two**

Federal ships were blocking Southern ports. Union armies in the East were trying to capture Richmond. Union soldiers in the West were trying to take the towns along the Mississippi River. On the map on page 193 find the Mississippi towns held by the Confederates at the beginning of the war.

Admiral David Farragut was sent to capture New Orleans, the largest of the Mississippi ports. Confederate soldiers tried to protect this city. They fired at the Union ships. In spite of everything Farragut steamed up the mouth of the Mississippi. The Federals captured New Orleans.

Now it was the task of General Ulysses S. Grant to take the towns farther up the Mississippi River. First Vicksburg, then other towns fell. By the middle of 1864 the Mississippi River was in Northern hands. The Confederacy had been cut into two parts.

**The Emancipation Proclamation**

Almost two years of war passed and still the fighting continued. President Lincoln longed for a way of shortening the war.

“If you free the slaves, you will weaken the South,” said his advisers. “The slaves are supplying their masters with food, clothing, and ammunition. Many of them are even fighting in the Confederate Army.”

“I must do something to stop this bloodshed,” said President Lincoln. So in January, 1863, he signed a paper called the *Emancipation* (ë-man’shə-pən’shən) *Proclamation*, which emancipated, or freed, the slaves in the Confederacy.

But the Emancipation Proclamation made very little change. Because people in the South did not consider Lincoln their President, they paid no attention to his message. The slaves continued to help their masters.

**End of the War Between the States**

General Grant had succeeded in capturing the West. Still there were no victories in the East. So Lincoln sent for Grant and made him commander of all the Union armies.

Grant immediately set to work making plans for bringing the war to a close. “I will
The War Between the States divided North and South. Name the slave states. Name the free states. How far north did the Confederate army go? How far west did the war extend?

lead an army into Virginia, take Richmond, and conquer Lee,” he decided. “At the same time General Sherman must cut what is left of the Confederacy in half. The South will be weakened.”

General William T. Sherman was one of the ablest officers the Union had. In August, 1864, he captured Atlanta, Georgia. Then he started on his march to the sea.

On the map above you can see the route Sherman took from Atlanta to Savannah. His men brought ruin to all this part of the South. On Christmas Day in 1864 General Sherman sent a telegram to President Lincoln. It read, “I give you Savannah for a Christmas present.” Then he marched northward to join General Grant.

General Grant attacked Richmond with a huge army. General Lee’s men fought bravely. But they could get no men to replace those who were killed or wounded. Lee realized that it was useless to continue to fight. The Confederate Army had to surrender or be cut to pieces by the strong Union armies.

On April 9, 1865, General Lee surrendered his army to General Grant at Appomattox in Virginia. In a few weeks the War Between the States was over. The South had fought for the right to secede. It had lost.

General Grant was kind to his foes, whose courage and ability he admired. He permitted General Lee to keep his sword. The Confederate soldiers had to give up their weapons. Lee told Grant that the army animals belonged to the men. “Keep your horses and mules,” Grant told the men. “You will need them in your spring plowing.” The Southern soldiers swore never again to take up arms against the United States. Then they were allowed to return to their homes. “These men have suffered enough during four years of bitter fighting. They need no further punishment,” said Grant.
General Ulysses S. Grant commanded all the armies of the United States. Later he became the President of the United States.

AFTER THE WAR

People in the North had also suffered during the war. But the Union had been saved. The question of whether a state could ever secede from the Union was settled at last. Our nation could never be divided.

Death of Abraham Lincoln

When peace came, President Lincoln immediately made plans to unite the North and the South. He too believed that Southerners had suffered enough. He wanted the Southern states to be taken back into the Union quickly and quietly.

Unfortunately Lincoln did not live to carry out the plan. Five days after the war ended, he was sitting in his box at a theater quietly enjoying a play. The curtains of the box parted. The firing of a gun was heard. President Lincoln had been shot by a half-crazy actor. He died soon afterward.

People everywhere grieved for Lincoln as they would have grieved at the loss of a father. From Washington the funeral train bearing his body started west by slow stages on its way to Lincoln’s home in Springfield, Illinois. Across the country thousands of people lined the tracks to pay their respects and to weep for the lost leader. The great poet Walt Whitman put their feelings into words in the poem called “O Captain! My Captain!” The poem helps us understand what Lincoln’s death meant to the people.

When Lincoln died, the South lost its best friend. The government passed into the control of men who hated the South. They thought Lincoln had been too easy with the seceding states. “We shall punish all Southerners who took part in the war,” they said.

Problems of the South

The end of the war did not end the suffering in the South. Returning soldiers found their homes burned, their fields trampled and destroyed. Their slaves were gone. They had no money to hire workers. They had to find a new way of making a living and rebuilding their land.

They also had the problem of the freedmen or freed Negroes, on their hands. The slaves had been freed, but no one had made any plans for them. Some of them stayed on with their former masters. Others wandered about from place to place. They expected the government to care for them just as their masters had cared for them before the war.

The government could have helped rebuild the South. Congress should have helped the Negroes learn their new way of life. But, instead of providing homes and work for the freedmen, Congress began to punish the white people in the South. Congress passed a law forbidding anyone who had fought in the Confederate Army to vote or hold public office. That meant that few white men in the South could vote for President or any other leader. Neither could they go to Congress or help make laws.
At the close of the war Jefferson Davis returned to Biloxi, Mississippi. His beautiful home in Biloxi was called Beauvoir.

The South was divided into districts which were ruled by Northern army officers. Troops were sent from the North to enforce the laws. The South was being treated as if it were a conquered foreign country.

**Amendments to help the freedmen**

Congress then passed three amendments to the Constitution. Amendments are laws making changes in our Constitution. The Thirteenth Amendment said that all slaves were free. The Fourteenth made the Negroes citizens. The Fifteenth Amendment gave them the right to vote. Thus all freed Negroes could vote and hold office. But for several years after the War Between the States most of the white men in the South could neither vote nor hold office.

Then some dishonest men from the North saw a chance to make money. They traveled with everything they owned in bags made of carpet. They were known as carpetbaggers.

The carpetbaggers pretended to be the freedmen’s friends. They got them to run for office and to make laws against their former masters. Both Negroes and white men in the South were cheated by these men. They became the most hated people in the South.

**The “Solid South”**

After twelve years the North became tired of ruling the South. Many of the men who had been bitter toward the South were no longer in Congress. Now that the Negroes were citizens the North was satisfied. Their armies were withdrawn. Congress passed a law which allowed Southern men to vote in national elections and to send representatives to Congress. The Southern states had finally regained their place in the United States.

White men in the South then took steps to get the freed slaves out of office. They frightened the Negroes and made them promise to give up their positions. They kept most freedmen from voting. They were able to elect white men to make the laws. They voted the same way on important questions. For this reason the South began to be called the “Solid South.” The South still votes the same way on most national matters.

**Our united nation**

The War Between the States decided for all time that our Union was to last. After it, Americans were ready to go on with the work of building up a fine democratic nation. We have added lands in the Atlantic and the
Pacific. We have fought two great wars, World War I (1917-1918) and World War II (1941-1945), to defend democracy. After World War II we gave aid to many nations to help them build up again. We joined the United Nations. In all these ways the United States has taken its place and its share of duties as a grown-up member of the family of nations. Today its people are trying to help build a united and peaceful world.

TO HELP YOU LEARN

Persons and Places to Remember

| Appomattox | Matthew Perry | Abraham Lincoln | Jefferson Davis | Ulysses S. Grant |
| Fort Sumter | Robert Gray | Andrew Jackson | Robert Edward Lee | William T. Sherman |
| Gettysburg | Fort McHenry | David Farragut | Francis Scott Key | Oliver Hazard Perry |

Words and Terms You Should Know

freedman civil war slave state abolitionist
secede abolish free state impressment of sailors
tariff amendment slave compromise carpetbagger

A Matching Game

Number a paper from 1 through 14. After each number write the word or term from the above list which matches the definition.

1. A war between two groups of people in the same country
2. A slave who had been set free
3. To do away with entirely
4. To withdraw from an organization
5. A state which held slaves
6. A law which changes the Constitution
7. A tax on goods coming into a country
8. The paper, signed by the President, which freed the slaves in the Confederacy
9. The union formed by the seceded states
10. A Northerner who went to the South to make money in the hard times after the war
11. An agreement reached by each side giving up part of what it wanted
12. A person who wanted all slaves to be freed
13. A state which did not keep slaves
14. The states which held slaves

Can You Answer These?

1. Tell the story of our war with the pirates of the Barbary States.
2. Why did we go to war in 1812?
3. Who were the "War Hawks"?
4. Tell what each of these men did in the War of 1812: (a) Andrew Jackson (b) James Madison (c) Oliver Hazard Perry

Using Maps

1. Study the two maps on page 159. What lands did each European nation claim in 1750? Who owned the important waterways of North America? What changes took place between 1750 and 1763?
2. Use the map on page 167 as you answer these questions about the Revolutionary War: Where was the first battle fought? Where did the fighting take place in the Middle Atlantic Colonies? How far west did the fighting progress? Where did the war end?

3. Turn to the map on page 171. What was the western boundary of the United States in 1783? Now turn to the map on page 193 to find how our country grew between 1783 and 1861. Tell what land was added during these years.

4. Use the map on page 193 as you answer these questions about the War Between the States. What states formed the Confederacy? Which of the slave-owning states, called the “border” states, stayed with the Union?

**Interesting Things to Do**

1. Divide the class into groups. Let each group take one part of this unit and prepare to present it to the class in one of these ways:
   (a) Tell the story through the use of maps.
   (b) Pretend that you are living during the period about which your group is telling. Write a story about one of the events.
   (c) In the library find books about the events in this unit. Tell the class about the book you liked best.

2. Plan tableaux (tāb'əlōz) to tell the story of this unit. A tableau is a kind of living picture in which persons group themselves to resemble a famous scene or a well-known painting. The persons remain silent and motionless while the audience guesses the scene they are representing. Find as many famous paintings as you can. “The Signing of the Constitution,” “Washington Crossing the Delaware,” and “The Spirit of ’76” are a few of the pictures you could use. Your teacher will help you stage the tableaux.

3. “Yankee Doodle” was sung during the Revolution. “The Star-Spangled Banner” was written during the War of 1812. With the help of your music teacher, find and learn other songs which were sung during these and other periods discussed in this unit.

4. In the library find and read the poem “Paul Revere’s Ride.” Try to find other poems about the history of our country.

5. Homes of some of the famous men in our history are still standing. Find pictures of them to show to the class.

**Things to Think About**

1. The battle of New Orleans was fought more than two weeks after the peace treaty of the War of 1812 was signed. How did this happen? Would it be likely to happen today?

2. When the War Between the States ended, President Lincoln urged that the nation’s quarrel should be forgotten and that the Southern states should not be punished. What would have happened, do you think, if Lincoln had not been killed?

**Using a Time-line**

Make a time-line for the events in Unit 5.

**Matching Causes and Results**

Each of the events listed in the first column was the cause of an event in the second column. Match the causes and the results.

**Causes**

Cornwallis surrendered at Yorktown.
American sailors were seized and made to serve in the British navy.
The Articles of Confederation proved to be a weak form of government.
Lee met Grant at Appomattox.
The British won the French and Indian War.
The British government taxed the colonists without consent.
France sold Louisiana to the United States.
Fort Sumter was fired upon.

**Results**

A convention met to write the Constitution.
The American colonists declared their independence.
The War for Independence ended.
The War Between the States began.
Great Britain gained control of most of North America east of the Mississippi.
The War Between the States ended.
The land between the Mississippi and the Rockies was added to the United States.
The War of 1812 began.
Before the War Between the States, as you know, the Southeast was a land of farms. Most planters specialized in a single crop—tobacco, rice, indigo, or cotton. Eli Whitney’s cotton gin made cotton the best-paying crop. Cotton became “king.” Negro slaves did most of the work in the cotton fields.

After the War Between the States life in the South changed. There were no slaves to do the heavy labor. Planters could no longer afford to farm large areas of land. They had to hire freedmen and poor white men and pay them wages. The large plantations were broken up into smaller farms. Still farmers in the Southeast specialized in a single money crop, chiefly cotton.

The Southeastern states made up the greater part of the Confederacy, or the South, in the War Between the States. Their ports were blockaded and they could not get manufactured goods from Great Britain and Europe.
Making a Living in the Southeast

But the South has coal and iron ore in the southern Appalachians. “We have coal for fuel,” the people in the South said after the war. “Let us build factories and do our own manufacturing.” So cotton and other textile mills, tobacco factories, and iron and steel mills were built. When the South turned to industry, it began to recover from the effects of the War Between the States.

Today more and more people in the South work in factories. Industries of all kinds are found in our Southeast. This section is becoming important for the many kinds of manufactured goods it produces.

The increasing factories need fuel and raw materials. Farms, forests, mines, and quarries are close by. Thousands of people work at mining, lumbering, quarrying, and fishing.

The Southeast is still chiefly a farming region. Many planters have turned to mixed farming. Several years of little or no profit taught these farmers not to depend on a single crop. Much cotton is still grown in the Southeast. But corn is raised in many parts of this area. Dairying, truck farming, and the raising of livestock also increase the income of farmers in the Southeast. Today the Southeast supplies the Northeast with fruits and vegetables in winter. A new and better South has been built on the ruins of the old South.

As you read this unit, you will learn the answers to the following questions:

1. What crops do the farmers of the Southeast raise?
2. Which fish are caught in the waters of the Southeast?
3. How do the forests help people in the Southeast earn a living?
4. What are the Southeast’s chief minerals?
5. What are the leading Southeastern cities?
6. What is TVA?
FARMING IN THE SOUTHEAST

As you know, most of the Southeast is on the Atlantic Coastal Plain (see the map on page 11). Only a small area is too rugged for farming.

The climate too is favorable for farming. The map on page 36 shows the amount of rainfall our Southeast gets. Its surface and climate make it possible to grow many different crops in the Southeast. But cotton is one of the chief money crops of this region.

Life in the Cotton Belt

Cotton needs a very special climate. It must have a growing season of at least two hundred days. The growing season is the part of the year during which plants can be grown outdoors. Cotton needs between twenty and sixty inches of rainfall. Too much rain causes the plants to rot. Too little makes them wither and die. Rain must come in spring and early summer. Rain in late summer or early fall mildews or rots the fiber. It also makes it hard to pick the cotton. This special climate is found in the area known as the Cotton Belt.

The map on page 202 shows the location of the Cotton Belt. Which states does it include? The coastal lowlands of the Southeast are not suited to growing cotton because of too much rain.

Sharecroppers and tenant farmers

For many years before the War Between the States planters had no labor problem. If their plantations grew, they bought more slaves. After the war there were no slaves. There were also few workers to hire. Even if there had been, the planters had no money to pay them. How were planters to run their plantations?

Some clever planter found a way. He divided his land. He kept part for himself, and fenced the rest off into small farms of twenty-five to forty acres each. He then rented the small plots to freed Negroes and white men who needed work. Neither the freedmen nor the white men had money for rent, mules, plows, seeds, or food. The planter gave each a cabin, a mule, crude farming tools, and food. In return, the men worked on his land as well as their own. After the harvest each gave the landlord part of the crops he had raised. Farmers who shared their crops with the owner of the land came to be known as sharecroppers. Soon most of the cotton plantations were worked by sharecroppers.

A planter often also had tenant farmers on his land. Tenant farmers received small plots to work. But they owned their tools and work animals. They paid their rent either with crops or money.

Sharecroppers and tenant farmers could never own the land they worked. They used poor methods of farming. They did not fertilize the soil. Neither did they change the crops they planted year after year. Each year they planted the same crops on the same land, and the land became more worn out. The farmers became poorer.

This system of farming is slowly ending. Small farmers are beginning to own the land they work. Instead of raising the same crops on the same land year after year, they are beginning to use crop rotation. That is, after two or three years they plant a different crop on a field. Some crops, like cotton, rob the soil, but crop rotation helps to build it up. Modern machinery and fertilizer bring richer harvests. In spite of this, much of the cotton grown in our Southeast is raised by sharecroppers and tenant farmers. The Cotton Belt still produces more cotton than any other region in the world.

From planting to picking

Much of the Southeast is near the tropics (see the map on page 11). We speak of land near the tropics as sub-tropical lands. In the
The Southeastern states raise many crops. List all the crops that you can find on this map. Which products are used or eaten just as they are grown? Which are used in manufactures?

Sub-tropical part of the Cotton Belt planting begins as early as February. Farther north it is March or April before danger from frost has passed. Plows drawn by mules or horses are used on small farms. Plows drawn by tractors turn the soil on large plantations. After the soil has been broken up, seeds are sown either by hand or machinery. Many seeds are sown close together so that enough will take root.

The spaces between the rows of plants are kept clean by chopping. Chopping begins when the plants are about two or three weeks old. In small farms a man does the chopping with a hoe. He moves up and down between the rows thinning out plants, loosening the soil, and killing the weeds. Machines do the chopping on large farms. Flame throwers like those used in the Second World War are sometimes used to clear the weeds off the ground.

Eight or ten weeks after the seeds are planted, the Cotton Belt is a sea of blossoms. The blossoms are white, then pink, and then red. The blossoms fall off in a few days. Small seed pods called cotton bolls form in
their places. All during June, July, and August the plants grow and the bolls develop. Then the bolls slowly turn brown and begin to burst.

Late in summer the cotton bolls begin to burst open, showing white, fluffy fibers. These fibers are strong enough to be spun into thread. Many small brown seeds are hidden among the white fibers. But the cotton field looks like a low forest covered with patches of snow.

The fibers must be picked as soon as they are ripe, so picking begins when the first bolls open. Otherwise the cotton changes color and brings a lower price. All the bolls do not ripen and open at the same time. Picking sometimes continues through fall and into winter. Farmers in some parts of the South pick cotton as late as Christmas.

Within recent years cotton-picking machinery has been invented. But only the wealthiest planters can afford it. Some planters do not like to use these machines because they leave small twigs or leaves in the fiber. But the machines are being improved. One of the newest has headlights and can be used at night. When these machines are perfected, they will take the place of cotton pickers. Meanwhile men, women, and children work up and down the rows filling their sacks with the snowy fibers.

Preparing cotton for market

A short distance from most plantations is a large building called the cotton gin. “Cotton gin” means both the machine and the building where the machine separates the fiber from the seed. Whitney’s gin was run by a hand crank. Modern gins are huge machines run by steam engines or by electricity.

At the gin the cotton is weighed. The fiber is then sucked through a pipe into the gin inside the building. This machine separates the fiber from the seeds. Another presses it into bales, wraps the bales in heavy cloth, and binds them with steel bands.

The bales weigh about five hundred pounds each. They are too large for shipping. So they are taken to a third machine which presses the cotton together. This makes the bales much smaller. They are then stored in warehouses in Memphis, Tennessee, and other cotton markets.

Memphis, on the Mississippi River, is the greatest inland cotton market in our country. Agents for factories and mills in our country and other countries come to Memphis to buy cotton. Can you tell why? Much raw cotton is also shipped from the large coast cities of Georgia, Alabama, South Carolina, and Florida. Name the principal ports that
In the picture above, the harrow breaks up the lumps of earth between the rows of cotton.

After the seeds have been taken out, the cotton is formed into thick, loose strands.

This machine picks the cotton and pushes it through the round tube into the wire basket.

More work makes the thick strands finer and thinner. Finally the cotton becomes thread.
ship cotton. Today much of the cotton is sold to textile mills right in the South.

Other uses of the cotton plant

Ages ago people learned to use cotton fibers to make cloth. But they had no use for the seeds. Great piles of seeds were burned or destroyed in other ways. Today many useful products are made from cotton seeds.

First the thin, tough hull, or skin, is removed. Next the seeds are put into presses which squeeze out the oil. Cotton-seed oil is used in cooking as a salad oil and in making soap and margarine. Margarine is used in place of butter. Look carefully at the labels on these products to see if they contain cotton-seed oil. What is left of the seeds after the oil has been removed is known as cotton-seed cake. Cotton-seed cake mixed with the hulls makes good feed for cattle. Ground into meal it makes a fine, cheap fertilizer.

Short cotton fibers stick to the seeds. These fibers, which are too short to make good cotton cloth, are used in making rayon. Rayon is cloth that looks and feels like silk. The stalks of the cotton plant are used in making paper. So you see that every part of the cotton plant is used today.

As more uses were found for the different parts of the plant, planters grew as much cotton as possible. When prices were high, planters could afford fine houses, automobiles, rich clothing, and travel. When cotton prices dropped, many farmers had to borrow money even to buy seed. Yet they went right on depending on cotton for their crop. “Prices for cotton are sure to be much higher this coming year,” they would say. Sometimes they were right. Often they were not.

Cotton pests

More than fifty years ago the boll weevil began to destroy cotton crops. The boll weevil is an insect which lays its eggs in the bud of the young cotton plant. Little worms hatch from the eggs, feed on the bolls, and destroy them.

Another pest, the pink boll worm, also attacked the cotton boll. It caused as much damage as the weevil did. Farmers learned to control these pests by dusting the plants with a poisonous powder.

Then the United States lost its cotton market. Before 1914, when the First World War began, we sold more cotton than any other country in the world. During the war our South could not supply all that was needed for war materials. People in other warm lands began to grow cotton. So long as the war lasted, cotton raised in other countries as well as our own was needed. But in time of peace the world could not use so much cotton.

In the past the United States has had plenty of rich land. For this reason many
farmers did not take the trouble to fertilize their land and to rotate crops. They did not learn how to get the most from the land. This is one of the reasons why it costs the farmers of our South more to grow cotton than it costs in many other countries. Buyers seek the lowest prices, and Southern planters began to find it hard to market their cotton.

Our government has tried to help the Southern farmers in several ways. Government planes were sent to spray the cotton fields with a poison powder to kill the insect pests. Farm experts taught planters how to cultivate their soil so that each acre would yield more cotton. Planters could then afford to sell their produce more cheaply. But it was still not cheap enough for Southerners to regain their world market.

**Raising tobacco**

The first money crop raised in our country was tobacco. To which colony did it first bring success? Which others became “tobacco colonies”? The damp, hot coastal fields of South Carolina and Georgia were not suited to this plant. The richer, deeper soil and cooler climate of the Piedmont were just right. Here pioneers found the best of our tobacco regions. Later Daniel Boone and his friends found another area which was just right. Where was it? On the map on page 11 find these two regions. Each of them is sometimes called “Tobacco Land.”

Raising tobacco is hard work. The tiny seeds must be started in seedbeds. Each plant is then set out in the field by hand. The growing plants must be carefully tended. With hoe or plow the farmer keeps the weeds down and the spaces between the rows clean. When ripe, the leaves are picked and taken to barns or sheds for curing, or drying, to prepare the leaves for market.

Tobacco curing is usually done in one of two ways. Sometimes the ripe leaves are hung in sheds. These sheds either have walls made of slats or no sides at all. Tobacco dried this way is air-cured. In the Carolinas tobacco is often dried by stoves or furnaces.

As the leaves ripen on the tobacco plants, they are picked and hung up in bunches to dry.

*North Carolina News Bureau*

The dried tobacco is stored in a dry place until it is sold and shipped out to factories.

*Winston-Salem Chamber of Commerce*
Tobacco treated this way is heat-cured. A third and less popular way to cure tobacco is placing it on racks to dry in the sun. Cured tobacco is taken to market towns and sold at auction to buyers from tobacco factories.

North Carolina and Virginia are the chief tobacco lands in our country. North Carolina’s farms produce more raw tobacco, its factories more cigarettes, cigars, and other tobacco products than those of any other state. Winston-Salem and Durham have grown into cities because of their tobacco markets and large cigarette factories. Raleigh, the capital of North Carolina, is a tobacco center. Richmond, the capital of Virginia, is a great tobacco market and manufacturing center.

The second of our tobacco lands is that of Kentucky and northern Tennessee. Kentucky ranks next to North Carolina as a tobacco state. Louisville and Lexington are its great tobacco markets. Louisville is noted for the manufacture of cheaper cigars, cigarettes, and chewing tobacco.

**PRACTICING MIXED FARMING**

In time farmers saw that it was foolish to depend on one crop for their whole living. 

“It is just like putting all our eggs in one basket,” some planters decided. They looked around for other crops to raise.

Southern farmers have begun to change to mixed farming. They have not given up cotton and tobacco. But they also raise grains, fruits, and vegetables for market. They keep livestock and raise feed for *fodder*. Fodder is the name given to the coarse, dry winter foods such as cornstalks fed to farm animals. Southern farmers now have a better chance of earning money. If one of their crops does not bring a good price, another usually will. They also eat a greater variety of food and drink more milk. This has greatly improved the health of the poor farmers of the South.

The crops and animals raised on mixed farms help to build up worn-out soil. Beans and alfalfa put plant food back into the soil. What do cotton, tobacco, and corn do? Animal manure is the best kind of fertilizer. So livestock too help fertilize the soil.

**Special crops of mixed farming**

Even today most Southern farmers raise certain crops as money crops. They may be special plants which will grow nowhere else
in the United States. Such special crops usually bring high prices.

**Legumes and nuts**

Peas and beans, which grow in pods, are called *legumes* (lèg'úmz). Legumes are grown on most mixed farms. An important legume is the *soybean*. The soybean was brought here from China. Many uses have been found for soybeans. They are useful in industry. They are also ground into flour and used in cakes and bread. Soybean oil, which dries slowly, is used in making paints, varnishes, and plastics.

Peanuts are also called legumes. The peanut pods grow and ripen underground. The first peanuts were brought to our shores from Africa by the Negro slaves. The low, sandy Coastal Plain of southeastern Virginia and of North Carolina proved good for growing peanuts. Alabama and Georgia also raise large crops of peanuts.

The American teacher George Washington Carver, working with peanuts, found more than one hundred uses for these legumes. Dr. Carver’s work with peanuts and some other southern plants was considered one of his greatest gifts to the South. Among other things he made foods similar to coffee, milk, and cheese from them. Many Southern farmers now raise peanuts as a money crop. Thousands of people work in factories in the South preparing peanuts for market.

Pecans and tung nuts are the most unusual nuts raised in the South. Pecans were probably brought to North America by the Spaniards. The tall pecan tree grows wild along the Gulf Coast. It is cultivated in only a few of the Southern states. The nut has a thin shell which makes it easy to get the meat out. Farmers of the South ship bags of pecans to all parts of our country. They sell pecans and candies made with them to tourists from roadside stands.

The tung tree, a native of China, was brought to the United States because we needed *tung oil*. This oil is pressed from the seeds found in the tung nuts. It is used in the manufacture of paints, varnishes, and plastics. Large groves of tung trees in Mississippi and Florida supply most of the tung oil American manufacturers use.
Oranges, one of Florida’s important crops, usually grow in bunches. Flowers and fruit often appear at the same time on the tree.

Fruits and other special crops

Many kinds of fruits grow in the orchards of the Southeast. Fine peaches are raised in Georgia, in the Great Valley of Maryland and Virginia, and on the lower slopes of the mountains of West Virginia. The Great Valley in Virginia is famous for its apples. South Carolina produces fine watermelons and peaches.

Few parts of our country are suited to growing oranges, grapefruit, lemons, and limes. These citrus fruits need fertile soil which is not too wet and a tropical or subtropical climate. They grow well in some parts of Florida, southern Alabama, and southern Mississippi. (See the products map on page 201.) Florida produces one third of the oranges and two thirds of the grapefruit raised in our country.

The owner of a citrus grove is never free from worry until the fruit is ripe. A frost can ruin his crop. Lemons and limes are most easily damaged. A frost known as the “Big Freeze” of 1894 and 1895 destroyed the entire Florida citrus crop.

Tallahassee, the capital of Florida, is a trade center for citrus fruit, other fruit, nuts, and lumber. Large packing sheds are located near the citrus groves all through the citrus growing regions. Some of the fruit is washed, sorted, packed in boxes, and shipped to the big cities. Frozen-juice packing plants are also located near citrus groves. Canning grapefruit and orange juice is an important industry in Florida.

Other special crops of the South are sweet potatoes, sugar cane, and hemp. Sweet potatoes became more important when Dr. Carver began to experiment with them. He found he could make bread, starch, glue, candy, plastics, rubber, and other things from sweet potatoes. Many farmers in Mississippi and Alabama make a good living by growing sweet potatoes. The drying of sweet potatoes has become an important industry.

Sugar cane needs a hot, wet climate and fertile soil. That is why so little sugar cane is raised in our country. Find the Everglades on the map on page 11. These swamplands in southern Florida are being drained so that sugar cane may be planted there. Sugar cane promises to become an important product of drained land in the Everglades.

Hemp is an important crop of Kentucky. Strong cord, coarse toweling, and yarn for carpets are made from hemp fiber.

Livestock raising and dairying

Southerners have always raised some livestock for food or other purposes. Today nearly every farm in the South has some pigs. Many farmers also raise dairy and beef cattle, mules, horses, sheep, poultry, and bees for honey.

Dairying is an important industry only in the cooler northern part of the Southeast.
There are many dairy farms east of the Appalachian Highland. The Coastal Plain of Maryland has dairy farms. So have the Piedmont of Maryland and Virginia and the Great Valley. These dairy farms send their products to cities close by. Nashville, the capital of Tennessee, is in the heart of the Nashville Basin. Dairy farmers in this region sell their products in Nashville. The hilly sections of West Virginia supply dairy products to cities close by. Most dairy farms in the Southeast are much smaller than those farther north.

In our Southeast the raising of beef cattle has become an important industry. The only large ranches east of the Mississippi River are found in Florida. Great herds of beef cattle range the pine forests and cowboys "ride the range."

Raising horses was a paying business before the automobile was invented. Today it has lost some of its importance. However, the Bluegrass region of Kentucky is still famous for its fine racing and saddle horses. A trade center in this Bluegrass region is Frankfort, the capital of Kentucky. Fine horses are also raised in Virginia and Tennessee.

The Southeast raises more mules than horses. Mules are smaller, tougher, more sure-footed, and cheaper than horses. They can be used in mines as well as on farms. The finest mules are bought by the army. They haul war supplies up mountain paths too narrow and steep for jeeps and other machines. Memphis, Tennessee, is an important mule market.

Sheep are raised on the hillsides and lowlands for meat and wool. The largest flocks are raised in Kentucky, Tennessee, and West Virginia.

**Truck farming**

Spring comes early to the Atlantic Coastal Plain of Maryland and Virginia. The light, sandy soil warms up quickly. This soil lacks only plant food to make it ideal for truck farming. Farmers of the Coastal Plain use more fertilizer than do those of almost any other region. They have made it one of the most productive vegetable-growing areas in the world. Cabbages, tomatoes, onions, lettuce, sweet corn, potatoes, strawberries, and melons are grown here. They are planted very early in spring on the Coastal Plain. As soon as one crop is picked, the fields are plowed, fertilized, and replanted. Two or three crops can be raised here in one season.

The population map on page 36 shows why it pays these farmers to spend so much to fertilize their lands. Most of their produce is

*Louisville Chamber of Commerce*

Many horses are raised in the Southeast. This is a picture of a Thoroughbred and her colt in the Bluegrass region of Kentucky.
sold in large cities close by. What are some of these cities? At one time, whatever was left went to waste. Today fresh vegetables and fruits can be shipped to distant places in refrigerator cars without spoiling. They can also be preserved, or kept from spoiling, by canning, freezing, and dehydrating (de-hi'drāt-ing). Dehydrating means taking out the water by a special process. When water is added later, the vegetables and fruits taste almost as if they had just been picked.

Maryland is in the heart of this truck-farming region. It is noted for the great number and size of its canneries. Near Annapolis are many dairy farms. Annapolis, the capital of Maryland, is also the home of the United States Naval Academy.

Truck farming is becoming important on the Atlantic Coastal Plain. Refrigeration has made it possible for farmers here to supply Northern markets with vegetables and fruits in winter and early spring. Florida alone supplies us with about one fourth of the fresh vegetables we eat during the winter. Many truck farmers in Florida specialize in growing potatoes. Hundreds of acres are also planted in strawberries. New potatoes sold early in spring and strawberries sold in winter bring high prices.

Southern Mississippi and Alabama share Florida’s winter markets. Kentucky and Tennessee grow strawberries that ripen early enough to find a ready market farther north.

There has been a decided change toward mixed farming in our Southeast. Many new crops and much livestock have been added to those already raised there. But even today most Southern farmers like to specialize in one or two money crops.

**FISHING IN THE SOUTHEAST**

As you know, many people in our Southeast make a living by farming. Others earn their living by fishing. Along the Atlantic Coast and the Gulf Coast the continental shelf is more than one hundred miles wide. Hundreds of kinds of fish come to these warm, shallow waters to feed. About one fourth of our yearly catch of fish comes from these waters. They are shipped in ice to inland cities. Others are frozen, packaged, and shipped. Still others are canned.

**Shellfish**

Shellfish, such as oysters, shrimp, crabs, and clams, form the most valuable part of the catch. Oysters, as you know, grow best in warm, quiet waters. Chesapeake Bay and Delaware Bay are the chief oyster areas on the Atlantic Coast. The greatest oyster areas in the Gulf of Mexico are off the coast of Mississippi. Baltimore, in Maryland, and Biloxi, in Mississippi, are important oyster
packing and shipping cities. Most of the oysters are packed in ice and shipped fresh mainly to cities east of the Rockies. Some oysters are frozen.

Shrimp too like warm waters. Many of these shellfish are caught in the waters of the Gulf of Mexico. Some of the catch is packed in ice and sold fresh, some is canned, and some is frozen. The shrimp in your salad probably comes from a can.

Many clams and crabs come from the shores of Delaware and Chesapeake bays.

**Deep-sea fishing**

Sea trout, flounder, mullet, and red snapper are other food fish caught in these waters. An enormous amount of menhaden (men-ha'd'n) is caught in the Atlantic Ocean and in the Gulf of Mexico. Menhaden are valuable because they are used in making oil and fertilizer. They are not used as food.

Many kinds of game fish live in the waters off both coasts of Florida. People who like to fish for sport come here and to other Gulf ports. Game fish are fighters and are difficult to catch. A man who catches a tarpon or a sail fish has a fine fish tale to tell. He usually brings home a picture to prove that he caught a fish much bigger than he is.

**Sponges**

Sponges are the skeletons of small sea animals. These animals attach themselves to rocks and other material on the ocean floor. They are found in the shallow water off the coast of Florida. Sponge fishermen pull them loose with hooks fastened to long poles or cut them off with knives. The dangerous work of cutting sponges is done by divers. It takes real skill and training. Greek fishermen, who first learned to dive for sponges in the Mediterranean Sea, do much of this work. They have taught their sons and other young Americans to love this exciting kind of fishing. Not long ago Key West was the chief sponge center. Then Tarpon Springs, near Tampa, became the leader in sponge fishing and the preparation of sponges for market.

**LUMBERING IN THE SOUTHEAST**

Before the coming of the colonists, most of the Southeast was a forest. Coastal lands were covered with softwood trees, mostly yellow or Southern pine. Oak, hickory, maple, and other hard woods grew on the cooler uplands. Gum, sycamore, and cottonwood grew along the rivers and in the bottomlands of the Mississippi. Cypress and live oak were found in the swamps. What is now the Cotton Belt was once the largest stretch of forest lands in our country.

The early settlers were pleased with these great forests. Later they cut down many trees to clear places for their settlements. Forest fires caused by careless people also destroyed millions of dollars’ worth of lumber.
Some of these young pine trees will soon be cut down so that the others will have more room to grow. The trees which are cut down will be made into wood pulp. What is wood pulp used for?

Forest conservation

When we began to practice conservation and to plant forests, the Southeast found that it was fortunate indeed. The warm climate and abundant rainfall made it possible to repair some of the damage. New trees grew faster here than in other parts of our country. Today lumber companies cut only full-grown trees. New trees are planted to take their places.

Our government helps in this work. It sets aside large areas as national forests. It hires trained men to help conserve these forests. Rangers patrol the forests watching for fires. Conservation and the fast growth of the new trees have begun to work. Today more than one third of the lumber cut in our country comes from the Southeast.

Cutting lumber

Most lumbering in the Southeast is done on the coastal lowlands. The work is much easier here than in the North. Roads and railroad tracks are run into the forests to the lumber camps. Logs are loaded on flat cars or on motor trucks and carried to the mills.

Because of the mild climate, shouts of “Timber!” echo through the Southern forests both winter and summer. “Timber” is the warning cry given by lumbermen when a tree is about to fall.

The logs are sawed and made into boards in mills close to the lumber camps. Until recent times the boards were sent to the North or to foreign countries to be manufactured. Today wood products are made in the factories of the Southeast. Raw lumber, however, is still one of the Southeast’s leading products.

Uses of lumber

The resin, or gum, of the pine is made into turpentine, tar, and rosin. These products are called naval stores because in colonial days they were used in shipbuilding. Other uses for these products have since been found. Resin is used also in making soap, paper, and linoleum. Tar is used for paving and roofing. Turpentine is used in mixing paints and varnishes. Today most naval stores come from northern Florida, southern Georgia, and Alabama, where there are large pine forests.
The tall, straight pines make good telegraph poles and boards for building purposes. Recently it was found that wood pulp can be made from yellow pine. Wood pulp is wood that has been ground and mixed with water. Wood pulp is used to make paper. Writing paper, newsprint, and other papers are manufactured throughout the South. Newsprint is cheap paper used mostly for newspapers. The wood pulp is used to make rayon.

Cypress trees, which grow in swamps, often have to be cut by men standing in boats. Cypress wood does not decay easily. It is fine for staircases, the woodwork of houses, and for things which must last for a long time. Some of the largest cypress mills in the world have been built in Florida. Can you explain why this is true?

**MINING IN THE SOUTHEAST**

The Southeast has a great supply of natural resources. For more than two hundred years only the farming resources were used fully. In recent times mining has become an important industry of the South.

**Coal fields**

On the map on page 114 you found that a bituminous coal field lies under almost the whole Appalachian Plateau. This is the largest coal field in the world. It extends into Kentucky, West Virginia, Virginia, Tennessee, and Alabama.

Mining is an important occupation in these states. You have already read about shaft and strip mining (see pages 114–116). Both kinds of mining are carried on in the Southeast. West Virginia ranks second only to Pennsylvania in the amount of coal it produces each year.

Many mining towns have grown up in these states. Some of the coal mined is used in factories in Southern cities. Much is shipped north or exported. Whenever possible, coal is shipped most of the way by water. You remember that it is cheaper to ship heavy goods by water than by railroad. Norfolk and Newport News, Virginia’s largest seaports, are the greatest coal-exporting cities in the United States.

**Oil and gas**

The oil and natural gas fields of the Appalachian Plateau also extend into West Virginia and Kentucky. These fields help furnish power and fuel for the chemical and glass factories of West Virginia.

**The Birmingham area**

Do you remember what three minerals are needed in manufacturing steel? See page 118. Large deposits of all three are found close together in northern Alabama. The Great Valley near Birmingham, Alabama, is one of the chief iron-ore areas in our country. You already know that coal is mined in this region. The third mineral, limestone, is found throughout the Great Valley. There is much limestone, especially around Birmingham. Birmingham has become the greatest iron-and-steel center in the South. It is known as the “Pittsburgh of the South.”

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Phosphate rock

You know that farmers use a great deal of fertilizer. Much fertilizer is made from phosphate (fōs'fät) rock because worn-out soil often lacks phosphates. Phosphates are minerals which are necessary to the growth of plants and animals.

Large amounts of this rock are found in both Tennessee and Florida. The world’s largest deposits of phosphate rock lie near Tampa Bay in Florida. Here some of the rock is so near the surface that it can be scooped up with steam shovels. Phosphate rock is Florida’s most important mineral product. The making of fertilizer has become one of Florida’s leading industries.

Not all the phosphate rock is made into fertilizer. Some is made into a chemical which puts the “fizz” into soft drinks. Some kinds of baking powder contain phosphate. Some of the rock is sold as raw material after it is crushed, washed, and dried. Many people of Tampa work in the phosphate fields. Others prepare this mineral for market. Still others help to ship the fertilizer out.

Other minerals

A bed of building stone, sixty miles long and several miles wide, lies in the Piedmont of northern Georgia. Pure white and pink marbles are quarried here. They are noted for their beauty and quality. Georgia marble is in great demand for statues and for public buildings. Tennessee, Virginia, and Alabama are also noted for marble. Granite too is quarried throughout most of this region. Granite is used for large buildings, bridges, monuments, curb stones, and paving stones because it is so hard. Because of this we have the expression “hard as granite.”

The soft, black, greasy mineral called graphite, used in making “lead” pencils, lead, zinc, and even a little gold are mined in our Southeastern states. Mining is becoming more important as the section becomes more and more industrialized.
CHIEF CITIES IN THE SOUTHEAST

The Southeast has everything necessary for industry close at hand. Railroads and navigable rivers connect manufacturing centers with their sources of supply and their markets.

As mills and factories were built, small towns grew up around them. At first they manufactured just one kind of article. This depended on the raw materials of the neighboring region. Even today many Southern towns specialize in the manufacture of only a few things. These might be tobacco products, cotton goods, or wooden articles. But industrial centers, like farms, are beginning to produce a greater variety of products.

The cities of this section are smaller than those of the Northeast. Most of them are centers of commerce and shipping as well as industrial centers.

Coast cities

You remember that in early colonial times cities and towns were built along the Atlantic Coast. Can you tell why? Many of the towns started in colonial times are the important cities of today.

Baltimore, Maryland, on Chesapeake Bay, early became a commercial center. Today it is the largest city in the Southeastern states and the seventh largest in our country. Baltimore is a commercial center because of its location, its fine harbor, and many railroads. But manufacturing is the chief reason for its rapid growth.

In the Southeast, Baltimore ranks next to Birmingham in the making of iron and steel. Baltimore's factory products range from heavy machinery, airplanes, and railroad cars to tobacco products, cotton goods, and wooden articles.

The port of Baltimore is one of the busiest on the Atlantic Coast. This picture shows railroad cars bringing many products to the piers, where they will be shipped to all parts of the world.

Baltimore Association of Commerce
Many ships are built in this yard at Newport News, Virginia. When completed, this ship will be raised and floated in the harbor.

Through dainty cotton goods to tin cans. Baltimore manufactures millions of cans. Why does it can and preserve so much fruit, vegetables, and sea food? The people of this city also build ships, refine sugar and oil, and process meat. Almost every industry you can think of is found in Baltimore.

The map on page 11 shows that Chesapeake Bay is connected with the Atlantic Ocean by a narrow neck of water called Hampton Roads. This is one of the busiest waterways in our country. Norfolk and Newport News in Virginia on Hampton Roads form the most important shipbuilding center in the United States. Warships, passenger and merchant ships, freighters and fishing boats are made and launched here. Norfolk also has one of the largest naval bases in the world.

Charleston, South Carolina, and Savannah, Georgia, are cities with a long history. Today they are shipping and manufacturing cities. Both produce cotton textiles, wood pulp, other wood products, and fertilizer. Charleston exports the products of North and South Carolina. Among Savannah's important exports are naval stores, which include tar, pitch, and turpentine. Can you tell why?

Jacksonville and Tampa, in Florida, are manufacturing and commercial centers. Jacksonville, on the Atlantic Coast, manufactures articles of wood, naval stores, and about a tenth of the cigars smoked in our country. Tampa, on the Gulf Coast, ranks first in the manufacture of Havana cigars. Why is preparing sponges for market another of Tampa's important industries?

Mobile, on Mobile Bay, has one of the finest harbors on the Gulf Coast. Rivers and railways connect this gulf port with inland cities so it has become a point of distribution. Ships from Latin America bring bananas and coffee. They carry away raw materials and manufactured goods. Mobile's own sawmills, cotton mills, fertilizer and aluminum plants produce much of its exports. What comes to Mobile from Birmingham for shipment to other ports?

Appalachian cities

Birmingham, Alabama, and Atlanta, Georgia, are the chief manufacturing and commercial centers of this area. How does Birmingham rank as a manufacturing city? Atlanta, the capital of Georgia, is the greatest railroad center in the South. How has this helped make it a manufacturing and commercial city? Why does Atlanta make iron and steel goods, cotton goods, wood products, and fertilizer? Atlanta also manufactures brick and tile from the fine clays of Georgia. Atlanta is more than one thousand feet above sea level.
Can you tell how its location has helped the city grow?

Chattanooga and Knoxville, in eastern Tennessee, manufacture heavy machinery, stoves, and smaller articles of iron and steel. Look at the map on page 201 to see where they get their iron and steel for manufacturing. These cities also produce cotton goods and wood products. Knoxville’s knitting mills turn out large quantities of stockings and cotton underwear. A few miles north of Knoxville are huge rayon mills. Chattanooga, close to the limestone and clay of the Great Valley, makes cement, brick, and tile.

Wheeling, West Virginia, and Charleston, the capital of West Virginia, are railroad centers and river ports. They are on the Appalachian Plateau where coal and oil are found. Among their manufactures are iron and steel, petroleum products, glass, bricks, and cement.

**Piedmont cities**

Many of the industrial cities of the Piedmont are old market towns. They turned to manufacturing because they had water power and ready workers from worn-out farms. Also they were close to raw materials. Piedmont cities in the Southeast are important for manufacturing cotton textiles, cigarettes, furniture, and other wood products.

You know that Richmond, Virginia, is one of the oldest of Southern manufacturing cities. Ocean steamers of average size can go up the James River to Richmond. Why has this seaport become a market and manufacturing center for tobacco? Cigarette making is Richmond’s most important industry. Richmond also manufactures locomotives, cotton goods, rayon, paper, and cellophane.

You also read that Winston-Salem and Durham in North Carolina are leaders in the tobacco industry. Winston-Salem leads the world in tobacco products. It makes about two thirds of the cigarettes produced in the United States. Most of Durham’s inhabitants earn a living manufacturing, packing, or shipping tobacco products. Greensboro, North Carolina, also started as a tobacco manufacturing town. Today the largest denim factory in the world is located in Greensboro. Denim is a cotton material used mostly for work clothes. All these cities make textiles and knitted goods. Why?

Charlotte, the largest city in North Carolina, is the center of a group of industrial

*North Carolina News Bureau*

These men are putting springs in sofas which they are building in a furniture factory in North Carolina. Furniture for every room of the home is made in the factories of the Southeast. Can you tell why the Southeast has many such factories?
Memphis, Tennessee, on the Mississippi River is both an important factory city and a great river port.

A. Devaney

towns. Each grew up around a cotton or rayon plant. These cities specialize in cotton textiles, rayon cloth, and knitted goods. Columbia, the capital of South Carolina, manufactures textiles, fertilizer, and cotton-seed oil.

High Point, North Carolina, was the first Southern city to manufacture furniture. It is still the leader in an industry which is a growing one in the Piedmont. Some Piedmont furniture companies own the forests from which their lumber comes. These companies do everything from logging to shipping the finished products.

River cities

Louisville, Kentucky, and Memphis, Tennessee, are important river ports which were market centers in colonial days. Now they are industrial and commercial centers. Louisville, on the Ohio River, very early became a market for the products of its neighboring regions. What raw materials do the surrounding areas produce? Louisville soon began to manufacture tobacco products (see pages 201 and 206). Veneers and furniture, paints and varnishes, shoes, flour, brick, and tile are made here. Louisville is also famous for its fine horses and the horse races which are held there each year.

Memphis, Tennessee, is one of the largest cities on the Mississippi River. It began as a shipping port for cotton from the near-by farms. It also shipped lumber from the surrounding bottom lands. Memphis is still an important cotton and lumber market. But it has many factories too. Cotton goods, cotton-seed products, furniture, and other wood products are made in its factories.

Also located on rivers are Jackson, the capital of Mississippi, and Montgomery, the capital of Alabama. They are manufacturing and trade centers. Jackson’s chief product is cotton-seed oil. Montgomery manufactures lumber products and handles much livestock and cotton.

The South is making great progress in industry. Southerners spin and weave Southern cotton. Southern workers make furniture from their lumber, and rayon and paper from their cotton and wood pulp. They manufacture iron, steel, and machinery from their iron ore. They make fertilizer from phosphate rock for Southern farms. People of the Southeast are now making better use of their natural resources. They are conserving their forests and their soil. In this work of conservation our Federal Government is lending a helping hand.
TVA—A TEST OF CONSERVATION

The Tennessee Valley, as the map on page 220 shows, is the land drained by the Tennessee River and its tributaries. Daniel Boone and James Robertson called this region a "promised land." It had fertile soil, forests, minerals, and water power. But poor methods of farming robbed the soil of plant food. Much of the forest was destroyed, so heavy rains caused floods which carried off the top soil. The once fertile fields became barren. They were cut by wide gullies, or ditches. This washing away of the soil is known as soil erosion.

As the years passed, this valley produced less and less. The inhabitants became poorer and poorer. At last our government sent scientists to see what could be done. They reported that the valley could be rebuilt so that the people could earn a good living.

In 1933 the government set up an organization known as the Tennessee Valley Authority, usually shortened to TVA. The TVA made its headquarters in Knoxville, Tennessee, to begin its work. TVA planned ways to prevent floods, stop soil erosion, and make better use of the natural resources.

Dams and reservoirs

The work was started by building dams. A dam is a wall or bank built across a stream of water to stop its flow. There are to be twenty-one dams along the Tennessee River when the project is completed. Wilson Dam at Muscle Shoals in Alabama was built before this experiment really began.

These dams hold back the waters so that the rivers do not get too full and cause floods. Reservoirs (rēz'ēr-vôr') are formed behind the dams. Water from the reservoirs is allowed to flow into the streams when the rivers are low. This makes the rivers navigable at all times. Great power plants have been built at the foot of each dam. These plants generate, or make, electricity. This electricity can be used in factories, towns, and farms for two hundred and fifty miles around.

The Wilson Dam, on the Tennessee River in northeastern Alabama, is part of the Tennessee Valley Authority (see map, page 220). Wilson Dam was named for President Woodrow Wilson.
The Tennessee Valley Authority was set up by Congress in 1933. The authority, or agency, was given the right to build dams and powerhouses to make electricity and to build power lines on the Tennessee River. In addition to supplying electric power, the dam has also provided flood control and improved navigation. Study the map, and name the states which are in the Tennessee Valley Authority. What cities are in this region? What crops are raised here?

Trees are being planted on the bare slopes. This is to help check soil erosion and prevent floods. Farmers, trained in farming colleges, are running special farms. They show farmers in this region the best way to plow, to fertilize their land, and to rotate crops.

TVA is trying to improve farming methods in the Tennessee Valley. It also plans to bring industry to the valley. Factories and factory towns are growing up throughout the farming sections. A farm family could have some of its members in a factory every day. These factory workers would still have time to help on the farm. Why is this a good arrangement? The valley itself supplies much of the raw materials for manufacturing. How is power provided? Which cities are near TVA dams? Why are these cities manufacturing and trade centers? They manufacture fertilizer, textiles, machinery, and many other things.

During World War II the factories in the Tennessee Valley turned out huge quantities of war materials. In a plant at Oak Ridge, Tennessee, much of the work on the atomic bomb was carried on. Today scientists at Oak Ridge are trying to find ways of using atomic energy in peacetime.

Near Aiken, South Carolina, a new type of atomic plant is being completed. The Clark's Hill Dam, located on the Savannah River near Augusta, Georgia, will supply electric power as does TVA. The results of the TVA project have brought about the further development of water power in other states of the Southeast.

**Results of the experiment**

Has the TVA been a success? Opinions differ, and only time will answer that question. It has given the valley electricity, factories, better farming methods, and better transportation. The TVA has changed the lives of people throughout the South. If TVA is judged a success, this plan may be used to help other worn-out regions in our country.
TO HELP YOU LEARN

Words and Terms You Should Know

- fodder
- wood pulp
- citrus fruit
- soil erosion

- hemp
- tung oil
- dehydrate
- tenant farmer

- rayon
- legumes
- newsprint
- naval stores

- veneer
- soybean
- reservoir
- sharecropper

- phosphate rock
- crop rotation
- sub-tropical land

A Matching Game

Number a sheet of paper from 1 through 19. After each number write the word or term from the list above which matches the definition.

1. Coarse, dry food such as corn stalks which is used as feed for cattle, horses, and sheep
2. The washing away of soil by heavy rains or floods
3. A place, like a lake or a large tank, where water is stored for use
4. Removing, or taking out, water by a special method
5. Wood that has been ground up and soaked in water
6. A person who works another's farm for part of the produce
7. A way of building up the soil by planting different crops on the same land every two or three years
8. A farmer who works a farm for which he pays rent in cash or produce
9. A plant whose fiber is used in making strong cord, rough toweling, and yarn for carpets
10. A mineral from which fertilizer is made
11. Vegetables, like peas and beans, which grow in pods
12. Oil made from the nuts of a tree first brought here from China
13. A kind of bean first brought to this country from China
14. Products from the pine tree which are used in shipbuilding
15. Cheap paper, usually made from wood pulp, and used for newspapers
16. A cloth that looks and feels like silk
17. Land which lies near the tropics
18. Oranges, lemons, and grapefruit
19. Wood shaved into thin layers used in making fruit baskets, boxes, and barrels

Can You Answer These?

1. Why is agriculture the chief occupation of the people of the Southeast? Give at least three reasons.
2. What three things make the Cotton Belt the right region for growing cotton? How long a growing season does cotton need? How much rainfall? When should the rains come? When are rains harmful to the cotton?
3. How is cotton cultivated? Describe some of the newest machines and methods used. What are some of the uses for cotton? Name some products made from cotton seeds.
4. What are some enemies of the cotton plant? How are planters fighting them? How is the government helping?
5. What other important money crops do Southerners raise? Where is each raised? How have climate, soil, and rainfall helped the farmers to decide which money crops to raise?
6. What caused Southern farmers to turn to mixed farming? What are some of their important products? Which are not grown on the farms of the Northeastern states?
7. Where is dairying an important industry? Why are these dairy farms smaller than those farther north?
8. Where is the great truck-farming region of the Southeast? Why do the truck farmers in this region use so much fertilizer?
9. Why can some states of the Southeast supply Northern markets with fruits and vegetables in winter? Name these states and tell in what they specialize.
10. How does the continental shelf help make fishing important in the Southeast? What shellfish are caught in the bays and inlets along the coast?
11. How are shellfish prepared for market?
12. What city on the Atlantic Coast is noted for
preparing shellfish for market? What city on the Gulf of Mexico?
13. What other kinds of fish are caught in the waters of the Southeast? Where is each kind caught?
14. What lumber do the Southern forests yield? For what are the different kinds used?
15. What are some important lumber shipping ports? What cities are becoming important centers for making furniture? Why?
16. What other products are being made from lumber? What kind of mills are bringing work to thousands of Southerners?
17. The Southeast was almost entirely covered by forests when the colonists arrived. Today it is necessary to protect the forests of this area. Why?
18. What different minerals are found in the Southeast? Where?
19. What mineral found in the Southeast is of great help to farmers? Where is it found? How is it used?
20. Why has the Birmingham area become the greatest industrial area of the South? What are some of the products of this area? How are goods manufactured here shipped?
21. Name the most important cities of the Southeast. For what is each important?
22. What is the Tennessee Valley Authority? Why did our government undertake this experiment?

Can You Match These?
On a sheet of paper arrange these words in two lists. Put the names of states in one list. Put the capitals in the other.

West Virginia       South Carolina       Annapolis
Florida             Tennessee           Atlanta
Alabama             Virginia            Charleston
Georgia             Nashville          Columbia
Kentucky            Raleigh            Frankfort
Maryland            Richmond          Jackson
North Carolina      Tallahassee        Montgomery
Mississippi

Using Maps
1. Turn to the map on page 11. Using the key, locate the natural regions of the Southeast. How large a part of this section is lowland? What work would you expect most of the people in this region to do? Where are the plateaus found? Name the most important plateau. What work would you expect the people who live on this plateau to do? Where are the highlands found? Where is the highest peak? What is its name? How can people in highland regions make a living?
2. On the map on page 11 examine the coast line. Point out the bays, inlets, and peninsulas. Find some places which you think would be good harbors and tell why. Have cities grown up at these places? Name some of the important ports.
3. Turn to the map on pages 250–251. Find the lines, called parallels, which mark latitude, or distance from the equator. Through how many degrees of latitude does the Southeast extend? Find the line which marks the northern border of the tropics. What is this line called? Does any part of the Southeast lie in the tropics? What effect does the latitude have on the life and work of the people in this section?
4. Study the products map on page 201. Make a list of the industries of this region.
5. Now look at the map on page 202. Which states grow the most cotton? Why is this part of our country suited to growing cotton?
6. Turn to the rainfall map on page 36 to find out how much rainfall the Cotton Belt gets.
7. On the map, page 36, find the forest areas of the Southeast. Now find these areas on the map on page 11, and locate the cities which are lumber markets or which use lumber in manufacturing. What does each make?
8. On the map on page 114 find into what Southeastern states the large bituminous coal field extends. What other important mineral is found in the Southeast? The products map on page 201 will help you answer this. Where is this mineral found, and for what is it used?
9. Use the map on page 11 to locate the important cities of this section as you read about them. Be able to tell some important facts about the largest of them. How does your map show which cities are large and which small? How are capitals marked?
10. Look at the map of TVA on page 220. What river flows through this area? What states are affected by this experiment? Locate
some of the important dams, and tell for what they are used.

11. Look at the population map on page 36. Find areas of dense population in the Southeast. After reading this unit, you should be able to explain why so many people live in these parts of the Southeast.

**Interesting Things to Do**

1. You might like to make a classroom movie which tells the story of cotton. To do this, you need a roll of narrow shelf paper. On the paper draw pictures one under the other beginning with the planting of cotton seed and ending with pictures of finished goods made from cotton. Write short captions under the pictures. When you have fastened each end of the paper to a short stick, you will be ready to show your movie to the class.

2. Tell the story of tobacco also in the form of a classroom movie.

3. Below is a list of special products of southern farms. We connect certain of these products with certain states. Copy the list. Then write the name of the state or states with which you connect each product.

<table>
<thead>
<tr>
<th>sweet potatoes</th>
<th>watermelons</th>
<th>cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td>citrus fruits</td>
<td>peanuts</td>
<td>horses</td>
</tr>
<tr>
<td>dairy products</td>
<td>peaches</td>
<td>mules</td>
</tr>
<tr>
<td>beef cattle</td>
<td>tobacco</td>
<td>sheep</td>
</tr>
<tr>
<td>sugar cane</td>
<td>apples</td>
<td>hemp</td>
</tr>
<tr>
<td>shellfish</td>
<td>sponges</td>
<td>corn</td>
</tr>
<tr>
<td>naval stores</td>
<td>lumber</td>
<td>coal</td>
</tr>
</tbody>
</table>

4. Divide your class into groups. Let each group, or committee, choose one of these topics: (a) agriculture, (b) fishing, (c) lumbering, (d) manufacturing, (e) TVA. Prepare reports to give to the class. Collect pictures, and bring in exhibits to make your talk as interesting as you can.

5. Make a set of map slides to tell the story of living in the Southeast. You can make a population map, a rainfall map, a products map, a natural resource map, and others. You can trace the maps from this and from other books.

6. Read the story of George Washington Carver, and be ready to tell it to the class.

7. Many historical buildings are still standing in the Southeast. See how many pictures of these you can find. Add them to your scrapbook.

8. Find a road map of the Southeast at a gasoline station or at the Automobile Club if there is one in your town. Locate some of the places about which you read in this unit. Choose the place you would most like to see, and show how you would travel to reach it. Give some reasons why you wish to visit this place.

9. You might like to play a game called “Where Would You Go?” One pupil asks, “Where would you go if you wanted to see a citrus grove?”, or “Where would you go to see sponge fishing?”, or “Where would you go to see cypress trees?” The pupil who is first to answer the question correctly asks the next question.

10. Make a large mural showing “The Southeast at Work.” Plan it with your art teacher and your social-studies teacher, and carry it out under their directions.

**Making a Chart**

Make a chart telling some important facts about the Southeastern states. List the states alphabetically. The information for the first state has been filled in for you.

<table>
<thead>
<tr>
<th>State</th>
<th>Capital</th>
<th>Largest City</th>
<th>Important Products and Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Montgomery</td>
<td>Birmingham</td>
<td>Cotton, peanuts, citrus fruits, vegetables, naval stores, iron and steel manufacturing, quarrying, lumbering, coal mining</td>
</tr>
<tr>
<td>Population</td>
<td>106,525</td>
<td>Population</td>
<td></td>
</tr>
</tbody>
</table>

223
Long before white men came to America, Indians lived in the northern part of our great central plain. They roamed over its grassy lands. They held their councils in the shelter of its forests.

This broad plain stretched for over a thousand miles from the Appalachian Highland to the Rocky Mountains. Its soil was deep and fertile. Through it flowed rivers and streams which we still call by their Indian names. Here was the mighty Mississippi River with its branches. Here too were five great lakes like huge inland seas.

Great forests of oak, hickory, elm, and maple covered most of the land between the Appalachians and the Mississippi River. Farther north were other fine forests of pine, spruce, and hemlock. These forests sheltered many wild animals. In the rivers and streams were many fish.

Trees did not cover all this land. Near the Mississippi the great forests ended and the prairies, or grassy plains, began. The tall grass waving in the wind seemed endless.
The North Central States

These plains stretched westward to the Rocky Mountains. Close to the Rockies the land became higher and higher. Here the grass grew shorter, for it was drier land.

Large herds of buffalo wandered over these great lands, grazing as they went. Some herds were so large it was impossible to count them.

For thousands of years the land was like this. The Indians lived in it, hunted in it, but left it much as they found it.

Today this land is divided into twelve states, called the North Central States. Five of them are east of the Mississippi River: Illinois, Indiana, Ohio, Michigan, and Wisconsin. The other seven, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas are west of the Mississippi. The population map on page 36 shows how densely populated some of these states are.

Some sections of the North Central States are not part of the wide central plain. See the map on page 12. In eastern Ohio the land is part of the Appalachian Plateau. A rough, hilly region extends into Michigan, Wisconsin, and Minnesota from southeastern Canada. This is the southern end of the Laurentian Upland. It is a region of forests, rocks, and lakes. Missouri is part of another natural region. There the rough, hilly land is called the Ozark Highland. Farther west, in southwestern South Dakota, the Black Hills break the stretch of rolling plains. The Black Hills are higher than the Appalachians, but they are not higher than the Rockies.

As you read this unit, you will learn the answers to these questions:

1. What plan of government did the United States set up in the Northwest Territory?
2. How did the United States grow toward the west?
3. What ways of travel were developed to connect lands west of the Appalachians with lands east of these mountains?
4. How do people make their living in the North Central States today?
THE NORTHEAST TERRITORY

The map on page 12 shows us that the North Central States include the Ohio Valley. You will remember that the French and the English fought a war for this region. The French lost this war, and the English gained control of New France as well as of the Ohio Valley (page 159).

During the Revolutionary War George Rogers Clark and his brave men captured the British forts in the Ohio Valley. Because of Clark’s victories, the United States got all the land in the Northwest Territory. This stretched from the Ohio River to the Great Lakes and the Lake of the Woods. Its western boundary was the Mississippi River. (Find the Northwest Territory on the map on this page.)

After the Northwest Territory became a part of the new nation, certain states claimed this land. They claimed that the land west of the Appalachians had been granted to them in their colonial charters.

States, like Maryland, which could claim no western lands were not in favor of these claims. “We are now under one govern-ment,” these states declared. “All western lands should belong to the United States.”

After some discussion the states which claimed these western lands finally agreed that these lands should belong to the United States. Now Congress could make plans for governing and developing them.

PLAN OF GOVERNMENT

The Northwest Territory was the first colony of the United States. In 1787 Congress made a plan of government for it. This plan was so successful that it was used as a pattern when other territories were established.

This plan set up three steps in the government of the territory. It provided that the Northwest Territory should be divided into areas, which would someday become states. At first Congress would govern the territory. A governor and three judges would make the laws and carry them out.

As soon as there were five thousand voters in one of the areas the settlers would be ready for the second step. They would elect their own legislature, or assembly. They would

How did the Northwest Territory get its name? What states were formed from this territory? What important rivers are in the territory to help to make its boundaries? What great cities grew in this region in later times?
In 1788 a group of men, under the leadership of General Rufus Putnam, floated down the Ohio River to the point where the Muskingum flows into the Ohio. There the men founded the settlement of Marietta, Ohio.

then make their own laws and raise money by taxes. They would also send a representative to Congress. But unlike the representatives of the states, he could not vote.

When there were sixty thousand free inhabitants, the area could become a state. The people would write their own constitution. If Congress approved this constitution, the area would become a state. The people could then send representatives to Congress who could vote. The new state would have the same rights and privileges the old states had.

This was the first time in history that a government planned for its colonies in this way. Never before had a nation made a plan which would make it possible for a colony to have the same rights and privileges that the nation itself had.

But the plan also included a bill of rights which guaranteed certain rights of self-government to the settlers. It gave them the right to believe and to worship as they pleased. They also had the right to a fair trial. Slavery was forbidden in the Northwest Territory.

**SETTLING THE NORTHWEST TERRITORY**

Besides making a plan for governing the Northwest Territory, Congress had to decide what should be done with this land. Should it be sold or given away? The struggling young nation was too poor to give its land away. So it sold large areas to groups of men who formed land companies. These companies planned to make money by dividing the lands and again selling them.

**Early settlements in Ohio**

One of the first land companies was formed by a group of soldiers who had fought in the Revolutionary War. They bought a million and a half acres of land along the Ohio River near the mouth of the Muskingum River. General Rufus Putnam was put in charge of this company’s settlements.

Let us join some of these early settlers on their way to the Ohio Country, as the land north of the Ohio River was sometimes called. It is a cold, clear day in December, 1787, when a group of these settlers begin their journey. It is a strange group that leaves the little Massachusetts town. No women are with the party. If the dangerous journey proves successful, wives and families will go out later.

The party slowly heads west. A wagon drawn by four oxen is in the rear. It carries
their supplies. On its canvas cover is written, "For the Ohio Country." Months of winter travel lie ahead of these men. For awhile they will be going through settled regions. Later they will travel over rough roads and mountain trails. They will have to cross swift-flowing streams. Let us listen as they talk.

First Man: "At last we're on our way to the Ohio Country. I thought the government would never open the Northwest Territory to settlement. But I reckon the plan of government it set up is what we want."

Second Man: "Well, the government plan says the land's going to be part of the Union some day. We won't be a colony forever. That suits me!"

Third Man: "When we get to the new country, we can worship as we please. The government promises this under the plan."

Fourth Man: "My wife Becky wasn't sure she wanted me to come. I finally convinced her though. I told her that in the Northwest Territory we'd all be equal and free and that we'd have a right to trial by jury."

Fifth Man: "I'm glad that slavery is forbidden under the government plan for the territory."

Sixth Man: "'Schools and the means of education shall forever be encouraged.' That is what the plan says, and that was what helped Emmy and me decide. Out here our boys will have a chance to go to school."

Seventh Man: "There has never been anything like this government plan. Some of its laws have never been tried before. I hope we can make them work out well."

General Rufus Putnam and his group of people made their settlement at the mouth of the Muskingum River. They named it Marietta in honor of Queen Marie Antoinette of France. France, you remember, helped us during the Revolutionary War. Marietta was the first settlement in the Northwest Territory under the new plan. Can you find Marietta, Ohio, on the map?

Soon other settlements were made on the Ohio River. Cincinnati was one of these.

On the southern shore of Lake Erie in the present state of Ohio General Moses Cleveland made a settlement. It was called Cleveland in honor of its founder.

War with the Indians

The Indians feared the coming of settlers to the Northwest Territory. Too often they had seen the forests cut down, and their hunting grounds turned into farms. They had seen their villages burned and their winter's food supply destroyed. Their people had lived in this land for centuries. Was there anything they could do to keep from losing it? They were determined to try.

The settlers were never sure when the Indians would strike swiftly and savagely. They lived in constant fear of losing their lives or their homes.

Twice President Washington sent troops into the Ohio Country against the Indians. Each time the Indians defeated the troops. The struggle between the settlers and the Indians went on. President Washington decided to try again. An army was gathered together near Pittsburgh. For two years the troops were drilled and trained. Before marching against the Indians the American general offered peace. But the Indians chose war. They even murdered two of the messengers sent to them with the offer of peace. The war which followed was over quickly. It ended in the complete defeat of the Indians.

The Indians made a peace treaty with the white men. They gave up almost half the land for which they had fought so bravely and so long.

Peace and Settlers

After the peace treaty there was no stopping the settlers. They arrived by the hundreds, the thousands, and the tens of thousands. Among them were farmers, merchants, and traders. Some were blacksmiths, carpenters, and tanners. Others were ministers, lawyers, and teachers. They came from everywhere. Some came from the Northeastern states, and
On this map trace each route to the West. Which route was principally a water route? What cities grew up along each route?

Others from the South. Some came from the Old World far across the sea. They left their old homes and old friends to build a new life in the lands beyond the Appalachians.

**Routes to the western lands**

As you know, four important routes led the pioneers westward. Find them on the map, page 147.

In early days the Wilderness Road through Cumberland Gap was an important highway to the West. Later this road reached the Ohio River at Louisville. Pioneers pushing northwest followed it northward to the river. Settlers bound for the Southern states, you remember, used a route around the southern end of the Appalachians.

Other trails led across the Appalachian Highland to where the Allegheny and Monongahela rivers meet to form the Ohio River. Here, on the site of an early fort, Pittsburgh grew up. From this frontier town settlers continued their westward journey by water. Tens of thousands of settlers used the Ohio River as a highway to the West.

Pioneers from New England and New York traveled west by way of the Hudson and Mohawk rivers. After crossing a short stretch of land, they reached Lake Erie. Some traveled westward along its southern shore. Others journeyed westward over its waters. The route through these river valleys was the easiest path through the mountains. But for years it was little used, because the Indians of this region were on the warpath. After they quieted down, this lowland became an important route west.

Pioneers traveled westward as best they could. They went on foot, on horseback, in wagons, or in boats. Let us imagine we are watching some of them on their way west.

**Going west on foot**

Here is a group of men, women, and children. They are walking wearily over the rough, uneven ground. The women are dressed in *homespun*. Homespun is coarse cloth made from yarn spun at home. The men wear *buckskin* suits. Buckskin is strong soft leather made from the skins of deer and sheep. On their heads are coonskin caps. Some are barefoot. In the packs on their backs they carry everything they own. What they could not carry had to be left behind.
These pioneers carry little food with them. They expect to hunt and fish along the way. They will live on the game they kill and on wild fruit and berries.

In their hands they carry guns. They never know when they will see wild animals or be attacked by Indians. Their hunting knives are in their belts. They will use them to skin and cut up the animals they shoot.

Day after day and week after week, these weary travelers push on. Up and down steep trails, through thick forests, and across rushing streams they go. They are tired and often hungry. But they are determined too. Their dream of a new home in the wilderness makes them keep on traveling.

**Traveling by horseback**

The next group we see is having an easier time. Most of their strong horses have heavy packs on their backs. Only a few horses carry riders. These riders are the women and children. They go in single file because the path through the thick woods is narrow. It is little more than an Indian trail.

The woods are full of turkeys, rabbits, deer, and other wild game. In the stream are many fish. These travelers often stop to hunt or fish. How happy the children are then. They stretch their tired legs and run about. The wild berries they find taste delicious. Near supper time the children stay close to the campfire. How good the roasting turkey smells! They know it will taste even better.

After supper everyone soon falls asleep on blankets spread on the ground. Even the howling of the wolves does not disturb them. Early in the morning these hardy pioneers continue their journey. Through sunshine and storm they travel on. At times they are soaked to the skin. Indians attack them. Sometimes they are sick. But that does not make them turn back. They are on their way to their new homes in the west!

**Moving in covered wagons**

Four oxen draw the *Conestoga* (kon'es-tō'gā) wagon of another group of pioneers. The blue body of this covered wagon is shaped like a boat. It is higher at both ends than in the middle. Its red front wheels are large, its back ones even larger. Over the top of this big Conestoga wagon is a white canvas cover. As the strong animals slowly pull it over the rough, dirt road, the wagon sways from side to side.

Father walks beside the oxen. Little sister sits between mother and grandmother on the
front seat. The two boys feel quite grown up as they walk behind the creaking wagon. They watch closely to see that nothing harms the cow, the sheep, and the pigs that they have brought with them.

It has been a struggle to decide what to bring. Most of the heavy furniture had to be left behind. There was not room in the wagon for everything. But every inch of space has been used. Here is a box of tools and the ax, plow, hoe, and saw. Near by is the bag of seed corn and the food they will eat along the way. Flour, beans, bacon, ham, coffee, salt, and molasses are included. The spinning wheel, loom, churn, and leather trunk are packed in carefully. On top of the boxes and barrels is the bedding. Near by are the copper kettles. Pails of grease and tar hang beneath the wagon.

It had been hard to say good-by to old friends and neighbors. Those who set out as pioneers never knew whether they would ever see their old friends again. But there is always hope that some of them may also come west.

**Transportation by boat**

This pioneer family is going west by boat. Seventeen-year-old Virginia keeps a diary, or written record, of their journey. Dick and Betty, the ten-year-old twins, help her. Let us look through Virginia’s diary and read a few pages.

*April 30, 1790.* At last we’ve reached Pittsburgh. Uncle John met us at the inn. Were we glad to see him! He told us that he has a place to live picked out for us near Cincinnati in the Ohio Country.

*May 1, 1790.* Pittsburgh is not like Philadelphia. Most of the houses here are made of logs. Only a few are made of stone. The streets are muddy. Cows, chickens, and pigs wander over them. There are only a few stores.

*May 2, 1790.* Father bought our boat today from some people who decided to return to the East. It is a flatboat — just the kind we wanted. The cabin has a fireplace and some bunks where we can sleep. There is room for all the things we brought from home. There is room for the cow, oxen, pigs, and chickens we bought in Pittsburgh. The boat is thirty-eight feet long and fifteen feet wide. The lumber from it can be used for building our house when we get to Cincinnati.

*May 5, 1790.* Mother bought some things in Pittsburgh today. Father has loaded the boat with everything that we need. It seems strange to hear the lapping of the water...
By 1800 Cincinnati was a thriving settlement with a church and a post office. Its four streets were Walnut, Main, Sycamore, and Broadway. The square building at the right with the flag flying over it is Fort Washington. What means of transportation can you see in the picture?

against the boat. Uncle John said that we'll get used to it. Tomorrow we will begin our trip down the Ohio. Mother promised to call us early so we would not miss anything.

May 6, 1790. It seemed as though I had just fallen asleep when Mother called us this morning. We were already on our way down the river when I jumped out of bed. Father and Uncle John had started the boat at dawn. Everything was beautiful, but strange.

May 8, 1790. Floating down the Ohio is much easier and more fun than crossing the mountains. There are no thick woods to travel through or steep mountains to climb. There are no rushing streams to cross. All day we've floated downstream between hills covered with trees. Betty saw a deer at the water's edge. When our cow mooed, the deer ran away.

May 10, 1790. There was great excitement today. Dick fell overboard when his fishing line snapped. Mother was worried. As she leaned over the boat, she almost fell in too. Then Uncle John jumped in and pulled Dick out. He got a ducking, but he was not hurt. Because of the accident, we had no fish for supper.

We almost had another accident. We felt the boat jerk sharply. Father had thrown his weight against the steering oar to prevent our hitting a floating tree trunk. Uncle John says that these floating trees are very dangerous. The ones that float just beneath the surface of the water are the worst. Sand bars are also bad.

May 11, 1790. We passed some settlements today. The log cabins looked comfortable. Some settlers were plowing in their fields. Some were planting corn. Dick and Betty are disappointed that we haven't seen any Indians.

May 12, 1790. It was rainy and windy all day. The river got very rough. Some of the waves splashed over the deck. The boat tossed up and down like a twig. The pigs squealed, the chickens squawked, and the cow bellowed. I was frightened too.

May 13, 1790. This has been a quiet day. There have been no swift currents on the river, and no sudden rain or wind storms. The sunset was beautiful this evening. Soon it will be night.

May 14, 1790. We stopped at Marietta today. It was fun to get dressed in our best clothes again. Father says he hopes the fort at Cincinnati will be as good as the one at Marietta.

May 15, 1790. All morning a thick fog lay over the river. We couldn't see from one end
of the boat to the other. By noon it lifted. We passed a keelboat on its way upstream this afternoon. Father says these boats can carry from fifteen to forty tons. Keelboats are longer and narrower than flatboats. They have narrow platforms on each side. Some have masts and sails. It's hard work to push a keelboat upstream against the current. The crew walk along the platform and push the boat through the water with long poles.

May 17, 1790. Last night we decided not to tie up at the shore at all. We kept floating downstream. Once or twice an owl hooted.

May 18, 1790. I helped mother with the spinning today. Dick milks the cow every morning and evening. He has also learned to take good care of the oxen, pigs, and chickens.

May 19, 1790. We've seen many flatboats carrying people westward. Some are as large as ours. We saw a large raft this morning. It was made of logs. At one end was a small hut. Father said he wouldn't want to be caught on that raft in a storm.

May 22, 1790. We heard exciting news today. Some people passed us on a flatboat. They had been attacked by Indians. Fortunately no one was hurt. Father also had exciting news. He said that we'll be in Cincinnati soon.

Finding a place to live

Whether the pioneers traveled westward on foot, horseback, wagon, or boat, they were looking for a place to live. Some settled in villages and towns. Others looked for farms.

Many farmers settled near a river or stream. They could grow fine crops on the rich, level land of the river valley. They could use the river for travel.

Some farmers chose a spot where large trees grew. They thought the soil was fertile because trees grew there. Besides, trees had many uses. Trees furnished wood for building houses, making furniture, and building fences. Trees supplied fuel for the fireplace. Other settlers were happy when they found a grassy meadow or an open place in the forest. They could plant crops there with little trouble. They did not have to clear the land. Clearing land was hard work. Sometimes the pioneers girdled, or cut a strip of bark from around, the trees. Girdling killed the trees and let the sunlight through. Later the settlers cut down the dead trees. Often they left the stumps in the field.

Food and shelter were the first things most settlers thought about. Their first shelter was often a crude log hut open on one side. They lived in it until they could build a better home. As quickly as possible they planted a small patch of corn. It was their best crop because corn is good food for animals as well as for people. Corn grew well in this area.

Busy lives

The pioneers were seldom idle. There was always something to keep them busy from early morning until late at night. Spring was plowing and planting time as well as sheepshearing time. Summer days were good for cultivating crops, clearing land, and building fences. Autumn was for harvesting. Winter was for trapping wild animals and curing their hides. When the food supply ran low, the pioneer and his faithful dog went to the woods or a stream. He had to be a fine shot and a good fisherman. He seldom came back empty handed.

Pioneer women worked as hard as the men. There were many things to do besides cook, wash, and keep the house clean. They would weave cloth and make clothes for all the family. They made candles. They salted and dried meat and dried fruits and vegetables.

Pioneer girls shared the housework with their mothers. They also helped with the spinning and weaving. Pioneer boys helped their fathers with the farm work and did daily chores. They chopped wood and kept the wood box filled. They gathered nuts and picked wild berries. Both boys and girls watched over the cornfields as soon as the corn was planted. It was their job to frighten away the crows and squirrels.
At a house-raising everyone for miles around came to help. The men cleared the land and split logs. And the cabin was quickly built.

Pioneers had little time to play. But what fun they had when they got together! It might be a husking bee, a house-raising, or a quilting bee. Neighbors used to help each other with jobs that were too big for one family to do alone. Everyone looked forward to these good times when they could be together even though it meant hard work.

A husking bee

Husking bees were held in the autumn after the corn was harvested. People came from far and near on the night of the party. The barn with its loft of sweet-smelling hay was a popular place that evening. Light from the lanterns shone on the piles of corn. With much joking and laughter the men formed two teams and chose their captains. The pile of corn was divided evenly between them. And the race was on.

Quickly the dry husks were stripped from the ears of corn. The captains urged their teams on. The girls cheered the men on too. Louder and louder grew the voices. The piles of husked corn grew higher and higher. At last there was no more corn to husk. Shouts of victory filled the barn. The captain of the winning team was swung to the shoulders of the strongest men. Gaily they carried him round the barn. By that time everyone was ready for the hearty supper which the women had prepared.

After supper a neighbor brought out his fiddle. A lively square dance finished the evening’s fun. By midnight everyone was on his way home. The pioneers were tired, but everyone looked forward eagerly to the next time they would get together. More than likely the occasion would be a house-raising.

A house-raising

When a new family moved into a neighborhood, everyone from miles around knew about it. One neighbor told another. In turn he told others. The news traveled from farm to farm, up and down the creek, and through the woods. The neighbors would do all they could to help the new family get settled. They looked forward to helping them build their cabin. The occasion was known as a house-raising.

For days the pioneer family talked about the house-raising. Much work was done ahead of time. Trees were cut down and underbrush, or thick bushes, cleared away to make room for the new home. Logs were carefully chosen and cut to the right lengths for the walls.

At last the great day came. The neighbors began to arrive early in the morning. Some rode horseback. Some came in wagons. Others walked. The men came with axes and other tools. The women brought food.

There was work for everyone. The men and big boys rolled the logs to the clearing.
Four logs were laid down to make a square or an oblong. Other logs were laid on top of them to make the walls of the new cabin. Two deep notches had been cut in the ends of each log. When the logs were laid on top of one another, the notches fitted together. This held the logs in place and made a good, solid wall. There was only a narrow crack between the logs.

During this time the women and big girls were preparing dinner. They spread the feast out under the trees. There was much to choose from, roast turkey, deer meat, and duck as well as beef and pork. There were heaping bowls of potatoes, beans, pumpkin, and corn. For sweets they had maple sugar, maple syrup, and honey. There was corn bread. For dessert there were delicious pies and cakes. What a wonderful dinner it was!

After dinner the men and boys went back to work on the cabin. The women and girls sewed and visited. The little children played or slept.

Willing hands made the work go fast. By sunset the one-room cabin was raised. Its roof of strong poles was covered with split logs or shingles. There it stood, strong and sturdy.

The food left over from dinner was soon eaten. Then the men built a big fire. They sat around the fire until it was time to go home.

The family was glad to have their new home. They were grateful for the kindness of their neighbors. Yet there was still much work to be done. Cracks between the logs had to be packed with clay and moss. This would keep out the wind and rain and make the cabin snug and warm.

A big chimney would be built at one end of the cabin. Such chimneys were of stones and sticks plastered with mud. Inside the cabin was a large stone fireplace. This fireplace was an important part of the home. All the cooking was done in it. On long winter evenings a roaring fire from its big logs gave light and heat.

There was no glass for the windows. Oiled paper or thin deerskin was used instead. Pioneers often used the hard-packed earth as their floor. Sometimes the floor was made of logs split in half. The logs were laid with the flat sides up. This kind of floor was called a puncheon floor. Beds, tables, and chairs were also home made. There were no stores near by where furniture could be bought. A bed of poles was built into one corner of the cabin. Ropes or narrow strips of leather between the poles held the mattress in place. Cornhusks, leaves, or feathers were used in the mattress. The table, benches, and stools were also made of split logs. These furnishings, crude as they were, made the pioneers feel they had a home to be proud of.

**A quilting bee**

Often the women and older girls would gather in the home of a pioneer family to help make quilts to be used as bed covers. The tops of the quilts were usually of patchwork, or small, bright scraps of cloth sewed together. Fluffy layers of cotton or wool were put between the patchwork top and a piece of plain cloth and quilted, or stitched together. Patchwork quilts made fine warm covers on cold winter nights. The women who met at these quilting bees enjoyed talking together as they sewed. People sometimes have quilting bees today.

**Marketing goods**

By the beginning of the 1800's tens of thousands of people had settled in the Northwest Territory. Fields of grain and pasture lands had taken the place of forests. Villages and towns had sprung up.

As the settlers cleared more land, they raised more crops and animals. They raised more corn, tobacco, hogs, sheep, and wheat than they could use. Where could they sell these surplus, or extra, products? People in the East needed them. But it cost too much to send their surplus products across the Appalachians to the Eastern cities.
The pioneers soon thought of a way to solve their problem. Many farms were along the Ohio or along streams flowing into it. Here was a highway already made for them. Transportation on it was easy and cheap. All they needed was a boat.

In the spring the ring of axes was often heard on farms along the river banks. Neighbors banded together to make a flatboat from trees on their land. They worked early and late cutting down trees, making planks, and nailing them together. They wanted to have their boat ready when spring floods came.

“We can load our corn, tobacco, and pork at our own landing,” they said proudly. “We can float with the current to the Ohio. We can go down the Ohio to the Mississippi and then down the Mississippi to New Orleans.”

“Ships come to New Orleans from Europe, the West Indies, and cities along our Atlantic Coast. We can get a good price for our products there.”

As time passed, settlers in the Ohio Country sold more and more of their products at New Orleans. They received a good price for their corn, wheat, pork, lard, hides, and lumber. They bought manufactured goods and other things they needed. Trade grew up between the pioneers and the merchants of New Orleans, the great Mississippi River port.

No sooner had these farmers found a place to sell their surplus products than they faced another problem. The port of New Orleans did not belong to the United States, but to Spain. They knew that Spain could stop their trade if it wished. Here was a problem to be solved.

While Washington was President, Congress tried to help the settlers. It made a treaty with Spain, which then owned New Orleans and the land west of the Mississippi. The settlers gained the right to use the river and to land their goods at New Orleans. At this city they could sell their goods without paying a tax. So long as Spain owned New Orleans, Americans were not very worried. Spain was a weak nation and peaceful.

Then Americans learned that Spain had given New Orleans and all the Louisiana Territory to France. How the settlers worried then! This was dangerous. France was a powerful nation. It was ruled by the greatest general in Europe, Napoleon Bonaparte. He could stop the trade of the western farmers if he wanted to.

Thomas Jefferson, who was President of the United States at this time, greatly feared that this might happen. He also feared that the settlers might even try to take New Orleans. That would mean war with the French! Something had to be done quickly.

THE LOUISIANA PURCHASE

President Jefferson acted at once. He sent James Monroe to France to join our representative there. He hoped they could persuade Napoleon to sell New Orleans and the land around it. To everyone’s surprise, Napoleon offered to sell not only New Orleans but all the Louisiana Territory. This vast plains region stretched from the Mississippi River to the Rocky Mountains (see the map on page 238).

At first our representatives in France did not know what to do. There were no modern means of communication. They could not telephone or telegraph President Jefferson to find out what to do. It did not seem wise to hesitate when such a bargain was offered. After some discussion they fixed the price that the United States was to pay for the Louisiana country at $15,000,000.

It was in 1803 that the Louisiana Territory was added to our nation. Much of the region now known as our North Central States was a part of the Louisiana Territory.

From the map on page 238 you will see that the United States now reached from the
In 1803 Thomas Jefferson, President of the United States, bought the large area of land between the Mississippi River and the Rocky Mountains. It was called Louisiana. But the government did not really take possession of this region until 1804. Here we see the United States troops moving in as the French prepare to leave.

Atlantic Ocean westward as far as the Rocky Mountains. The Mississippi River system and the land it drained now belonged to our nation. New Orleans and the fur-trading post of St. Louis were also added to our country.

In 1803 most of this region was unsettled. Indians and buffaloes roamed over it. Only a few white people — Frenchmen, some Spaniards, and a few Americans — lived there. Little was known about this huge plains region or the mountains beyond it.

President Jefferson had been interested in the country west of the Mississippi for many years. Now he could learn more about it.

Exploring the Louisiana Territory

The President asked Meriwether Lewis to lead an expedition, or exploring party, into this region. Young Lewis was Jefferson’s private secretary. Lewis asked William Clark to go with him on this expedition. William was the younger brother of George Rogers Clark. George Rogers, you remember, won the Ohio Country and the Great Lakes region from the English during the Revolutionary War. (Look at the map on page 226.)

Lewis and Clark were to trace the Missouri River to its source, or beginning. President Jefferson also wanted them to cross the mountains to find a way to the Pacific Ocean. On the way they were to take careful notes about the soil, climate, animals, plants, and minerals. The President especially wanted them to treat the Indians in a friendly manner. He hoped to gain the good will of the tribes living in this vast territory.

The reports and maps Lewis and Clark brought back from the expedition gave much valuable information. Fur traders, trappers, and settlers going into this new land now knew what they might find. People began to realize what a huge and rich country lay beyond the Mississippi.

The new states of Ohio, Indiana, Illinois

Meanwhile many people had settled in the Northwest Territory. It was not long before some areas had enough people to become states. Ohio was the first state to be made from the Northwest Territory. It came into the Union the same year the Louisiana Territory was bought from France. Because the plan of government for the Northwest Territory did not permit slavery, Ohio came in as a free state. Within the next fifteen years Indiana and Illinois were admitted from this territory. They too came in as free states.
What was the boundary of the Louisiana Purchase on the east? On the west? What states were formed entirely from this area? What states were partly formed from this area? What large rivers were in this territory or formed part of its boundaries?

PROBLEMS IN THE NEW LANDS

People kept moving west. When they found much of the Northwest Territory taken up, they crossed the Mississippi into Louisiana Territory.

Louisiana, which was the first state to come into the Union from this new land, came in as a slave state. No one questioned this. Slavery and plantation farming had long been carried on there.

But when Missouri asked to come into the Union, a question arose. Missouri wanted to be admitted as a slave state. As yet no law had been made about slavery in the Louisiana Territory. Congress had to decide what should be done.

The Missouri Compromise

For two years Congress quarreled over how Missouri was to come into the Union. The quarrel was finally settled by the Missouri Compromise. Under this compromise Missouri was to be admitted as a slave state and Maine, far to the north, was to be admitted as a free state. The number of slave and free states would then be equal. Neither the North nor the South would have more members in the Senate.

The question of future slavery in the Louisiana Territory was also decided by this compromise. The southern boundary of Missouri was to be the dividing line between slave and free states. States formed from the territory north of this line were to be free states. States formed from the territory south of this line would be permitted to have slavery.

Kansas and Nebraska

For awhile the slavery question in the Louisiana Territory appeared to be settled. Two states had been formed in this region. Each had entered the Union as the compromise stated. Iowa came in as a free state. It was north of the southern boundary of Missouri. Arkansas had come in as a slave state. It was south of Missouri. Everyone thought the Missouri Compromise would continue to be carried out. But people were to be disappointed.

In 1854 a new law was presented to Congress. This law asked that the area bordering Missouri on the west and lying just north of that state’s southern boundary be divided into
two territories. The southern part was to be called Kansas Territory. The northern part was to be known as Nebraska Territory.

No one objected to this part of the law. But another part caused trouble. Settlers in these territories were to decide whether they would allow slavery or not. Northerners were worried by this.

People began taking sides at once. "Kansas and Nebraska are north of the line agreed upon in the Missouri Compromise," said people in the North. "The slavery question in this territory was settled by the Missouri Compromise. The Missouri Compromise must stand." Of course, the South did not agree. Here was a chance for another slave state to be admitted, and that would mean more Southern members in the Senate.

Everyone now thought about slavery more seriously than ever. All over the country people discussed it. Even the members of Congress quarreled about it. But the law finally passed.

People soon learned what the new law meant. Neither the North nor the South seemed concerned about Nebraska. There was little doubt that it would be a free state. It was too far north for slave owners to be interested in it. They felt that plantation farming would not be successful there.

In Kansas the story was different. (Find Kansas on the map on page 12.) Southerners thought it had the same advantages of climate and soil that Missouri had. "It will make a fine slave state," they said. Since the settlers themselves could decide if the state were to be slave or free, the race was on. Northern settlers rushed in, hoping to make it a free state. Southern planters hurried there to win it for slavery. Quarrels and arguments broke out between these two groups. Seven years later Kansas came into the Union as a free state.

Quarrels of this kind led to bitter feeling between the North and South. As you know, this was one of the causes of the War Between the States.

Meanwhile people living west of the Mississippi had other problems to solve.

**Farming on the prairies**

When the pioneers went beyond the Mississippi, they found a strange, new land. Instead of forests and hills, they saw miles and miles of gently rolling plains covered with grass. These grassy plains were known as prairies. On and on the prairies stretched. They were covered with tall, thick grass. Trees were scarce except along streams and rivers.

The pioneers did not know what to think of a land where so few trees grew. "Where can we get materials to build our homes?" they wondered. "Where can we get fuel for our fireplaces?" they asked. "Surely this soil is too poor for crops," they said. Many of the first settlers beyond the Mississippi chose places for their farms along the streams where there were trees. They worked hard at clearing the land and planting their crops.

A few pioneers were braver than the rest. They decided to settle on the open prairies. It was hard work breaking the thick, tough sod with the kind of plow they had. But their reward was great. They found the prairie soils richer than any they had ever imagined. There were other advantages. They did not have to cut down trees and dig out stumps.

When people learned that fine crops could be grown on the prairies more began to settle there. Later, a new and stronger kind of plow was invented. Then people by the thousands settled on the prairies.

Beyond the Missouri River settlers had a hard time getting used to the plains of western Kansas, Nebraska, and the Dakotas. Summers were extremely hot. Sometimes hot winds blew for days. Then everything became dry and dusty. Sometimes there was little rain, and crops failed. Winter winds were bitter and cold. There were no trees for protection from the winds that swept across the plains.

Logs for building were scarce. Most pioneers used what they had at hand. Many
built their homes of sod. Squares of sod were piled on top of one another to make the walls. Even then some wood was needed. Small trees were brought from distant streams. Poles made from them were laid across the walls for the roof. Squares of sod were laid over them. Such a house was cheap to build. It was cool in summer and warm in winter.

**Free land to settlers**

As the United States grew in size, our government obtained large areas of land. But when people wanted any of it, they had to buy it from the government. After a while people began to say, “The United States covers a large area. Much of its land is not being used. It is going to waste. Why do we have to buy it when we need homes? Why doesn’t the government give it to us?”

The government at last decided to do something about the land it owned. During the War Between the States Congress passed the Homestead Act. By this law, a pioneer could get one hundred and sixty acres free. In order to get this land he had to live on it for five years. During that time he had to plant crops on it. If he did these things, the land became his.

After the War Between the States was over, thousands of soldiers returned to their homes. Many wanted to begin a new life. They wanted land they could call their own. The Homestead Act caused many of these men to go west to take up government land.

People from the Old World were eager to get a start in the New World. They were willing to become citizens of the United States in order to get some of the free land. Immigrants from Germany, Ireland, England, Norway, Sweden, and Denmark made their way to America. To them the United States became a land of opportunity.

**IMPROVING WAYS OF TRAVEL**

**BUILDING ROADS**

The first roads were trails made by Indians or wild animals. Later, the pioneers blazed their own trails through the forests. As time passed, these trails were improved and new roads were built. On some, logs were laid side
by side. Others were made of boards or thick planks. Still others were built of stone and gravel.

Most of these roads were built by men who wanted to make money. They charged a toll, or fee, for the use of their roads.

One of the finest and most important highways of its time was built by the United States government. This excellent road was eighty feet wide. It was built of broken stone with stone bridges across the streams. The National Road, as it was called, began at Cumberland, Maryland. Six years after it was started, it reached as far west as Wheeling on the Ohio River. Later it was built westward across Ohio, Indiana, and Illinois. Finally it reached the Mississippi River. This was the first time the government had built a road.

Traffic was heavy on the National Road. Big Conestoga wagons pulled by powerful teams of six horses carried freight between the East and the West. Gaily painted stage coaches dashed along it. Over it rolled farm wagons, market wagons, and buggies. Cattle, sheep, and hogs were driven to market over it. Many pioneers traveled westward on it.

**TRAVEL BY WATER AND RAIL**

For years people wondered whether boats could be moved without the aid of sails or oars. Many men thought about the idea of running them with steam power. In 1807 Robert Fulton proved that it could be done successfully with his steamboat, the **Clermont**.

**Robert Fulton's steamboat**

Crowds gathered at the Hudson River in New York on the day Fulton's boat, the **Clermont**, was to make its run. Curiously they stared at this boat which was so different from any they had seen. At each side was a paddle wheel. On its deck was a smokestack. Some people laughed. “Will it work?” others wondered. They did not have long to wait. As smoke and sparks poured from its smokestack and its wheels splashed water, the **Clermont** puffed its way up the Hudson. It reached Albany in thirty-two hours. Here at last was a boat that did not depend on the wind but traveled under its own power. It could even sail against the wind. This made upstream travel faster and easier. Within a few years steamboat travel was common on all our important waterways.

**The Erie Canal**

Canals were another means of connecting different parts of our country. Many of these waterways were built during the first half of the 1800's. Some are still in use.

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The National Road was the first road built by the United States government. Beginning at Cumberland, Maryland, it went through Pittsburgh to Wheeling, West Virginia. In later years it was extended west across Ohio and Indiana, finally reaching St. Louis. Many pioneers traveled over this road. Today the U.S. Highway 40 follows very closely the route of the “Old National” road.
As more and longer railroads were built, trains were improved. By 1845 they looked like this. Compare this with the train pictured on page 108. Note the changes in the engine and cars. Compare the tracks with our modern tracks.

You will remember that the Erie Canal was one of the important links between the East and the West. It followed the northern route to the West (see the map, page 229). This canal provided an all-water route between the Great Lakes and the Atlantic Ocean. Eastern merchants and manufacturers used this canal to send goods and supplies to the North Central States. From these states meat, lumber, and grain went through the canal to eastern cities. Through the Erie Canal thousands of pioneers made their way to new homes in the West.

**Early railroads**

Some pioneers moved west by railroad. Travel by railroad was faster, but it cost more money than travel by water. As you know, by the 1830’s steam engines were being used in America. The first railroads were built in the East.

Early railroad lines were not very long. They usually joined one town with another. Passengers rode in cars built like stagecoaches. Like the stagecoaches these cars had curtains on the windows. The curtains were used in bad weather to keep out rain and snow.

Riding on these early trains was neither comfortable nor very safe. The cars swayed and bumped along. There were no springs. There was constant danger of fire caused by sparks from the smokestack. The roads, made of rocks, jolted the passengers badly.

As time passed, more and longer railroads were built. Towns and cities grew up along the railroad tracks. Travel became safer and pleasanter. The population of the North Central States grew. Villages became towns and towns became cities. The people found many different ways to make a living and worked hard for their new homes.

**TO HELP YOU LEARN**

**Words and Terms You Should Know**

- prairie
- homespun
- flatboat
- keelboat
- toll
- girdle
- buckskin
- surplus
- expedition
- patchwork
- husking bee
- house-raising
- quilting bee
- Conestoga wagon
- Missouri Compromise
- Homestead Act

242
A Matching Test

The phrases below describe or define the words and terms listed on page 242. Number a paper from 1 to 17. After each number write the word which matches the definition.

1. Coarse cloth made from yarn spun at home
2. A law by which pioneers could get land free if they would live on it and farm it for five years
3. Fancy work made by sewing together pieces of cloth of different colors and shapes to form a design
4. Logs split in half and laid with the flat side up to form a floor
5. A gathering of friends and neighbors to husk corn
6. Strong, soft leather made from the hides of deer or sheep
7. A long narrow boat which can be pushed upstream with long poles
8. Something extra
9. A law which said that all new states north of the northern boundary of Missouri were to enter the Union as free states, and all south of that line were to be slave states
10. A gathering of women to make quilts
11. To cut a strip of bark from around a tree
12. A large covered wagon
13. A gathering of neighbors to help build a house
14. A tax paid by a traveler for use of a road
15. A journey for some purpose, such as exploring
16. A large boat with a flat bottom and square ends
17. A grassy plain

Can You Choose the Right Answer?

Each of the sentences below has four endings. Only one of these endings is correct. Number a sheet of paper from 1 to 7. Write the correct ending for each sentence after its number.

1. The United States obtained the Northwest Territory from the: (a) French (b) Indians (c) British (d) Spanish
2. The plan of government for the Northwest Territory had a law against: (a) religion (b) schools (c) slavery (d) chopping down trees
3. The first state to come into the United States from the Northwest Territory was: (a) Indiana (b) Ohio (c) Illinois (d) Iowa
4. The first settlement in Ohio under the plan of government for the Northwest Territory was at: (a) Marietta (b) Cleveland (c) Cincinnati (d) St. Louis
5. The Louisiana Country was purchased from: (a) Spain (b) Great Britain (c) France (d) the Indians
6. The price which the United States paid for the Louisiana Country was: (a) $15,000,000 (b) $30,000,000 (c) $50,000,000 (d) $75,000,000
7. The first successful steamboat was built by: (a) Eli Whitney (b) Benjamin Franklin (c) Robert Fulton (d) Meriwether Lewis

Can You Answer These?

1. Why were settlers eager to go to the Ohio Country?
2. What happened to the Northwest Territory after the peace treaty with the Indians?
3. How did the pioneers choose a place to live?
4. Describe some of the ways the pioneers had fun along with their work.
5. How did the pioneers make use of natural highways to take their surplus goods to market?
6. Who were Lewis and Clark? Who sent them on a journey to the West? For what purpose?
7. What difficulties did the pioneers face who settled on the plains?
8. How did the Homestead Act help settle the West?
LIVING AND WORKING IN THE NORTH CENTRAL STATES

The North Central States play an important part in the work of our nation today. Millions of people make a living from the farms, forests, mines, and factories of this region. Through these states flow two big tributaries of the Mississippi. These are the Ohio and Missouri rivers. Here too are four of the five Great Lakes. These busy lakes make up one of the most important inland waterways in the world.

Soil, surface, climate

Almost everywhere you go in the North Central States you see farms of one kind or another. These states are one of the leading farming regions of the world. They produce food for millions of people.

Thousands and thousands of years ago, as you know, a great ice sheet covered much of this part of the United States. In some parts of the North Central States this ice sheet left thin soil, bare rocks, and hills. Over most of these states it left deep, rich soil, and many miles of level and gently rolling land.

Farmers in the North Central States are favored by a fairly long growing season. The season during which plants can grow out of doors lasts from almost four months to more than six months. This is long enough for wheat, corn, and oats to grow and ripen.

Rainfall

Plants need moisture, or water, as well as rich soil and a favorable growing season. As you know, twenty inches of rainfall is enough for many crops outside the tropics. On the map on page 36 find the North Central area. You can see that much of the North Central area receives between twenty and forty inches of rainfall each year. A few places receive more than forty inches yearly. Western North Dakota, South Dakota, Nebraska, and Kansas receive less than twenty inches of rain during a year. But the rainfall here comes in spring and early summer. That is when it is needed most.

Differences in rainfall, growing season, or temperature make parts of these states better suited to one crop than to another. As you read about farming in the North Central States, you will find out why different crops are grown where they are.

CORN, AN IMPORTANT CROP

Corn is one of the great gifts of America to the world. As you have already learned, the people of the Old World knew nothing about this useful grain until Columbus discovered America. He found the Indians growing maize or corn. Since those days corn has become a very important grain. It is grown in almost every part of the world.

Corn played an important part in colonial days. Imagine what might have happened to the Pilgrims if it had not been for the friendly Indians and their corn. Surely they would have starved! Corn helped the pioneers too. They all carried seed corn with them when moving westward. Corn was the first crop they planted. Corn was the one crop they could plant easily and quickly. It needed little care while it was growing. When it was ripe, it did not have to be harvested right away.

People as well as animals could eat this grain. When the corn was ground into meal, it made bread for the family. Livestock and poultry grew fat on corn. Corn was used as winter feed for the farm animals. Corn husks made mattresses for the beds. Corn cobs were often used for fuel.

The Corn Belt

Since pioneer days corn has been a leading crop in the North Central States. The map on page 246 shows that corn is grown throughout these states. In many parts it is the chief crop. These lands are called the Corn Belt.
The North Central States grow important crops. In the cities in this area factories also produce a great variety of goods. Study the map, and list the crops. List also the manufactured articles.

Notice that the Corn Belt extends from central Nebraska through Iowa, Illinois, and Indiana to central Ohio and includes parts of Missouri, Minnesota, South Dakota, and Wisconsin.

Throughout the Corn Belt the growing season is at least five months long. Most varieties of corn need about this much time to grow and ripen before the heavy frosts come. A heavy frost usually kills plants or stops their growth. The hot summer days and nights of this region are good for corn. Much rain in June and July makes corn grow rapidly. Soil, surface, growing season, and rainfall help make the Corn Belt the best corn-growing region in the world. Almost everywhere you travel in the Corn Belt in summer it looks the same. There are fields of corn and of alfalfa or other hay crops, and of soybeans, oats, wheat, or barley. There are hogs, cattle, and chickens. The Corn Belt farmer has found it pays to raise both crops and animals. But he raises more corn than any other crop and more hogs than any other livestock.

Wheat is also an important crop of the North Central States. The farmer sells much of his wheat as well as some of his corn, oats,
and other crops. But he feeds most of these other grains to his livestock, which he sells for meat. Soybeans are sold to be made into oil. The cake which is left after the oil is pressed out of the beans is also used as feed for livestock. Iowa is first in the growing of corn and oats in our country. Illinois is the chief soybean producer.

Most Corn Belt farmers raise dairy cattle and poultry to supply their own families with milk, butter, eggs, and meat. There are also many dairy farms in this area. Fresh milk and butter are sold in the cities near by. Cheese making is also an important industry in this region.

More hogs are raised in the Corn Belt than in any other part of our country (see the map on page 245). Many beef cattle are also raised in this region. Many farmers raise their own beef cattle to feed and fatten. Others buy cattle from ranches farther west. Some cattle are bought in the South. Most of the fattened animals are then sent to meat-packing centers. Chicago, Kansas City, Omaha, St. Louis, St. Paul in Minnesota, St. Joseph in Missouri, and Sioux (sōo) City, Des Moines, and Ottumwa in Iowa. Many Corn Belt farmers also keep a few dairy cows. Feeding and milking these animals helps make every day a busy one for the Corn Belt farmer.

Uses of corn

The most important use of corn is the feeding of cattle, hogs, and poultry. More than three of every four bushels of corn raised are fed to livestock. Corn has many other uses. Corn meal, hominy, breakfast cereal, and sirup are made from corn. Corn starch is used in cooking.

Many other uses have been found for corn since settlers in the New World first learned about this grain from the Indians. One of its most important uses is in the manufacture of soap, starch, and gun powder. It is also used in making dyes, medicines, electrical batteries, and artificial rubber. Paper and wallboard are made from corn stalks and leaves. Even corn cobs are ground and used.

VISITING A CORN BELT FARM

The branches of the bare trees sway back and forth in the strong March wind. Mr. Jones and his eldest son, Stanley, walk about their Iowa farm. At the top of a hill they stop and look around. The farm buildings are sheltered in a grove of trees. A steel windmill rises above the tree tops. A creek flows between the house and the hill. The water is muddy from soil washed down the hillsides of the farms. The land of this farm is partly flat and partly sloping. There are also a few low hills. Such land is called rolling land.
Christopher Columbus on the Santa Maria on his first voyage to the New World
Washington stands while the Constitution is signed by members of the Convention.
Lewis and Clark and their party set forth to explore the Louisiana Territory.
The faces of four American Presidents are carved on Mount Rushmore, in South Dakota.

This view of the Grand Canyon shows how the Colorado River has cut through layers of rock.
This scene in Yosemite National Park shows forests, the timber line, and snowy peaks.

Only small clumps of vegetation grow on the wide stretches of sand in this desert region.

In this market, on the steps of a church in Guatemala, the people sell goods and produce.
Saving the top soil

As Mr. Jones looks back at the fields, he says, “It’s time we began to use better farming methods, Stanley. Look at the gullies and ditches on that slope. The crops raised on it have been getting poorer each year. Now that you are home from college, you can have the job of getting the farm in shape.”

“Thanks, Dad. I’ve been studying our farm problems all the time I’ve been away. The things I learned in college will help us, I feel sure. I hope there’ll be one farm along Willow Creek where the rich Iowa top soil won’t be washing away.”

There are many different kinds of farm lands in the North Central States. Some land is so low and flat that water collects and ruins the crops unless it is drained. Some land is so hilly that the water washes the soil away as it runs down the slopes. Some farms are on rich lowlands where the water follows gentle slopes to near-by rivers. Because the Jones farm is partly level and partly hilly, or sloping, Mr. Jones and Stanley must take good care of their soil.

Spring farm work

Spring work now keeps everyone busy on the farm. Mr. Jones uses a tractor to which a disk harrow is attached on the twenty-acre field where he plans to plant oats. Using a disk harrow is faster than plowing and it can be done before the ground is dry enough to plow. Mr. Jones wants to plant his oats as early as possible.

New pigs arrive daily. Tom is happy. His father has promised him ten pigs for his 4-H Club project. “They’ll be the best pigs in the show!” he boasts.

“They can’t be any better than my chickens,” replies fifteen-year-old Ruth. “See how they’ve grown. Mother says she’s seldom seen a flock as healthy as mine. And she ought to know. She’s a champion at raising chickens. She’s won some blue ribbons at state fairs herself.”


Planting corn

A heavy rain keeps the men out of the field for several days. As soon as the weather clears, the farmers are hard at work again. It is corn-planting time. Everyone works early and late. Tom helps too. He and Stanley drive the manure spreader back and forth across the fields. Then when the fields are plowed, the fertilizer will be turned under. It will add richness to the soil and bring a bigger yield.

Down the field Mr. Jones drives the tractor with the corn planter attached to it. Stanley watches as the tractor chugs toward him. Planting corn looks easy. But straight and careful driving is necessary. The hills and rows of corn must be the same distance apart. If the rows of corn are straight and even, it is easier to cultivate the corn and keep the weeds down.

When the last row of corn has been planted, the Jones family celebrates. Mrs. Jones bakes a cake. Ruth and Tom make ice cream.

“So far we’ve had a good spring, Dad. There has not been too much rain,” Stanley remarks as the family enjoys the ice cream and cake.

“This spring isn’t like the one we had two years ago or even last year, Stanley. Two years ago the spring was so wet it was almost haying time before I got all the crops planted. I didn’t think we would get through with haying before the grain harvests, but we did. How we worked! Your mother drove the tractor, and I loaded the hay. Some days we worked until after dark.”

“Last year wasn’t too bad,” Mrs. Jones adds. “But Dad had to plant the west field three times. First, a late spring frost killed the corn. Then too much rain ruined it. And we had to plant the field again with expensive seed.”

“We couldn’t have had a crop if we hadn’t planted a short-season kind of corn,” says
Mr. Jones. “Good seed is worth buying every time. It costs just as much to prepare the ground, plant the crop, and harvest it with poor seed as with good. But good seed is sure to produce more.”

As summer comes, much rain makes the corn grow well. The pastures are now rich and green. The oat fields look grayish-green. The clover field has done well. Not a drop of rain has been wasted. It has soaked into the soil. The alfalfa is beginning to bloom. Tiny purple flowers show among the green of its leaves. A sweet smell like honey comes from it. “We’ll have to cut that alfalfa soon, Stanley,” remarks Mr. Jones as they stand looking over the fields.

Midsummer on the farm

By the first week of July the corn on the Jones farm has been cultivated for the last time. Haying time has come.

Morning after morning the sun comes up like a red ball of fire. Hot, sunny days so good for corn and ripening grain make haying hot and dusty work. Even the nights are hot. It is hard to sleep. But the members of the Jones family do not stop. Each morning they arise early. Each evening they work late. The clover must be cut and allowed to dry in the sunshine before it is harvested. Mr. Jones looks anxiously at the sky. Not a cloud is in sight. He breathes a sigh of relief. “If this weather keeps up,” he says to himself, “we can get the hay into the barn before it rains.”

While the field work is going on, Tom is busy with the animals. The hogs are in the grass and clover pasture. Tom keeps the self-feeders filled. The self-feeders are boxes or bins into which enough feed can be placed to last the hogs for several days. Whenever the hogs are hungry, they help themselves from the troughs. The cows are in another pasture. The rich grass there helps them give good milk. Every evening Tom and his dog bring the cows back to the barnyard to be milked.

Hot days and nights continue. Thunder showers are frequent. The corn is so deep a green that it looks almost black. The leaves on the cornstalks are long and straight.

“Once small grains, like oats and wheat, are ripe no time can be lost in harvesting them,” says Mr. Jones to Stanley. “That field of oats should be ready in a day or two.”

Mr. Jones uses a combine to harvest his oats. A combine is a machine which both

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Hogs like this prizewinner at a fair in the Corn Belt may weigh more than one thousand pounds. Just think what a lot of ham and bacon and pork chops this hog would make!
cuts and separates the grain from the straw at the same time.

For weeks Ruth and Tom have talked about the County Fair. Ruth has selected the chickens she plans to show. Each belongs to a 4-H Club. In 4-H Clubs boys learn better ways of raising crops, livestock, and poultry. Girls learn some of these things too. They also learn to raise and can fruits and vegetables, to cook and sew, and to manage a house and garden. 4-H Club boys and girls usually exhibit some of their work at the County Fair. Tom will show his pigs at the fair. Later he will sell them to other farmers who want to raise better hogs or to meat packers. Tom may keep some of his pigs so that he can raise more next year.

The county fair

On the day of the fair Stanley, Tom, and Ruth take the pigs and chickens to the fair grounds. Their father and mother meet them there later in the morning. After looking at Tom’s pigs, they walk to the Poultry House. They agree that Ruth’s chickens are as good as any others that they have seen there.

That afternoon the Jones family are proud and excited. Tom’s pigs win third place, and he gets a red ribbon. Ruth’s chickens receive a blue ribbon, or first prize.

Fall farm work

After the fair, the fall plowing begins. Within three weeks most of the farmers finish their plowing. They will sow their winter wheat soon.

Corn-picking time comes. The fall days are as mild as spring. Stanley drives the tractor down the rows of corn. The dry stalks rattle and rustle. Behind him the corn picker gathers the big yellow ears of corn. Stanley’s thoughts drift to the time when he was a little boy. How times have changed since then. He remembers how his father used to go into the fields and husk the corn by hand. “Now,” he thinks to himself, “the corn picker picks the corn, husks it, and puts it into the wagon alongside it. The picker can do as much in two or three hours as Dad used to do in an entire day. Farming has certainly been speeded up.”

Exciting days have come for Ruth. Her young hens are starting to lay. People stop at their gate when they see the sign, “Fresh Eggs for Sale.” Ruth will put the money she makes in her bank account for college.

Tom is ready to sell some of his pigs. When he and his father drive to town to take the pigs to market, Tom says, “Dad, I’m going to be a farmer. Farming is the most exciting work in the world. There’s something new all the time.”

WHEAT LANDS

Every day millions of Americans use wheat from the wheat fields of the North Central States. These wheat lands are the greatest wheat-growing region in our country. They
produce so much of this grain they are sometimes called our nation’s "bread basket."

Wheat was not grown in the New World until men brought it from Europe. In colonial days it was grown in the northeastern section of our country. As the pioneers moved westward, wheat growing spread westward with them. Farmers who moved into Ohio, Indiana, and Illinois found that wheat grew well in these states. When settlers reached the grassy prairies of North Dakota, South Dakota, Nebraska, and Kansas, they found excellent wheat land there. The soil was rich, the land was cheap, and the climate was good. Because it was drier than farther east, this region was better for wheat than for corn. Wheat soon became the most important crop.

**Wheat farming in early days**

Early farmers depended on members of their family to help them. They did not have slaves or other outside labor. Neither did they have machinery. Each farmer used as much land as he and his family could plant and harvest. Therefore, most farms were small, for wheat must be harvested as soon as it is ripe.

Harvesting the ripened grain was slow work in early times. The first settlers used either a sickle or a scythe (sith) to cut it just as they had done in Europe. The sickle and the scythe both had a curved metal blade attached to a handle. Cutting grain with a sickle was back-breaking work. It was easier with a scythe, for the scythe had a much longer handle and a longer, sharper blade. While working with the longer handle of the scythe, the harvester could stand up straighter. With the longer, sharper blade he could cut much more grain with each swing of the arm. When a wooden frame was added to the scythe, it was called a cradle. Although harvesting went faster when a cradle was used, the grain was still cut by hand. So long as there was no other way to harvest grain, farms remained small. Better and quicker ways to plant and harvest grain were needed so that farmers could have larger crops.

**Speeding up farm work**

As a child Cyrus McCormick had watched his father try again and again to make a machine to cut grain. Cyrus’s father worked hard, but his experiments with the reaper always failed. The neighbors laughed at him. But young Cyrus had faith in his father’s idea. He began to work at making a harvesting machine.
At last the day came when the young inventor’s machine was ready for testing. Cyrus drove his reaper into a near-by grain field. The curious crowd wondered if this queer, horse-drawn machine would really cut the grain.

“Look at those blades. What are they supposed to do?” asked one curious person.

“Why is that platform at the back?” wondered another.

They did not have long to wait to learn the answers to their questions. As the boy on the horse urged his beast on, the blades, or reel, turned round and round. They raked in and pushed the wheat stalks back against a knife near the bottom of the reaper. Now everyone could see why there was a platform at the back of the machine. It caught the stalks as they were cut off. When the platform was filled, a man raked the stalks off it.

Round and round the six-acre field went the new reaper. It was doing quickly by machine what once had been done slowly by hand. In less than half a day the six acres of grain were cut. Young Cyrus had succeeded!

The young inventor was not satisfied. He continued to work on his machine and improve it. It was several years before the reaper was put on the market.

At first McCormick made his reapers in the East. Then he made a trip to Chicago. Chicago was only a small town then and did not even have a railroad. “My reapers will work well on the level land of the prairies,” McCormick thought. “They will save the farmers’ time and money.” He moved his factory to Chicago so that it would be near the prairie farms where the wheat was grown.

Other machines to help the farmer were invented or improved about this same time. For thousands of years wheat and other grains had been sowed by hand. The farmer walked back and forth across the field with a bag of seed over his shoulder. As he walked, he scattered the seed with his hand. By this slow and wasteful method seeds were not sowed evenly. Some parts of the fields got too much seed, others not enough. In the 1840’s planting machines, called seed drills, were invented. These machines planted the grain faster and more evenly.

By this time, also, the crude wooden plow of colonial days had been replaced by one made of metal. Most farmers would not use this cast-iron plow at first. They thought it would poison the soil and make weeds grow!

As time passed, some plows were made in separate parts. Then if one part broke, it could be replaced. Farmers would not have to buy a new plow. Later, plows were made of steel. These steel plows worked well in breaking up the thick, tough sod of the prairies.

The invention of the threshing machine speeded up harvesting. The threshing machine separated the kernels of wheat from the stalks. Before this time threshing had been done by beating the stalks with a flail or by driving animals over them. With a threshing

Cyrus McCormick invented a reaper that did quickly what men with cradles did slowly.
machine a small number of men could do the work of many. They could do as much work in a few hours as had once been done in several days.

These inventions and improvements brought about changes in farming. More work on the farm began to be done by machines pulled by horses. Farms grew larger. Farmers did not have to work so hard as when they did all their work by hand.

Wheat farms today are much larger than they were in the 1800's. Many are between three hundred and four hundred acres in size. Some are from five hundred to one thousand acres. A few are even larger. The level or gently rolling land of the North Central States makes it easy to use machines on them. Most machinery is now pulled by tractors instead of by horses.

Today's wheat lands

Wheat is grown in many parts of the North Central States (see the map on this page). This is our Wheat Belt. Notice on the map that the dots are closest together in Kansas and North Dakota. These are the two leading wheat-growing states. Bismarck, the capital of North Dakota, is a shipping center for near-by wheat farms and cattle ranches. Topeka, the capital of Kansas, is one of the Wheat Belt’s shipping and manufacturing centers. Topeka has flour mills, meat-packing plants, and large railroad shops.

The wheat-growing region around Kansas is called the winter-wheat region. It extends into Nebraska, Oklahoma, and Texas. Winter wheat is sowed in the autumn and harvested in early summer. An important trade and manufacturing center in the winter-wheat region is Lincoln, the capital of Nebraska. Lincoln has flour mills, and also one of the world’s largest creameries.

The region around North Dakota is known as the spring-wheat region. It extends into Minnesota, South Dakota, Montana, and Canada. The winters here are too long and too cold for wheat to be planted in the autumn. Instead it is planted in spring and harvested in late summer. In the spring-wheat region Pierre (pêr), the capital of South Dakota, is a trade center for near-by farms. An important railroad shipping center and the second largest city in South Dakota is Aberdeen. The largest city and chief manufacturing and trade center in South Dakota is Sioux Falls. This city has the largest meat-packing plant in South Dakota.

Winter-wheat region

Autumn is a busy season on the Mills farm in Kansas. It is planting time in the winter-wheat region. We watch Mr. Mills drive the
tractor across his broad, level fields. Its engine is like that of an automobile. Attached to it is a harrow. Mr. Mills's harrow has sharp steel disks which are shaped like saucers with cutting edges. The disks break up the heavy lumps of earth left by the plow. This kind of harrow is called a disk harrow. When the ground has been cut into very fine pieces, Mr. Mills will sow his wheat. Wheat seeds grow best in fine, firmly packed soil.

"There are many risks connected with farming," Mr. Mills replies when we ask if he expects a good crop. "Farmers cannot always depend on the weather. Too little snow this winter may allow the roots of the wheat to freeze. A dry spring will keep the wheat from growing well. If there are hot, dry winds while the kernels are forming, the kernels will shrink. Heavy rains at harvest time may knock the plants to the ground and cause much damage. Grasshoppers and other insects may destroy the wheat. Or a plant disease called wheat rust may attack the grain. But if none of these things happen, the wheat crop should be good."

Mr. Mills has been a farmer a long time. He knows that there are good years as well as bad ones.

Mr. Mills's farm covers three hundred and twenty acres. Although wheat is his chief money crop, he does not plant wheat on all his land. Like many of the farmers in the wheat region, he carries on mixed farming. He uses some of his land for pasture and some for crops to feed and fatten livestock. He usually plants two hundred acres in wheat, twenty in corn, ten in oats, and forty in alfalfa and other hay crops. The rest of his land is used for pasture, a garden, a yard, the house, and other buildings on the farm. If Mr. Mills's farm were farther west, he would raise sorghum in place of corn. The land is drier farther west. Sorghum, a cane-like grass raised for grain, does not need as much moisture as corn does.

Mr. Mills believes in rotating his crops. Some of the wheat will be planted where oats or alfalfa grew last year. The wheat is sowed with a seed drill. The long box across the top of the seeder is filled with wheat kernels. As the tractor pulls the drill, the kernels slide down little tubes or pipes to the ground. A small disk at the bottom of each tube makes a furrow in the soil. The kernels of wheat fall into the furrow. Chains dragging behind the drill pull the loose top soil over the wheat.

The wheat sprouts in a short time. The broad fields soon grow green and look as though they are covered with grass. Wheat plants continue to grow until cold weather comes. Winter snows are like a warm blanket. They keep the roots of the wheat from freezing.

After the big job of fall planting is over, some winter-wheat farmers have little to do until spring. They plant most of their land in wheat. But not Mr. Mills! Before winter sets in, he husks the corn and puts it away. During the short winter days he feeds the livestock and does other work around the farm. There is always something to do. There are tools to repair, work to be done on the buildings, and machinery to inspect.

When spring comes, the wheat fields begin to grow green again. Before the wheat is ready for harvest, Mr. Mills has many busy days. He plows the fields for the spring crops. He sows oats and plants corn. He helps Mrs. Mills with the garden. By the early part of June the alfalfa is ready for its first cutting. From time to time the corn needs cultivating to keep down the weeds.

Toward the end of June the wheat is ready for harvest. The fields look like a golden sea as the winds blow over the ripening grain. Mr. Mills looks anxiously at the sky. "Will these hot, dry, sunny days continue until harvest is over?" he wonders. He knows what a thunderstorm may do to the wheat crop.

**Harvesting wheat**

When the wheat is ripe, Mr. Mills uses a combine to harvest it. A combine cuts the grain and threshes it at the same time. It cuts
Today a machine like the one shown in this picture is used by many farmers. This machine is called a combine. As it moves over the field, it cuts the wheat and threshes it at the same time. The machine is a great improvement over earlier ways of harvesting.

The heads from the wheat stalks and shakes out the grains of wheat. The chaff and the straw are left on the field. The threshed grain is stored in bins behind the driver's seat. When the bins are full, a truck pulls alongside the combine. The bright kernels of wheat are emptied into the truck.

The whirl and dust of the combines seem to be everywhere. All the farmers in this area are eager to get their wheat harvested as soon as it is ripe. Some of Mr. Mills’s neighbors own their own combines. Others hire men who own a combine and make a business of harvesting grain. Often they work all day and far into the night. As the wheat ripens, they move northward with the harvest.

Some of Mr. Mills's neighbors cut their wheat with a binder. The binder is a machine which cuts the wheat, ties the stalks into sheaves, or bundles, and drops them on the ground. Men stack the sheaves into shocks, or piles. They spread a bundle of wheat across the top of each shock. If it rains, this bundle keeps the rest of the wheat dry.

The wheat is threshed later. The threshing machine is taken to the fields. The bundles of wheat are thrown into one end of it. In a few minutes the kernels of ripened wheat are separated from the stalks. As the golden grain pours out through a small pipe, it is put into bags or a truck. The stalks shoot out of a big pipe and are made into a straw stack which grows higher and higher as the wheat is threshed.

As soon as his wheat is threshed, Mr. Mills must harvest his oats. Then he cuts the alfalfa a third time and bales the straw from the wheat and the oats. He also begins to get the wheat fields ready for fall planting. On other days he hauls the wheat to town to be stored in a tall building called a grain elevator. The building is called an elevator because the wheat is carried up, or elevated, to the top of the building and dumped in. Buckets on a moving belt carry the wheat up.

All over the winter-wheat region farmers haul their wheat to grain elevators in the small towns. They are anxious to get it under cover. There it is stored until it is shipped away. Freight trains carry it to grain markets or to flour-milling cities such as Kansas City.

**Spring-wheat region**

In Montana, North Dakota, South Dakota, and Minnesota spring wheat is raised instead of winter wheat. Wheat grows well in the rich soil of this almost level land. Though the rainfall is light, there is enough for this grain. The rain comes in the spring and early summer when the wheat needs it most.
Much of the work in the spring-wheat region is like that in the winter-wheat region. In the autumn farmers plow and prepare their fields for planting. When spring comes, they plant the wheat as fast as possible.

Most of the farmers in this area carry on mixed farming. Wheat has many enemies: dry weather in spring, frost, hail, rust, grasshoppers, or other insects. The farmers have learned to plant other crops and not to depend on wheat alone. Then if the wheat crop fails or the price of wheat is low, they are not ruined. Many of these farmers also raise oats, barley, hay, and corn as well as wheat. Some raise flax. From the flax fiber a kind of thread called linen can be spun. But most of the flax in this area is raised for its seed. From flax seed an oil known as linseed oil is made. Linseed oil is used to make paint and varnish. Many farmers, especially in the eastern part of the spring-wheat region, keep dairy cows. Like Mr. Mills, these farmers are busy the year round.

Soon after the wheat is threshed in the fall, it is hauled to grain elevators in near-by towns. Roads leading to town are often filled with trucks hurrying to the elevators. In this flat or gently rolling land the grain elevators can be seen miles away. They are the tallest buildings anywhere around.

Night and day after the harvest season, freight trains roll eastward with their loads of golden grain. Some grain is taken to large flour mills in Minneapolis. Minneapolis is one of the most important flour-milling centers in the world. Much grain is also taken to Duluth (doo-lut) on Lake Superior. There it is stored in giant grain elevators until it can be shipped down the lakes.

Thousands upon thousands of bushels of wheat go by lake freighter to Buffalo. As you know, much of it is made into flour there. Some wheat is sent from Buffalo to other busy cities in the East. There it is made into flour or exported to other lands.

Flour milling

In early days the miller was one of the most important men in town. Farmers from miles around brought wheat to him for grinding. Townspeople also depended on him for flour. His busy mill was a meeting place where people visited while waiting for the grain to be ground. They enjoyed exchanging news, discussing the affairs of the town, and talking about the weather and the crops.

The mill was usually built beside a stream or a river. The miller used the power of the river to run his mill. The moving water turned the big wheel on the outside of the

A binder cuts the wheat stalks, ties them into bundles, or sheaves, and drops them on the ground. Later a threshing machine moves into the field. The sheaves of wheat are fed into the machine which separates the grains of wheat from the straw.
mill. This wheel was connected with the millstones inside. As the big wheel rumbled round and round, the heavy millstones ground the wheat into flour.

Most flour mills are run by electricity today. Wheat from hundreds of small elevators is shipped to modern mills in big cities. There it is stored in giant elevators which belong to the mills. These elevators hold thousands upon thousands of bushels of wheat. When the millers need grain, a wide, moving belt carries it to the top of the near-by mill. From there pipes take it from floor to floor. On the way down it passes through many machines.

From the time the wheat enters the mill until it leaves as flour, machines do all the work. Machines clean and wash the wheat before it is ground. They remove any dirt, sticks, stones or seeds mixed with it. Other machines grind the wheat into flour. These machines are tightly closed to keep the flour from being blown out. In a modern mill the wheat passes between many sets of steel rollers. Each time it passes through a set of rollers it is ground a little finer. After each grinding, it is sifted. The fine silk cloth of the sifters takes out the pieces of bran. Bran is the dark outer coat of the wheat seed. When whole-wheat flour is made, this outer coat is left in. When white flour is made, the bran is taken out. It is not wasted but is used for chicken and cattle feed.

When the flour becomes very fine and smooth, it goes to the packing room. Machines put it into bags, sacks, or boxes. Just the right amount is put into each bag whether it is large or small.

Workers load the sacks and bags of flour into trucks or freight cars. Bag after bag of it goes to all parts of our country. Some of the flour comes to the bakery near your home. Some of it goes to your grocery store. Some is sent to other lands.

**DAIRY FARMING**

Thousands of gallons of milk were rushed to the cities and towns of the North Central States this morning. That was the milk order for the people of the area for one day. That is a lot of milk for just one day, isn't it? But the same order will be repeated every day. Day after day, in good weather and bad, people need fresh milk.
Most of this milk comes from near-by farms. Notice on the map on this page that the North Central States have many dairy cattle. Wisconsin, Minnesota, and parts of Iowa, Ohio, Indiana, and Illinois are our country’s leading dairy states. Minnesota is noted for its butter.

Wisconsin is first in cheese making. Madison, the capital of Wisconsin, is in the heart of Wisconsin’s dairy region. Madison manufactures farm machines and medical supplies.

Iowa is one of the leading butter producers in our nation. The capital and largest city of Iowa is Des Moines (dë-moin’). Des Moines is a trade and manufacturing center. It produces farm machinery and cereal products and has meat-packing plants.

The land used for dairy cattle grazing is not as level as the land in the Corn Belt. Some parts are hilly and rough. Others are swampy or have many lakes. Winters are longer and colder than in the Corn Belt. Summers are cooler and shorter. There are well-fed dairy cows instead of beef cattle in the rich, grassy pastures. There are creameries and cheese factories instead of grain elevators and stockyards in the towns.

The fields

The neat, well-kept farms look much alike. Often there are groves of trees in the pastures. Cows like to lie down in the shade during the heat of the day. Sometimes there is a stream flowing through the farm, for cows need plenty of water to drink. There are hayfields, cornfields, and fields of oats or other grains. Cows need grain as well as grass and hay to give rich cream and milk.

Hay grows well in the cool, moist summers of the dairy regions. It is cut and allowed to dry in the sun before it is stored for winter feed. Oats and other grains are also raised for winter feed. Straw left after these grains are threshed is used for bedding for the cows.

The barn, silo, and milkhouse

The barn is light and airy. Its concrete floor is easily washed. Whitewashed walls and ceiling make it clean and light. Many windows let in light and air. Each cow has her own stall, or place in the stable, where she sleeps. She has her own feeding box and sometimes her own water dish with water running in it.

Hay and grain are stored in the big hayloft in the upper part of the barn. They are fed to the cows during the cold, snowy winter days.

The tall, round building that looks like a tower is the silo. Winter feed for the cattle is stored in it. Cornstalks are cut while they are still green. A machine chops up the

Name the North Central States that are in the hay and dairy belt. What belt lies south of this region? What are the principal products of this area?
stal\k, leaves, and ears into little pieces. It blows the pieces through a pipe into the silo.

The milkhouse is near the barn. The farmer keeps this building spotlessly clean. In one room he takes care of the milk. In the other he washes the cans and other things used in caring for the milk. In summer the windows and doors are screened. This keeps out the insects but lets in air and sunshine.

As soon as the cows are milked, the milk is taken to the milkhouse. It is weighed, strained, and cooled. After it has cooled, it is put into large, clean cans which are covered at once. These cans are kept cool until they start on their journey to you.

The dairy farmer is kept busy Sundays, holidays, and every day. Morning and evening he milks the cows. In between times he feeds the cows and cleans the stalls. In spring and summer there is even more work. Then he plants crops so that his cattle will have feed for winter.

The dairy plant

People in big cities need fresh milk every day. Dairy farms from miles around supply it. Milk from farms close by is taken directly to the city dairy plant. Milk from farms farther away is taken to milk stations first. There it is weighed, tested for the butter fat it contains, and cooled. Then it is shipped quickly to the city milk plant.

Perhaps you have seen large tank trucks carrying milk from the receiving station to the city. They can carry milk long distances. They keep it cold until it reaches the dairy plant. Sometimes milk is put into railroad cars and hurried to the city. Huge glass-lined tanks inside these cars keep the milk cold and clean.

Everything is done at the dairy plant to keep the milk clean, pure, and safe. Much of the work is done by machinery. The glass bottles must be thoroughly cleaned. They are washed and then sterilized to kill germs before they go to bottle-filling machines. The milk is pasteurized, or heated, to kill certain germs. Then it is cooled and put into the bottling machines. Each clean bottle is filled with milk and capped at once.

Perhaps you have bought milk in paper bottles called containers. These containers are sterilized before they are filled. Then they are dipped in hot paraffin, a kind of wax.
Paraffin makes them stronger and keeps them from leaking. When the paper containers are filled, they are sealed and dated. Then into wooden boxes they go, ready to be delivered to the grocery store or your home.

The cheese factory

Some dairy farmers live too far away to send fresh milk to the large cities. Many of these farmers separate the cream from the milk and sell the cream to creameries. There it is made into butter.

These farmers often raise pigs and poultry. They feed skim milk to these animals. Skim milk is the milk left after the cream has been separated from it.

Other farmers sell fresh milk to cheese factories. The milk is carefully weighed and tested when it is brought into the cheese factory. It is then put into big, clean tanks and heated. Other things are then added to give the cheese a good flavor and change the milk to curd. Curd is the thickened part of milk from which cheese is made. The watery part of the milk left after the curd is formed is called whey. Farmers living near cheese factories feed whey to their pigs. Whey is also dried and put into feed for livestock.

The curd is cut and stirred and heated so that the whey will run out of it. Then the watery whey is drained off. The curd is cut and stirred until no more whey runs out of it. Now the curd is solid and almost dry. Salt is added. The curd is placed in metal hoops or molds. These molds are put into a pressing machine. By the next morning the smooth and solid cheese is ready to be lifted out of the hoops. It is left to dry for a few days. Then it is dipped in paraffin. Paraffin keeps it from molding and getting too dry while it is curing, or ripening.

The shelves of the clean, dark, cool curing room are filled with cheese. Each cheese stays in the curing room until it has just the right flavor. Some kinds of cheese need only a short time to cure. Others need many months or years. From the curing room cheese is shipped all over our country.

In cheese-making this long wooden rake is used to help separate the curd from the whey.  
Kraft Cheese Company

After draining, the curd is cut into slabs and left in tubs until the flavor is right.  
Kraft Cheese Company
Dairying in the past and today

When this country was first settled most farmers carried on general farming. They raised grains and other crops. They kept a few cows to furnish milk, butter, and cheese for themselves. Sometimes they made more butter or cheese than they could use. At the village store they traded what they did not need for groceries and other supplies. Other farmers kept a few extra cows. They sold their surplus milk and butter to regular customers in towns and cities.

After a while farmers became interested in dairying as a business. They brought better breeds of dairy cattle from Europe. These cows gave more and richer milk. Farmers also learned that cows needed good food and good care to give rich, pure milk. The invention of the cream separator made it easier for them to separate cream from milk. A test for butter fat helped farmers decide which cows were giving the richest milk. They received a better price for the milk which had more butter fat in it. Refrigerator cars made it possible to send dairy products longer distances. Milking machines made it easier for the farmers to have large herds.

The milk and cream sold by dairy farmers today are used in many different ways. The milk may be used fresh. The milk and cream may be made into ice cream, butter, cheese, evaporated, condensed, or powdered milk. Chemists have done interesting things with milk by adding different chemicals to it. From the milk so treated they have made artificial wool, paints, and beautifully colored plastics for dishes, toys, and other articles.

LUMBERING IN THE NORTH CENTRAL STATES

When settlers first came to the Northwest Territory, forests covered most of the land east of the Mississippi River. These were fine forests of oak, hickory, elm, and maple, pine, spruce, and fir. For centuries Indians had lived in these forests but had made little change in them. When the pioneers came, all this was changed. They lost no time in cutting down the trees. They built their homes, their barns, and their fences of them. They used them for lumber to make flatboats, keelboats, and canoes. They used some for fuel. Still others were cut down to make room for fields of grain.

The settlers were not concerned about the cutting of the trees. Why should they be? So far as they knew there were trees enough to last forever. They could not know that a time would come when people would need to conserve, or save, them.

Most of the white pine trees had already been cut down in the northeastern section of our country. In the Great Lakes region of the Northwest Territory these highly prized trees grew in abundance.

Great Lakes Region

Lumbering was an important industry in the Great Lakes region by the time the War Between the States had ended. The cold winter days were busy ones in the forests. The ring of axes and the sound of crosscut saws were heard everywhere. Over and over again the shout of "Timber...r...r!" rang through the forests. The trees crashed to the ground with a roar. All winter lumbermen worked at cutting trees and sawing them into logs. They hauled them in wagons to the frozen rivers and streams. Sometimes oxen and horses dragged them over icy roads. In spring the ice in the rivers melted. Then the lumbermen became daring, fearless rivermen and drove the logs down the rivers to the sawmills. The mills were usually built where rapids or falls in the river furnished power.

Factories using wood for carriages, wagons, and furniture often grew up near the mills. Lumber from these northern forests helped build many cities and towns along the Great Lakes. Lumber from these regions also helped build new settlements on the treeless plains of Missouri and Kansas.

Like the pioneers, lumbermen seemed to think these forests would last forever. Often
they cut down all the trees in a region, but used only the best timber. The rest was left to rot on the ground. Time and time again lumbermen did this until much of the timber had been cut.

For a while this forest region produced more lumber than any other section of the United States. Today only a little lumbering is carried on there. The Federal and state governments have started to replant this region. In years to come, careful cutting and replanting will make the Great Lakes region an important source of lumber again.

MINING

Under the soil of the North Central States are riches the Indians never dreamed were there. Iron ore, coal, oil, natural gas, copper, gold, zinc, and lead are important mineral resources found in these states. Mining is a leading industry in several parts of them.

Lead and zinc

Our most important lead-mining district is located in southeastern Missouri on the Ozark Plateau. French explorers discovered the lead in the Ozark Plateau in the early 1700's. Lead mining is still carried on here. There is also much zinc in this plateau.

The part of the Ozark Plateau which extends from southwestern Missouri into Oklahoma and Kansas also produces lead. But zinc is the chief metal mined there. This district is an important zinc-producing region of our country.

Petroleum and natural gas

Both petroleum and natural gas are found in the North Central States. Find these fields on the map on page 245. The pipe lines show how these fuels are carried to places where they are used.

Coal

Petroleum and natural gas are not the only fuels mined in the North Central States. Deposits of bituminous, or soft, coal are found in Illinois and Indiana. Where else is coal found in the North Central States? (See the map, page 245.) These fields are among our country's leading coal fields. They supply fuel for running factories and heating homes. Coal from them is also sent to near-by lake ports. There it is loaded on freighters for shipment up the Great Lakes.

Gold

Gold ore is mined in the Black Hills of South Dakota. This has been an important gold-mining region for many years. The largest gold mine in the United States today is at Lead (lēd), South Dakota.

Copper

Long before Europeans came to America, Indians mined copper in northern Michigan. When the French came, the Indians told them about this metal. They showed the Frenchmen objects they had made from copper. But the French were more interested in the rich furs of the forests. They did little with the copper and soon forgot about it.

Years passed, a hundred years and more. In the early 1800's the copper in this area was again discovered. What excitement there was! Men flocked to northern Michigan. The copper deposits became the goal of hundreds of copper seekers.

For years Michigan produced most of the copper mined in the United States. This metal is still being mined in Michigan, but other states now lead in copper production.

Iron ore

Frenchmen who traveled through the forests around Lake Superior never guessed that iron ore was hidden beneath the soil. The English did not learn of this hidden wealth either. By the treaty of 1783 they gave up their claim to land south of the Great Lakes. The rich deposits of iron ore became part of the United States.

Many more years passed before people learned of this ore. Then chance led to its
discovery. A party of men were measuring land in northern Michigan near Lake Superior when an unusual thing happened. Their compass needle began to shift and turn and change direction. Nothing the men did could make the needle stop its strange behavior. "There must be iron near by," they said. "Only iron would cause the needle to act so strangely." Sure enough, when the men looked among the rocks and trees, they found deposits of iron ore.

News of the discovery spread. Some men interested in finding minerals heard about this ore. They persuaded an old Indian chief to guide them through the wilderness to it. These prospectors were pleased to find so much iron. They lost no time in forming a mining company and getting a title or claim to the land. Soon they began to mine the ore. This was fairly easy, since the ore was very near the surface.

Years passed. More ore was discovered in the hilly Laurentian Upland near the west end of Lake Superior. Find this region on the maps, pages 9 and 245. This is our nation's greatest iron-mining region. Four of every five tons of iron ore mined in the United States come from this district. It has made our nation one of the greatest producers of iron ore in the world.

Mining companies know that the rich ores of the Lake Superior region cannot last forever. Within recent years much of the best ore has been mined. Men are wondering how soon these deposits will be used up. They are looking for new deposits of this useful metal.

Some of the ore is found far underground. It can be reached only by deep shafts and underground tunnels. This ore is expensive to mine. But it has one advantage. Miners can work there the year round. The cold winters of this region do not stop underground mining.

Sometimes the ore lies near the surface of the ground. No shafts or tunnels are needed to mine this ore. It is mined easily and cheaply. The loose earth and gravel which cover it are easily stripped off. Large steam or electric shovels scoop up the ore. Deeper and deeper these power shovels dig into the deposits. Soon there is a huge pit, or hole, in the ground. This method of mining is called open-pit mining. The largest open-pit mine in the world is in the Mesabi (mě-sā'bē) iron range, in Minnesota.

Most of the ore from this region is shipped from Superior, Wisconsin. Superior is one of the most important iron-ore exporting ports in our country. Find it on the map. Long trains of loaded freight cars hurry from the mines to this port. They pull out on Superior's great loading docks high above the water. The reddish-brown ore they carry is emptied into pockets or bins beneath the
tracks. Freighters carry the ore down the lakes during eight ice-free months each year.

**THE GREAT LAKES**

The Great Lakes have become one of the world's most important inland waterways. Near their western end are great deposits of iron ore and a great wheat-producing region. Near their eastern end are coal fields and great cities (see map, page 12). Here raw materials shipped from the western region are made into manufactured goods. Together with their connecting rivers and lakes and the New York Barge Canal the Great Lakes form a continuous waterway from the middle part of the continent to the Atlantic Ocean.

**Cargoes**

Long, low freighters carry iron ore, coal, limestone, or grain. These are the most important cargoes, or freight, on the Great Lakes. Petroleum and copper are other cargoes. Specially designed ships carry shiny, new automobiles from Detroit and other Michigan cities.

The cost of shipping becomes important when heavy and bulky materials like coal and iron ore are shipped long distances. The automobile you ride in costs much less because the Great Lakes can be used to transport, or carry, the ore. For shipping by water is much cheaper than shipping by land or air.

When a boat goes up the lakes empty, it adds to the cost of the cargo it brings down. An empty boat brings the owner no money. For this reason many freighters carry coal on their trip back to the ore ports. Coal is the most important cargo taken up the lakes.

**Vineyards and orchards**

Most people think of the Great Lakes only as a fine water highway. Fruit growers along the Great Lakes think of them in a very different way. These lakes save them hundreds of thousands of dollars each spring and fall.

*United States Steel Corporation*

Many open-pit mines like this one are found in the iron-mining region. As the big shovels dig deeper, new railway tracks are laid farther down in the earth. Engines can then pull the cars, loaded with ore, to the surface. After that the ore is hauled to the docks.
What large cities are on the Great Lakes? What other waterways connect with the Great Lakes?

The map on page 245 shows three important fruit regions along the lakes. These are the western shore of Lake Michigan in Wisconsin, the eastern shore in Michigan, and the southern shore of Lake Erie in Ohio. Winds and the location of the lakes help explain why these regions grow so much fruit.

Winds in the northern part of the United States come mostly from the west. Before these westerly winds reach the fruit lands, they have been blowing over water. In spring the water of the lakes is cold. The winds are cooled by blowing over this cold water. As they blow over the land, they bring this cool air with them. This delays the blossoming of the orchards and vineyards until there is little danger of frost.

During the summer the water in the lakes is heated by the sun. In the fall the water stays warm long after the land has cooled. Winds blowing over this warm water are warmed by it. As they blow over the land, they take the warm air with them. This protects the orchards and vineyards until the fruit has had a chance to ripen.

Vacationists

Vacationists think of the Great Lakes in yet another way. These waterways and the lands around them offer rest and play.

Thousands of summer visitors are attracted by the sandy beaches and the beautiful scenery along the lakes. Others find relief from the heat and noise of the cities. They stay at hotels, cottages, and tourist camps along the shores or in the forests near by. Many people spend their vacations by taking a cruise on big passenger ships. Owners of sailboats, speedboats, or other water craft find pleasure in sailing them on these lakes. Fishermen find good fishing in the many smaller lakes of the region. Hunters find deer, bear, and other wild animals in the forests near by. Many people earn their living taking care of the vacationists who come here.

Shared by two nations

The Great Lakes are shared by both Canada and the United States. Yet nowhere along them is there a battleship or a fort.
Over a hundred years ago representatives of the governments of these two countries had a meeting. They agreed on the way they would patrol the waters of these lakes. Since that time the people of these two nations have worked together well. They have not needed to be protected from one another.

Ships of Canada and the United States use the lakes and canals without charge. Even the Welland and Soo canals between the lakes are used without paying tolls. Lake Michigan is entirely within the United States, yet Canadian ships use it freely. The Great Lakes are free waterways used by free peoples.

The St. Lawrence Seaway Plan

More and more people in Canada and the United States are becoming interested in the St. Lawrence Seaway Plan. This is a plan to deepen, widen, or improve parts of the St. Lawrence River and the waterways between the lakes. At present only small ocean-going vessels can come inland as far west as Duluth, Minnesota. If the seaway plan is carried out, ocean-going vessels could reach this port. The map on page 272 helps explain this.

A TRIP THROUGH THE GREAT LAKES

We are going down the Great Lakes from Duluth, Minnesota, to Cleveland, Ohio, with a cargo of iron ore. Our ship is one of the largest on the Great Lakes. It is more than six hundred feet long. That is longer than most city blocks. See the picture of an ore boat on page 275.

We are about to go aboard. A sailor throws us a rope. We tie our baggage to it. He lifts it on board as we climb up the steel ladder to the deck. Here is the pilot house where Captain Allen greets us. The engine room and deck house are aft, or at the rear. They seem far away from where we stand. Captain Allen says, "Lake freighters are different from most ships. All the space between the pilot house and the engine room is the hold. The hold is the place where cargo is carried." We look down through the hatches, or openings, into the hold. It is big and very clean.

The ore-loading dock rises high above us as our ship glides alongside it. Steel chutes, or tubes, from pockets in the dock are let down through the ship's hatches into the hold. Soon reddish-brown ore comes rumbling and thundering down the chutes.

Within a few hours the last of the ore thunders into the hold. We watch as the covers are put on the hatches. A huge crane comes sliding toward us. When it stops, two of the crew fasten steel hooks from its cable. A large part of the deck seems to rise. But it is only the lid for the hatch. Quickly this cover is fitted into place. Then the crane moves on to the next hatch, and the next. In a few minutes all of the hatches are covered.

Captain Allen pulls the whistle cord. The cables on the dock are loosened. Soon we are out on Lake Superior.

Exploring the freighter

Before we leave the pilot house we listen in on the ship-to-shore radio telephone. This is a modern ship. It provides for the safety and comfort of the men.

We go below to visit the captain's living quarters. His stateroom, where he sleeps, and his office lead into a wide parlor. His quarters and those of the forty-man crew are very comfortable. Farther below a tunnel runs alongside the cargo hatches. Crewmen going from one end of the ship to the other do not have to go on deck. They are protected from storm, fog, sleet, or rain. We walk through the tunnel on our way back to the galley.

The galley, which is the ship's kitchen, is the most popular spot on the ship. Anytime, day or night, the men can get something to eat or drink there. At regular meals we will sit at Captain Allen's table in the dining room. But now we get a between-meal snack in the galley.

We are glad we are inside. There is a stiff wind blowing outside. The waves are high
Ore is emptied into bins in the high dock. Chutes are then let down from the bins.

and it is very cold. Everyone wears jackets and sweaters. Captain Allen says, “It is often quite cold on Lake Superior. Sometimes there are heavy fogs. Then we blow the foghorn day and night. Autumn storms are severe on Lake Superior. Ships are often damaged and covered with ice before the storm is over.”

**Rapids, locks, and canals**

Captain Allen shows us a map of the Great Lakes. We notice the rivers and other narrow waterways which connect these lakes. You can find these waterways on the map on page 272.

“Rapids and waterfalls in these waterways made early lake transportation difficult,” the captain tells us. “Canals were built around some of them. The Welland Canal was dug around Niagara Falls so that boats could go between Lake Erie and Lake Ontario. The Sault Sainte Marie (sō’t sant má-rē’) or Soo Canals were built around the rapids in the St. Mary's River between Lake Superior and Lake Huron. One of these canals is on the American side of the river. The other is on the Canadian side.

“Lake Huron is twenty-two feet lower than Lake Superior,” the captain adds. “Ships going between these two lakes are lifted or lowered that distance. Locks are used for this purpose. Locks are large concrete boxes with gates at either end. They are part of the canal. Gates keep the water from flowing into or out of the lock. So many boats use the Soo Canals that four locks have been built in the American Canal. One has been built in the Canadian Canal.”

**Through the Soo Canals**

Traffic is heavy as usual when we reach the Soo Canal. The four locks in the American
Canal are busy. We wait our turn along with several other freighters. Finally we get the signal that Lock No. 3 is open for us. The water in it is at the level of Lake Superior. Surely and steadily our ship glides into the lock. We notice that the gate in front of us is closed. The gate behind us swings shut, and we are cut off from the rest of the canal. Now we are ready to be lowered to the level of the water downstream. Slowly, the water is let out of the lock. Our ship sinks lower and lower. We see more and more of the walls of the lock. At last our ship can go no lower. Water in the lock is at the level of the water in the St. Mary’s River. The big gate in front of us now swings open. With a short blast of our whistle we steam out of the lock. We continue on our way down the quiet, tree-lined St. Mary’s River.

From the St. Mary’s River we steam across Lake Huron. Then we pass through the St. Clair River and Lake St. Clair.

The mail boat comes alongside as we pass Detroit. We slow down as the mail pouches are hauled aboard. This floating post office brings letters, magazines, papers, and parcel post packages to the men on board. It takes away the letters they write.

Delivering the iron ore

Captain Allen has sailed the lakes for almost forty years. He tells us about early days.

“At first ore was manufactured into iron near the mines. But it is cheaper to ship the ore to cities nearer the great coal fields, where it is made into iron and steel. These cities also use much of the iron and steel in their manufacturing industries. Today almost all the ore moves from the mines to the blast furnaces in cities farther East.”

“You can easily see that on this map (see page 272),” he continues. “A large part of the ore goes southward on Lake Michigan. Chicago and Gary, Indiana receive much of

This ore boat, which is as long as some city blocks, has just unloaded its cargo of ore. The water area in which it is turning around is called a turning basin. Along the shores are piles of ore and piles of limestone. At the back is one of the great steel plants at Gary, Indiana.

United States Steel Corporation
This map shows the industrial centers in the North Central States. Can you tell why these areas have grown into industrial centers? How has the location of each city helped it to develop?

We soon enter Cleveland's outer harbor. There we pull in alongside a row of huge machines. These are cranes with giant scoops attached to them. The hatch covers come off, and our ship is unloaded. Our trip down the Great Lakes is ended.

CITIES, MANUFACTURING, AND TRADE

Not all the people in the North Central States are farmers, miners, lumbermen, or workers on the lakes. Many of them work in mills and factories. There raw materials from the farms, mines, and forests are made into usable products. The North Central States have become an important manufacturing region of our country.

Tens of thousands of people in this region earn their living by processing food, which means preparing it for people to eat. Slaughtering, or butchering animals for market, and meat packing are leading industries in many cities and towns. Flour mills are scattered...
One of the largest centers in the world for the manufacture of heavy machinery is Milwaukee, Wisconsin. Milwaukee is Wisconsin’s largest city and its most important lake port. It has a deep harbor. Its location on Lake Michigan provides cheap water transportation for the raw materials it receives and for the heavy machinery it ships out. Some of Milwaukee’s leading products are automobile frames, large gas engines, power shovels and dredges, and tractors. Milwaukee also processes meats and leather and manufactures chemicals, paints and varnishes, textiles, silk stockings, and many other things.

Some industries in the North Central States do not use the raw materials or the natural resources of this region. They get raw materials from other regions of the United States or from foreign lands. This is true of the rubber industry at Akron, Ohio. In Akron many kinds of rubber products are manufactured. The most important are rubber tires and tubes. Akron manufactures

This large airplane tire is only one of the many rubber products made in Akron, Ohio.  
*Goodyear Tire and Rubber Company*

Liquid steel is poured into molds from a large bucket which moves along on a trolley.  
*United States Steel Corporation*
The Chicago River, which flows into Lake Michigan, looked like this in 1833. Notice the water lilies and cattails growing along the banks of the river. The Indians are bringing wild geese to the settlers.

Chicago, great city on Lake Michigan

Largest of all the cities in the North Central States is Chicago, near the southern end of Lake Michigan. It is the second largest city in the United States.

At different times both France and England claimed the land where Chicago now stands. Under the treaty of 1783 this land became part of the United States. Twenty years later a fort was built at the mouth of the Chicago River. Trouble with the Indians

A. Devaney

Today Chicago is a great city. The shores of Lake Michigan and the Chicago River are crowded with skyscrapers. Crossing the river are many bridges. The bridges seen here are made so that they can be opened in the middle. The two sides of the bridge are then raised to allow ships to pass through.

more automobile tires than any other city in our country.

Columbus, the capital of Ohio, is another busy industrial city in this area. It has the world's largest factory for making mining machinery. It also has machine shops, meat-packing plants, and other factories.

There are many large cities in the North Central States. Four of these are among the ten largest cities in our nation. All of them are important for manufacturing of one kind or another.
kept the settlement small at first. Even after
danger from the Indians was over, the settle-
ment grew slowly. Then steamboats and rail-
roads helped it grow.

Settlers from the East came to Chicago by
lake steamboats. From there they began
their journey to their new homes on the
prairies. Soon grain and cattle were being
sent to Chicago from the farms of these
prairie settlers. Chicago shipped many of
these products to busy cities in the East. In
turn, the Eastern cities shipped manufac-
tured goods to Chicago. This city soon be-
came a trading, or marketing, center for the
region around it. Today Chicago is the most
important marketing center in the North
Central States.

Notice on the map on page 12 how Lake
Michigan extends southward into the North
Central States. When railroads were built in
this region, they could not cross Lake Mich-
igan. So they curved southward around the
end of the lake and centered in Chicago.
This city today is the greatest railroad center
in our nation. It is also reached by planes,
trucks, river barges, and lake freighters. It
has excellent air, highway, river, and lake
transportation.

Chicago’s railroads and its central location
have helped it become our nation’s greatest
meat-packing center. Millions of animals
from the North Central States are sent to
Chicago’s stockyards every year. Cattle and
sheep from western ranches are also shipped
to this great meat-packing center.

Usually these animals are kept only a few
hours in the huge stockyards before they are
bought. Soon after the animals are bought,
they are weighed and driven to the pens of
the packing houses near by. There they are
killed, and the meat is processed for market.
Fresh meat is the chief product of the pack-
ing houses. Canned, pickled, and smoked
meats are also prepared.

In early days slaughtering was done mostly
in winter. The meat was cured by pickling,
salting, and smoking. When cold storage and
refrigerator cars came into use, slaughtering
became year-round work. Then fresh meat
could be had any time of the year. Today
refrigerator cars carry fresh beef, pork, lamb,
and veal to all parts of the country.

Other industries connected with meat-
packing have grown up in and around Chi-
cago. These industries use the by-products
of the packing houses. By-products are prod-
ucts, such as hides and wool, which the meat
packers do not use. Hides of cattle slaughtered
in the packing plants are sold to tanneries.
Wool from the sheep goes to textile mills.

This great log has been
brought from Africa (see
the map, page 7). It is
more than four feet thick.
After the bark has been
stripped off, the log will
be cut into thin sheets
which are used for veneer
and into boards for the
making of fine furniture.
In most automobile factories today the engine is put together as a unit. Then it is bolted to the frame, which is built separately. The frame includes the wheels and the axles.

Other factories make buttons from the hoofs, horn, or bones of the animals. Medicine, soap, fertilizer, and glue are a few of the many other by-products of the packing plants.

Meat packing and the industries connected with it are only part of the work done in Chicago. Other foodstuffs are prepared for market. Corn is made into all kinds of corn products. Chicago is the center for this industry. This city is also a busy grain market. Chicago manufactures more farm machinery than any other city in the United States. Much of it is used on the great farming lands of the North Central States. Much is also sent to different parts of the country and to foreign lands. More furniture is made in Chicago than in any other city in the country. Chicago’s position on the Great Lakes provides cheap transportation for bringing raw materials to the factories and shipping out the finished products to all parts of the world.

Detroit, the Motor City

Before the time of automobiles the many people living in the Great Lakes region of the North Central States needed wagons and carriages. Most of these were made in Chicago. When automobiles began to be made, factories were started in Detroit. These were so successful that other automobile factories were built there. So many automobiles are now made in Detroit that it is often called the Motor City. The manufacture of automobiles, bodies, and parts has also become important in other near-by Michigan cities. Among these cities is Lansing, the capital of Michigan. Lansing is also a trade center for surrounding farms. South Bend in Indiana and Toledo in Ohio are also important in manufacturing automobiles. Many other products are made in Detroit’s factories. Among them are airplanes, ships, and equipment for railroads.
Cleveland, busy port on Lake Erie

Iron ore and coal play an important part in the work of the cities along Lake Erie's southern shores. The map on page 272 shows that iron ore can be sent down the lakes to these ports. Cleveland, a port on Lake Erie, is the world's largest receiver of iron ore. The map on page 114 shows how close these cities are to the important coal fields of the Appalachian Plateau.

Cleveland, you remember, was laid out by Moses Cleaveland and his surveyors. It is now the largest city in Ohio, and one of the ten largest in the country. Much of Cleveland's work is carried on in the valley of the Cuyahoga (ki-hog'ə) River. Here are railroad tracks, power plants, oil refineries, blast furnaces, steel mills, and unloading docks. Many products are made in the hundreds of plants in the Cleveland district. Bolts, nuts, wire, machine tools, men's and women's clothing, rayon, parts for motor cars, and paints are a few products made in Cleveland. However, the making of iron and steel and the products made from them is the most important work done in Cleveland.

Toledo, a lake and river port

Toledo is another important port on the southern shore of Lake Erie. Find it on the map on page 276. Notice that it is also at the mouth of a river. Along its banks are docks, factories, refineries, and rail yards.

Today Cleveland is one of the large industrial cities in the United States. The tall building on the right is the Terminal Tower Building. The buildings around the small park in the center of the picture include the City Hall, the County Courthouse, and the Public Library. The round building in the front of the picture is the city stadium where people attend sporting events.
Following the Louisiana Purchase, St. Louis began to grow rapidly. Steamboats sailing up and down the Mississippi carried freight and passengers to and from the city. Men going to the West bought supplies at St. Louis.

Thousands of cars of coal come into Toledo's railroad yards yearly from mines in Ohio, Kentucky, and West Virginia. At its docks huge machines pick up the coal cars one by one and dump the coal into waiting lake freighters. They carry it up the lakes to Detroit, Milwaukee, Gary, Chicago, and Duluth. Toledo is the largest shipping center of soft coal in the world. It is also an important center for refining petroleum. Toledo's chief industry is glass manufacturing. Automobiles are also a large industry.

**St. Louis, great city on the Mississippi River**

About two hundred years ago Frenchmen built a fur-trading post where St. Louis is today. They wanted to trade with the Indians of the Mississippi and Missouri river valleys.

Find St. Louis on the map on page 12. Notice that it is on the west bank of the Mississippi, south of the mouth of the Missouri River. Notice also that it is not very far from the mouth of the Ohio River. Can you explain why this was a good location for a trading post?

Not long after St. Louis was founded, it became the fur-trading center of the region around it. Today it is the greatest center in our country for distributing and processing furs. Fur processing means getting furs ready to use and sell.

When people began moving to lands west of the Mississippi River, St. Louis started to grow. Farmers, fur agents, merchants, and adventurers stopped at this city on the Mississippi. Here they bought supplies and equipment for their westward journey. St. Louis soon became known as the gateway to the West.

In steamboat days St. Louis was an important Mississippi River port. Its wharves were busy shipping and receiving goods. Much freight is still carried by river boat. All the year round, towboats and their barges go back and forth between St. Louis and New Orleans. They carry cotton, sulphur, crude oil, and other petroleum products up the river.

Some boats go as far upstream as Minneapolis or Chicago. On their return trip they carry wheat and steel products. Among the steel products carried down the river are automobiles. The transportation of automobiles and the activity of unloading them on special docks add interest to present-day life on the Mississippi. Shipping the automobiles by water reduces their cost. From the west, boats on the Missouri River also bring freight to St. Louis. From there it is shipped to other ports.
Kansas City, Missouri, one of the busiest cities in the Middle West, is a center where grain and livestock are bought and sold.

St. Louis has become an important railroad center. Airlines and highways also make it possible for travelers from other important centers to reach this city easily.

Farm products, minerals, and other raw materials come by truck, train, plane, or boat to St. Louis and the cities near by. From them manufactured products are easily distributed to many places.

Food processing is an important work in the St. Louis district. Large stockyards and meat-packing plants as well as plants for processing corn and wheat are there. St. Louis is also important for brewing beer, manufacturing drugs, and making boots and shoes.

The tiny trading post begun so long ago is now the largest city on the Mississippi and one of the ten largest cities in the nation.

Kansas City, two cities on the Missouri

Kansas City in Missouri and Kansas City in Kansas are two cities with the same name. They are on the Missouri River where it bends eastward on its way to the Mississippi. Of the two, Kansas City, Missouri, is the larger. These cities with only the river between them are so close together that they are like one big city.

The preparation of food has long been the most important industry in the Kansas City district. Raising animals and growing wheat and other grains is the chief work on the surrounding plains. Many cattle, sheep, and hogs are shipped to this district yearly. It is one of our largest livestock markets and an important meat-packing center. Good railroad transportation makes it easy to send the meat products to markets in all parts of our nation.

This district is an important grain market and flour-milling center. Millions upon millions of bushels of wheat come from the neighboring plains to this great grain market yearly.

There are other kinds of mills and factories in the Kansas City area. But most people earn their living by doing work connected with the animals and grain raised in the surrounding region.

Another trade center on the Missouri River is Jefferson City, the capital of Missouri. Jefferson City handles the products of the surrounding farms.

Minneapolis and St. Paul, Twin Cities

Minneapolis and St. Paul, in Minnesota, are often called the Twin Cities. A glance at the map shows why. St. Paul is on the eastern bank of the Mississippi River just below Minneapolis on the western bank of the river. In early days boats could travel upstream only as far as St. Paul. They can now go up the river as far as Minneapolis. Barges carry great loads of oil, gasoline, coal, and machinery to this city.

St. Paul is the capital of Minnesota. But both cities share in the trade and other business of the region around them. On the map on page 12 locate the Mississippi River cities.
This beautiful state capitol is in St. Paul. It is built of marble and Minnesota granite and stands on a hill. Inside are wall paintings of events in the state's history. Besides being the capital of Minnesota, St. Paul and its twin city Minneapolis form a large manufacturing and trading center.

Minneapolis is the larger of the two cities. It grew up at the Falls of St. Anthony. In early days these falls furnished power to saw logs from near-by forests. As wheat became important on the Western plains, their power was used to grind grain. Flour mills were built along the banks of the Mississippi. Since that time flour milling has been one of the important industries of Minneapolis. Minneapolis and Buffalo, New York, are the two leading flour-milling centers in the United States.

Millions of bushels of wheat come yearly to Minneapolis. Every visitor in this city has noticed the huge grain elevators where this wheat is stored.

Other manufacturing is also carried on in the Minneapolis-St. Paul district. There are butter factories, meat-packing plants, and mills where the oil, known as linseed oil, is made from flaxseed. Farm tools are also made here.

The North Central States, as you now know, have fertile land, a climate good for farming, and important minerals. We get corn, wheat, livestock, and dairy products from their farms. Their mines yield iron ore, coal, copper, gold, and petroleum. We get much lumber from their forests. The North Central States have some of the biggest market centers in our country. In these cities farm, mine, and forest products are sold, processed or manufactured, and shipped out. The North Central States are one of our chief farming, mining, lumbering, and manufacturing areas.
TO HELP YOU LEARN

Words and Terms You Should Know

reaper        stall        whey        by-product
scythe        sickle       chute       linseed oil
cradle        hold         sorghum     pasteurize
combine       bran          sterile     seed drill
hatch         curd          thresh      open-pit mining

A Matching Game

The phrases below describe or define the words and phrases listed above. Number a sheet of paper from 1 through 22. After each number write the word which matches the definition.

1. The opening into the lower part of a ship where the load is carried
2. A tall building where grain is stored
3. Oil from flaxseed which is used in making paint and varnish
4. A machine for cutting grain
5. A long, curved blade fastened to a long handle, used for cutting grain
6. A sloping trough down which things may slide to a lower level
7. To beat out kernels of grain from the stalks
8. Killing germs in milk by means of heat
9. The thickened part of milk from which cheese is made
10. The dark outer coat of the wheat seed
11. The lower part of a boat where the load is put
12. A curved blade fastened to a short handle used for cutting grain
13. A machine with sharp steel teeth used to break up lumps of earth
14. A machine which cuts grain and separates it from straw at the same time
15. Butchering animals for market
16. Mining done on the surface of the earth
17. A canelike grass grown for fodder or sirup
18. Killing germs by heat, for example, the boiling of milk bottles
19. The watery part of milk left after the curd is formed
20. Something produced from what is left after the main product has been manufactured
21. Machines used to plant corn or other grain
22. A frame fastened to a scythe

Can You Answer These?

1. Why have the North Central States become one of the important regions for producing food in the world? Include rainfall, soil, surface, and latitude in your answer.
2. How is corn planted? How is it cultivated? How is it harvested? How many things can you name that are made from corn?
3. What is the Corn Belt? Why are the states in the Corn Belt also important for cattle, hogs, and poultry?
4. What machines speeded up farm work and made it possible to have large farms run by fewer farm workers?
5. When is wheat planted in North Dakota? When is it planted in Kansas? Explain the difference between the two.
6. What are some of the dairy states in the North Central region? How is the dairy region different from the Corn Belt?
7. How are these three buildings used on a dairy farm: (a) barn (b) silo (c) milkhouse?
8. What happened to the forests which the North Central States once had? How can this region again become a source of lumber?
9. What mineral resources do the North Central States have?
10. How is open-pit mining carried on? Is this a good method of mining? Why or why not?
11. Explain how Ohio became a great manufacturing state. What are Ohio’s greatest cities and for what are they noted?
12. Why are the Great Lakes important to the North Central States? To the nation?
13. How did Detroit become a great industrial center?
14. Tell the story of St. Louis from the time it was a trading post in 1804 until the present.
15. Name other cities in this region which played a part in the early history of this area. How did their location help to make them important?
16. What reasons can you give for Chicago's becoming such a large and important city?
17. Why are the southern shore of Lake Erie and the eastern shore of Lake Michigan good for growing fruit?
18. How have engineers overcome the falls and rapids in the Great Lakes water system?

What Is the Right Answer?
From the sentences below choose the correct ending for each sentence.

1. Lake freighters traveling from Duluth to Cleveland carry (a) coal (b) lead (c) iron ore
2. From the Ozark Plateau in Missouri comes our greatest supply of (a) iron ore (b) lead (c) coal
3. The seed of the crop which is valuable in making paint is (a) flax (b) wheat (c) sorghum
4. An important crop grown on the shores of the Great Lakes in northern Ohio and western Michigan is (a) corn (b) fruit (c) alfalfa
5. A crop which is planted in the fall in Kansas and harvested in the early summer is (a) winter wheat (b) spring wheat (c) alfalfa
6. The chief crop of North Dakota is (a) winter wheat (b) spring wheat (c) alfalfa (d) flax (e) sorghum

Can You Name These Cities?
1. The leading railroad center in our country is ______.
2. The leading motor city in our country is ______.
3. The world's largest receiving center of iron ore is ______.
4. ______ is the largest shipping center for soft coal in the world.
5. An important center for distributing and processing furs is ______.
6. An outstanding city for making auto tires is ______.
7. This leading flour milling center is ______.
8. ______ is the largest city in Wisconsin.
9. ______ is a large city on the Ohio River.

Making an Outline
Make an outline of Unit 7 like the one you made for Unit 4. The outline is started for you below. Fill in the rest of the outline, and be sure to include all the side headings.

I. The Northwest Territory
   A. Plan of Government
   B. Settling the Northwest Territory
      1. Early settlements in Ohio
      2. _____
      3. And so on
   II. Growth of the United States
      A. The Louisiana Purchase
      1. Exploring the Louisiana Territory
      2. _____
      B. Problems in the New Lands
      1. The Missouri Compromise
      2. _____
      And so on

Using a Time-line
The following events are not in the right order. Copy the statements in the right order. Check with your book for the dates. Now put them on your time-line.

1. A plan of government set up for the Northwest Territory
2. The first settlement made in the Northwest Territory
3. The Homestead Act passed by Congress
4. Kansas admitted to the Union
5. The Louisiana Purchase

Using Maps
1. On the map of the United States, on pages 250–251, locate the North Central States. Between what parallels of latitude do these states lie? Which is the largest? The smallest? Which states border the Great Lakes? Which border, or touch, the Mississippi? The Missouri?
2. On the map of the North Central States, on page 12, find and name the natural regions. Be sure to look at the map key which explains these regions before answering this.
3. On the map of the Northwest Territory, on page 226, name and locate the states which were made from this region.
4. Look at the map on page 238, and find the boundaries of the Louisiana Purchase. Trace the route of Lewis and Clark through the North Central region.
5. Find the Corn Belt on the maps on pages 40 and 246. On an outline map of the United States shade the Corn Belt in green.
6. Find the Wheat Belt on the maps on pages 40 and 260, and shade the wheat regions on your outline map in yellow.
7. Study the map on page 270, and shade in black the regions in the North Central States where iron ore is found.
8. From the map on page 245 make a list of all the foods that might be made from things grown on farms in the North Central States. If you can, bring to class pictures to illustrate your list.
9. How much of the North Central region lies in the dairy belt? To answer this, look at the map on page 265.
10. On the population map on page 36 find the areas of greatest population. Why do so many people live in these areas? Where are the areas which have the fewest people?
11. On the map on pages 250–251 trace the route of a sack of flour from Minneapolis to New Orleans by water. How many miles will it travel? Use the scale of miles to answer this. **Hint:** You may find that a piece of string will help you measure the distance.
12. On a wall map trace a cargo of iron ore from Duluth to Cleveland. Name the lakes, rivers, and canals through which it travels.

**Learning from Pictures**

In this book each picture has a caption which helps to explain the picture. But you can often learn more about a picture if you study it carefully. Look at the picture on page 231, which shows a flatboat floating down the river in early days, and answer these questions:

1. How many persons are traveling on this boat? Are they all men?
2. How many animals can you see?
3. What is the canoe beside the boat probably used for? How is it fastened to the boat?
4. Does the picture help you to understand what flatboats were used for at the end of their journey?

On page 241 is a scene on the National Road soon after it was built.

1. What does the picture tell us about land travel in early times?
2. What is the road made of? What is the bridge made of?
3. How many horses pull the covered wagons?
4. Why do the men ride the horses instead of riding in the wagon?
5. Why do the horses wear bells?
6. What does the stage coach carry? Do you see the place where mail is carried?

In 1804 Americans met the French at St. Louis to take possession of the Louisiana Purchase, which we had bought from France the year before. Study the picture on page 237, which shows this event, and answer these questions:

1. What is the French officer giving to the American officer? What does this mean?
2. What is the man who is talking to the Indian wearing? How does he make his living?
3. How do you think the Indians feel about what is happening?
4. What river do we see in the background?

The picture on page 275 shows an ore boat in the turning basin near Gary, Indiana. Also shown is a large pile of ore, a pile of limestone, and a steel plant. Study this picture and see how many of these questions you can answer:

1. Where is the pile of limestone? Where did it probably come from?
2. Which of the three principal minerals used in making steel is not shown here?
3. Do you think the turning basin was formed by a river or built by man? Why?

Look at the picture of an industrial section of Minneapolis on page 264 and answer these:

1. How did the falls help the city to grow?
2. Can you find the grain elevator? What does this tell you about the kind of industry that is carried on here?
3. Where is the power house located? What service does it perform? How does this picture differ from the one on page 94?
Interesting Things to Do

1. Plan a radio program telling about the purchase of the Louisiana Country as though it were happening today.
2. Choose two groups to dramatize scenes of the pioneers going west. One group might be walking, another on horseback, a third in a covered wagon, and a fourth on a boat. Each group may divide its play into three scenes:
   a. Preparing for the journey
   b. Traveling westward (include sights, hardships, dangers along the way)
   c. Building a new home
3. Draw pictures of the pioneers as they moved westward on foot, in covered wagons, in boats, on their way to settle in the Northwest Territory.
4. Write a letter to a friend in the East telling of your trip down the Ohio River in pioneer times.
5. Make four pictures to show the work of the pioneer farmers in the spring, summer, fall, and winter.
6. Collect pictures of farm machines from magazines or newspapers for your scrapbook. Find out how each of the machines work. Divide the class into committees to do this.
7. Read all you can about 4-H Clubs in your library, and make a report to your classmates.
8. On a large sheet of paper draw a plan of the Mills farm. Show all the buildings, garden, feed lot, and pasture. Show also the number of acres planted for each crop.
9. Use your telephone directory to see whether any articles of iron or steel are manufactured in your town or city. Make a list of the articles.
10. Ask your librarian to help you plan an exhibit of books of stories and poems of pioneer days.
11. So far you have seen picture maps of three of America’s great cities: New York, Washington, and Chicago. Study these maps. Then make a picture map of your city or town. Include school buildings, the library, parks, historic spots, government buildings, and any other important buildings.
12. Find the seal and state flower of each of the North Central States and arrange a display.
13. Make a little dictionary of all the words and terms that you have learned in the first seven units. Make up your own definitions. But check them with the text and the Word List in the back of the book before putting them in your notebook.
14. Have you ever made a movie? You might like to choose one of the stories in your text and make it into a movie. You will need a long piece of paper, and two sticks a little longer than the width of the paper. Two window shade rollers, which can be cut down, will work very well. Draw pictures on the paper which tell the story, and put the events in the order in which they happened. Fasten the paper to one roller. When the pictures are all drawn and pasted on the paper, fasten the end of the paper to the second roller. Now you can move the pictures from one roller to the other as you tell your story.

Making a Chart
Make a chart for the North Central States like the one you made for the Northeast.

Matching Causes and Results
Each of the events in the first column was the cause of an event in the second column. Match the causes and the results.

<table>
<thead>
<tr>
<th>Causes</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Rogers Clark captured the British forts in the Ohio Valley.</td>
<td>The question of slavery was settled in the Louisiana Territory.</td>
</tr>
<tr>
<td>Congress passed the Homestead Act in 1862.</td>
<td>The area of the United States was almost doubled.</td>
</tr>
<tr>
<td>A peace treaty was made with the Indians in the Ohio Country.</td>
<td>The Northwest Territory became a part of the United States.</td>
</tr>
<tr>
<td>President Jefferson bought the Louisiana territory from France.</td>
<td>Pioneers went west to settle on free land.</td>
</tr>
<tr>
<td>Congress passed the Missouri Compromise.</td>
<td>Settlers moved into the Northwest Territory in great numbers.</td>
</tr>
</tbody>
</table>
When we are flying high in an airplane, we cannot see the ground. Let us pretend that we could fly very, very high and still see the earth. Then we could get a view of the whole region between the Appalachian Highland and the Rocky Mountains. As you know, the North Central States are here. In this region also are the Southwestern States—Arkansas, Louisiana, Oklahoma, and Texas.

Looking down from the great height of our plane, we would see what looks like a gigantic tree with spreading branches. The tree trunk is a huge river flowing almost the whole length of our country. This river is the mighty Mississippi, one of the longest rivers in the world. The whole region that it drains is called the Mississippi Valley. We would see the Mississippi start as a stream running from a small lake near the northern boundary of Minnesota. This stream grows until it becomes more than a mile wide below the mouth of the Missouri River. From its source the Mississippi flows over two thousand miles
The Southwest

southward to the Gulf of Mexico. As it flows, it changes from a bright, clear stream to a muddy one because it receives dirt, or silt, from the rivers that flow into it. Gradually too the current of the river, which is swift in the North, slows down as the river becomes broader and the land more level.

We would see that the Mississippi divides into several branches at its mouth. These branches flow through land shaped very much like a triangle. This land at the mouth of the Mississippi is the Mississippi Delta. A delta is land built up by mud and sand brought down by a slow river. If the Mississippi flowed faster, it would carry its soil far into the Gulf. Then the delta would not have been built. The Mississippi Delta covers almost twelve thousand square miles.

From our airplane we would also see several large rivers flowing into the Mississippi. These are the tributaries of the Mississippi River. Two great tributaries empty into the Mississippi in the North Central States. The Ohio River flows into the Mississippi from the east and the Missouri River from the west.

Farther south two other tributaries join the Mississippi River in the Southwestern States. The Arkansas River empties into the Mississippi in the state of Arkansas. And the Red River joins the Mississippi in Louisiana. For thousands of years these rivers have been overflowing their banks. Each flood has left much rich soil on the low, flat land. Today some of the richest farm land in our country is on these flood plains. The Mississippi, Arkansas, and Red rivers drain these four states.

Parts of Arkansas, Louisiana, Texas, and Oklahoma are much alike in climate, land, and mineral resources. But some parts of these states are not alike at all. Western Texas and western Oklahoma, for example, are different in climate and soil from Louisiana and Arkansas. We shall see this in the Southwest as we visit its great oil fields, its cotton and rice plantations, its large cattle ranches, and its lumber, fishing, and fur regions.
We shall find also that the early history
of each of these states is quite different.
In this unit we shall learn the answers to
these questions:

1. What kind of land, climate, and resources
does our Southwest have?

2. What is the history of Arkansas?
3. How did Louisiana become a state?
4. How did Texas become a state?
5. What is the story of the great Oklahoma
land rush?
6. How do the people in our Southwest earn
a living today?

**WHAT THE SOUTHWEST IS LIKE**

“Yippee-ai-ay! Git along, little dogie.”
A lone cowboy sings as he rides the range in
our Southwest. It is a land of great open
spaces. One of the Southwestern states—
Texas—is more than twice the size of all
the New England states put together. Texas
is the largest state in our Union.

**Surface of this land**

As we fly over the Southwest, we see the
gently rolling surface of the land. This land
is part of the great central plain of North
America. In our Southwest this rolling land
slopes down to the flat coastal plain. This
low, wide plain borders the Gulf of Mexico.
The chief mountains in our Southwest are
the Ozark-Ouachita (wô-sh’ê-tô) Highlands.
They extend from western Arkansas to east-
ern Oklahoma (see the map on page 13).

**Climate of the Southwest**

The people in most of the Southwest enjoy
a mild climate. Warm, moist winds blow in
from the Gulf of Mexico. Most of the farmers
in this region get enough rain to grow good
crops. The Southwest gets most of its rain in
spring and summer. The autumn, in which
there is little rain, is good for harvesting
cotton. The short winters are sometimes very
chilly because of cold winds from the north.

The Gulf Coast gets much rain and is
swampy. But western Texas and Oklahoma
are too far inland to get much rain from the
Gulf of Mexico. (See the rainfall map on
page 36.) In this area some farmers practice
dry farming. Dry farming is the growing of
only one crop in two years. On these fields
crops are planted every other year. But the
weeds are kept out so that the moisture in the
soil is stored for the next year’s crop.

**Resources of the Southwest**

Many people can earn a living in the South-
west because of its valuable resources. The
waters have a large supply of shellfish. The
soil is fertile, and there are valuable forests.
This region also has huge deposits of lead,
zinc, sulphur, petroleum, and natural gas.
Perhaps the most important minerals are
natural gas and petroleum, or crude oil.

**The story of oil**

Can you imagine our living without the
automobile and the airplane? These are only
two of the machines we probably could not
use without the products of petroleum. From
petroleum we get gasoline, kerosene, fuel oils,
lubricating (smoothing) oils, vaseline, and
many other useful products. Natural gas is
usually found with petroleum. Natural gas
is a perfect fuel. It leaves no dirt or waste,
and it is easy to use. Without petroleum and
its products we could not live as comfortably
as we do.

Petroleum is found deep down in the earth.
Thousands of years ago many plants and
animals were buried in mud and sand. As
they were pressed down under many layers of
sand and rock, they decayed. This decayed
material then formed oil and natural gas.

Early settlers in North America sometimes
found oil while drilling, or digging, for salt.
Salt was important to keep meat from spoiling.
But they had no use for oil. The settlers
were annoyed when they found oil instead of salt. Then it was found that kerosene, which is made from petroleum, could be used instead of whale oil to give light. Slowly the demand for oil grew.

In 1859 a company was formed in Pennsylvania to get oil by drilling wells. At the head of this company was a man named Edwin Drake. He used a tool for boring holes, called a drill, to dig down into the earth. The drilling was hard and slow. Twenty feet, thirty feet, forty feet—no oil. Then at about seventy feet, Drake struck oil. Word of Drake's success soon spread. Other men began to drill for oil in many parts of the country. They found it in great quantities, first in eastern Texas, in 1866, and later in other states of the Southwest. This brought more people and great wealth to the region.

Most oil wells must be dug much deeper than seventy feet. Deep oil wells may go down several thousand feet. Sharp, heavy tools are used to drill the wells. Huge frameworks, called derricks, are built to support the drilling tools. For deep wells the derricks sometimes are as high as one hundred and thirty feet high.

A drill is forced down into the earth. When the drill reaches oil, the gas that is often found with the oil tries to escape to the upper air. If there is a large amount of gas to be released, it shoots upward with great force. As it does so it pushes the oil up too. Sometimes oil and gas shoot high in the air. "There she blows!" shout excited workers. Such a well is called a gusher. But usually when oil is reached, it flows in a steady stream. This is called a flowing well. After a while most
gushers and flowing wells stop flowing because no gas is left to push the oil up. Then the oil has to be pumped out of the well.

As oil flows from a well, it is carried in pipes to huge storage tanks. Pipes are also used to carry the natural gas to cities. There the gas is burned to give heat in homes and factories. Some oil is shipped from the storage tanks in railroad tank cars. But most oil is pumped through pipe lines to a plant called a refinery. At the refinery the petroleum is purified and made into many useful products.

THE SETTLEMENT OF ARKANSAS

You will remember that Spain was the first nation to explore and to claim land in the New World. In their search for treasure, Spanish adventurers led by De Soto were the first to explore what is now Arkansas. But the Spaniards found no gold there.

Starting Arkansas Post

Many years later Frenchmen came to Arkansas. Instead of gold and silver they wanted furs. The French found many fur-bearing animals, so they built trading posts and settlements here. The first permanent settlement in Arkansas was Arkansas Post, near the mouth of the Arkansas River. It was started by Henry de Tonti, one of La Salle’s brave explorers.

The founding of Little Rock

“Far to the north is a green mountain which sparkles in the sun,” says an Indian to a group of explorers.

“That must be the emerald mountain I am searching for,” the white man exclaims. The white man was a French adventurer named Bernard de la Harpe. In his search for the emerald mountain he explored part of Arkansas. This was while France held the Louisiana Territory. Although he did not find this mountain, he found a good place to start a settlement.

During part of this journey he traveled on the Arkansas River. While on this river, he saw a huge mass of rock rising from one of the shores. About two miles farther on, he was surprised to see a second great bulk of rock. De la Harpe called these two masses of rock Little Rock and Big Rock. A tribe of Indians was camping near the smaller of the rocks. There De la Harpe started a fur-trading post. Later this trading post grew into the city of Little Rock, now the largest city in the state.

Hot Springs

Each year many people visit the famous health resort at Hot Springs in Arkansas. The Indians in Arkansas knew about the healing powers of the springs. According to the legends, they fought for ownership of these hot springs. At last they decided that all the tribes should share them.

The Spaniard, De Soto, visited the hot springs while he was exploring Arkansas. But the Spaniards did not build a settlement at the springs. One hundred and fifty years later a French trapper, Manuel Prudhomme (prú-do’m’), started a colony there. This colony later grew into the city of Hot Springs.

Becoming a state

Several fur-trading posts were built along the Arkansas River during the periods of French and Spanish control. But few settlers went to Arkansas until our government bought the Louisiana Territory. Then United States troops were sent to Arkansas Post. Several years later, wars among Indian tribes caused our government to build Fort Smith in northwestern Arkansas. The soldiers at Fort Smith and Arkansas Post protected settlers from Indian attacks. They also helped bring peace to the Indian tribes. Most of the people who went to Arkansas in the early days settled along the rivers. Arkansas was settled very slowly. But in 1836 there were enough people for it to become a state.

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HOW LOUISIANA BECAME A STATE

The explorers of two nations — Spain and France — played an important part in the early history of Louisiana. You know that De Soto with a group of Spanish adventurers searched the lower Mississippi Valley for treasure. You also know that more than one hundred and forty years later the French explorer La Salle traveled down the entire Mississippi River. He was not able to start the colony he had planned at the mouth of the Mississippi. But, as we shall now learn, other Frenchmen did.

Two brother explorers

Pierre d'Iberville (dĕ'bĕr'vĕl') was born in the New World. His parents, who were French, were well known and respected in New France, as Canada was then called.

Young Pierre loved France. He made a trip to France to see the king. “Your Majesty, let me help strengthen France’s claims to the huge Mississippi River Valley. What we need is a colony at the mouth of the Mississippi,” said Pierre.

“You are a loyal Frenchman,” the king answered. “I shall give you ships and supplies to build a settlement.”

Two hundred soldiers and colonists sailed from France with Pierre. His half brother, Jean de Bienville (dĕ byăn’vĕl’), a young man of eighteen, also went along.

Pierre was a good sailor. Unlike La Salle on his last voyage, Pierre found the Mississippi River easily. The brothers finally chose a suitable location for a settlement. Here they founded a colony a little below the place where New Orleans was later built.

Pierre left his younger brother Jean as governor of the colony and sailed back to France. Jean was only twenty-one years old when he became governor of the Louisiana colony. In 1718 he founded New Orleans, which later became the capital of the colony. He held the office of governor three times.

Louisiana under three flags

You remember that near the end of the French and Indian War, France gave the

This picture, which was taken from across the Mississippi River, shows that New Orleans was a large, beautiful city in 1841. Notice how many different kinds of ships can be seen in the bay.

Bettmann Archive
Louisiana Territory to Spain for its help during this war. But the French in the Louisiana Territory did not want to live under Spanish rule. They rebelled against the new Spanish governor. Spain quickly put down the rebellion and held the Louisiana Territory for about forty years. During that time Spain lost much of its power, and France again claimed the Louisiana Territory. Because of its position near the mouth of the Mississippi New Orleans soon became an important port. Soon after the French re-claimed the territory, the United States bought it. New Orleans then grew so fast that just nine years later the southeastern part of the territory had enough people to ask to be admitted to the union. It became the state of Louisiana in 1812.

HOW TEXAS BECAME A STATE

The Spanish began to explore the region that is now Texas soon after Columbus discovered America. They built forts and missions, or church settlements, there to hold their claims to the territory. But the French also began to come into this region after La Salle had claimed the Mississippi River Valley for France. Then the French began to build forts along the Mississippi.

These French forts worried the king of Spain. He said, “French soldiers at New Orleans can cut off our settlements in Texas from those in Florida. We must send more settlers to Texas.” So the king sent more soldiers and settlers. In this way the region remained under the control of Spain. The center of the Spanish government was at San Antonio, where a mission and a fort had been built in early times.

Texas under Mexican rule

Like other Spanish colonies in the New World, Mexico revolted against Spain. In 1821 it won its independence. At that time Mexico included most of what is now Texas. Very few people were living in Texas then. So the Mexican government decided to invite settlers from the United States on the condition that they would obey the laws of Mexico.

The first American settlers in Texas were brought there by Stephen Austin. In 1821, the year Mexico gained its independence, this young American led a group of three hundred families to Texas. They settled on land which Austin’s father had received from the Spanish government. Because he was the leader of the first group of Americans to settle in Texas, Stephen Austin is sometimes called the “Father of Texas.”

Pioneers from many parts of the United States followed Austin’s group into Texas. Farmers from the Southeast moved to Texas to find new fields in which to grow cotton and tobacco. Cattlemen also drove their herds to the fresh grazing lands of Texas.

These new settlers spoke English instead of Spanish, and they had different ideas of government. Mexico soon began to fear that it would lose Texas. So the Mexican government declared that it would accept no more settlers from the United States. But the settlers continued to move into Texas. Mexico also passed a law forbidding slavery in Texas. But the cotton planters kept the slaves they had brought with them to work on their new plantations in Texas.

The Texas revolution

When the cruel General Santa Anna became president of Mexico, the trouble grew worse. There were a few armed fights which the Texans won. Then the Texans banded together and declared their independence from Mexico.

When the news reached him, General Santa Anna shouted, “I’ll show those Texans that my word is law.” He marched his troops into Texas. At San Antonio he was stopped by a band of fighting Texans.
When the Texans declared their independence, Santa Anna marched into Texas to punish them. A small band of men took refuge in the Alamo, an old mission, and fought heroically against the Mexicans. They were all killed, but the memory of their bravery lives in the hearts of all Texans.

A group of less than two hundred Texans, who were determined to stop Santa Anna, gathered inside the Alamo (æˈlɑ-mo). The Alamo was an old walled mission at San Antonio. Santa Anna had three thousand soldiers and many cannon. He demanded that the Texans surrender, but they refused. Santa Anna's forces stormed the mission walls and forced their way inside. Within the chapel of the mission the little band of Texans fought bravely. The battle lasted thirteen days. When it ended, there were none left alive. All had been shot by Santa Anna's soldiers. After this, Santa Anna wiped out several other small groups of Texans. But still the people of Texas kept fighting for their independence.

Among the settlers who had come to Texas was a former governor of Tennessee, Sam Houston (hūstən). Houston had been a frontier leader in Tennessee. Now he fought for the freedom of the frontier in Texas. At San Jacinto (sän já-sinˈtō), Sam Houston and a group of Texans took the Mexican forces by surprise. Cries of "Remember the Alamo!" split the air as the Texans rushed into battle. They defeated Santa Anna's army and took the general prisoner. Santa Anna agreed to order all his soldiers out of Texas. He promised that Mexico would give up its claim to Texas and recognize it as an independent nation.

In spite of Santa Anna's promise, the Mexican government did not recognize the independence of Texas. The Texans ignored Mexico, and in 1836 they set up a republic with Sam Houston as president. Their flag was blue with one large star. Today Texas is called the Lone Star State.

The flag of the Republic of Texas
In the War with Mexico, General Taylor and General Scott won battles in Mexico. Other Americans took New Mexico and California.

**Becoming a state**

As soon as Texas gained its independence, many Texans began to talk about joining the United States. "It would be better," they said, "to be a part of a strong young nation." So Texas sent a request to Washington asking permission to join the United States.

Some Americans feared that Mexico would declare war on the United States if Congress admitted Texas. Some Northerners, who thought Texas would come in as a slave state, did not want Texas to join the United States. But most of the leaders in the United States government wanted to admit Texas. They said, "A strong European country might take Texas if we do not make it part of our nation. We do not want a European power on our southwestern border." In 1845 Congress voted to take Texas into the Union.

**War with Mexico**

The Mexican government still considered Texas a part of Mexico. When the United States admitted Texas into the Union, Mexico regarded this as an insult. There was also a quarrel between Texas and Mexico over boundaries. These things caused the United States government to send soldiers to Texas to protect Texas from invasion by Mexico. When war was declared these soldiers, under the command of General Zachary Taylor, who later became President of the United States, met and defeated Santa Anna's army from Mexico.

Meanwhile General Winfield Scott and his troops crossed the Gulf of Mexico. One of his captains was young Robert E. Lee. They landed at Veracruz on Mexico's eastern coast (see the map on page 298). They captured Veracruz and marched on to take Mexico City on September 14, 1847. That ended the war.

Under the peace treaty Mexico gave up its claim to land in southwestern North America. For this land the United States agreed to pay Mexico fifteen million dollars. Our government also settled the claims against Mexico that had been made by citizens of the United States, amounting to three million dollars more.

**THE SETTLING OF OKLAHOMA**

A covered wagon train moves through a valley. Columns of smoke begin to rise from the surrounding hilltops. The driver of the leading wagon spies the smoke. "Run back, Jimmy. Tell the other families." He sends his young son scampering back to the other wagons to spread the warning. Smoke signals mean Indians near by. The men crack big whips in the air over the oxen. "Giddap there, giddap," they shout. One by one, the wagons draw up in a circle. The pioneers hurry to get ready for the expected attack.

Suddenly war cries split the air. The Indians rush down on the wagon train. They shoot burning arrows into the canvas wagon tops. The pioneer women try to put out
these fires before they spread. From under the wagons men use their rifles to shoot with deadly aim. Many Indians and pioneers are wounded or killed. At last the fighting stops. The Indians have disappeared.

This kind of action happened often in the course of the westward movement. As pioneers pushed westward, the Indians gradually lost their hunting grounds. They fought a losing battle against the settlers.

**Indian reservations**

Our government wanted to take care of the Indians. It set aside, or reserved, for their use, areas in various parts of the United States. Such an area set aside by the government only for Indians is called a *reservation*. Indian tribes from all over the United States were moved to reservations. The largest reservation was an area north of Texas. It was called Indian Territory.

After a time white settlers began to move into the land around this Indian reservation. More and more people came. Then settlers began to want part of the Indian Territory.

When the Oklahoma Territory was opened to settlers, thousands of people rushed in to claim a share of the free land. They came on horseback and on bicycles, in wagons and in buggies.

**The Oklahoma land rush**

Many people asked the government to open the unsettled parts of the Indian Territory to white men. After a time the government bought from the Indians the large area now called Oklahoma. When the government declared this land open to settlers, a great land rush took place. The time of the opening was set for noon on April 22, 1889. Let us try to imagine that we were present.

It is the day of the great land rush! Long before the opening of the area many thousands of people have taken their places at the border. They have come in covered wagons, in carts, on horseback, and on foot. As the morning passes, people push nearer to the starting line. The eager pioneers have to be held back by United States troops until the hour of the opening. As the time for the starting signal comes near, a hush falls over the crowd. There it is! At exactly twelve o'clock the bugle notes ring clearly through the air. The troops hardly have time to get out of the way of the crowd. They’re off!
The people rush forward to get land. Cities of tents appear by nightfall. The area has fifty thousand people in it within twenty-four hours of the opening.

In a very short time all the free land has been taken. After a year enough people have settled in Oklahoma for it to become a territory. Then a few years later, in 1907, Oklahoma became a state.

EARNING A LIVING IN THE SOUTHWEST TODAY

Let us take a boat trip down the Mississippi River from St. Louis, Missouri, to New Orleans, Louisiana. Most travel on the Mississippi today is on barges which carry freight up and down the river. But there are a few river boats which carry passengers.

All aboard! Clouds of smoke rise from the boat’s smokestacks into the blue sky. People on shore wave good-by. Slowly we glide toward the middle of the Mississippi River. The boat’s captain soon comes on deck. He offers to tell us about our Southwest as it is today.

FARMING

As we move down the Mississippi River, the captain tells us that the Southwest has much rich farm land. Farming is one of the chief ways of earning a living in the Southwest. Some of this rich land is on the Mississippi flood plains.

The Mississippi flood plains

As you know, the Mississippi flood plains are flat areas of rich soil. This fertile soil has been deposited for thousands of years by the overflow of the Mississippi and its tributaries. Can you name the Mississippi River’s chief tributaries? The flood plains of the Mississippi River are like those of the other rivers in the Southwest. But they are larger because the Mississippi is much larger than the other rivers which flow into it.

Standard Oil Co. (N.J.)

Levees, or dikes, on the Mississippi help to keep the river from overflowing its banks. The levees are needed because the river in this area is higher than the land through which it flows. If you can find the road in this picture, you can find the levee.
These rivers have flood plains because they flow through low, flat land. A river that flows between high banks does not have flood plains. The land along such a river is higher than the water, and there is little danger of overflow. But the Mississippi and its tributaries flow through such low, flat land that they often overflow. They run over their flood plains and leave them covered with rich soil. Mounds of earth, or levees (lēv'ēz), have been built along the banks to hold back the water. The levees are made of earth strengthened by metal cables. Sometimes asphalt (ʔəsˈfɔlt) is also used to strengthen the levees. Asphalt, a mineral substance, is one of the by-products of petroleum.

Because these rivers often overflow their banks they cause great damage to farms, livestock, and wild animals. People must be moved out of the flood areas until the waters go down. Homes sometimes float away, and farm machinery is often ruined. During heavy floods men, women, and children work day and night to make the levees stronger and to rescue and care for the people whose homes are in the flooded area.

**Cotton, the white gold of the South**

The chief crop of the Southwest is cotton. Two Southwestern states — Texas and Oklahoma — have half the cotton land in our country. If you will look at the map on page 202 you will see that our Southwest is the western part of the Cotton Belt. The Cotton Belt is probably the best region in the world to grow cotton. Half the people who live in this area make their living from cotton. For this reason cotton is often called "white gold."

**The story of rice**

Our captain tells us that another important crop of the Southwest is rice. He says that four out of every five boxes of rice on our grocer's shelf come from this region. The rice comes from the flood plains in southeastern Arkansas and on swampy parts of the coastal plain of Louisiana and Texas. If no
On river water flooded built under is upon pumping by a grows. The with to turns pumping grain, drained. Few is rice is now harvested. It is thickly planted, thickly growing rice. It is thickly growing rice. It ripens. The stalks must be kept under water most of the time. Levees are built to keep the water from running off the flooded fields.

Rice is planted with machines which scatter the grain thickly on the fields. When the rice is a few inches high, the fields are flooded by pumping thousands of gallons of water upon them. To keep the fields flooded the pumping continues day and night. The rice grows into a thick heavy-looking grass. After a few months the leaves of the rice plant begin to turn yellow as it ripens.

It is now time to harvest the rice. The fields are drained. Most of the rice is harvested with large farm machines called combines. The combine is like the combines that reap and thresh other grains. First the machine cuts off the rice stalks. Then it beats the stalks to separate the straw from the grain. After the harvest, the grain is sent to mills. There the rice is husked, and usually polished, and put into packages for shipping. New Orleans is the rice market of the Southwest.

**Wheat, corn, fruit, vegetables**

Our captain says that farmers in the Southwest grow many other crops besides cotton and rice. Peaches, grapes, strawberries, and tomatoes are some of the many fruits grown in Arkansas. One section of Louisiana has become known for its fine strawberries. Fine citrus fruits are grown in Texas in the Rio Grande Valley. Texas is also noted for its peaches, watermelons, other fruits and vegetables, pecans, and peanuts. Wheat is the chief crop of northwestern Texas and western Oklahoma. Oklahoma is the second largest producer of winter wheat in our country. Farmers, or ranchers, in Texas and Oklahoma also grow huge crops of corn, oats, and other feed crops. Farms in all four Southwestern states supply near-by towns and cities with dairy products, fruits and vegetables, and poultry. Texas raises more turkeys than any other state in the country.

**The story of sugar**

Do you know how much sugar you eat in a year? The average person in this country eats as much as a hundred pounds of sugar each year. Most of the sugar that we eat comes from lands outside the United States. Sugar cane needs rich moist soil and a hot, sunny climate. In our country a little sugar cane is grown in Florida. But about three fourths of the cane sugar grown in the United States comes from Louisiana’s coastal plain and the Mississippi River flood plain.

Sugar cane grows tall and straight like corn. But unlike corn, rice, and wheat, it is not usually grown from seed. Instead, short pieces of the cane stalk are planted. Using modern machinery, the farmers plant pieces of cane stalk in wide furrows, or ditches, and cover them with dirt. Soon the green shoots
push their way up above the loose earth. Within eight or nine months the stalks are from ten to fifteen feet high, and they are heavy with sugar juice. Then the sugar cane is ready to be cut.

When machines are used to cut the cane, the leaves and tassels of the sugar cane are first burned off. The fire does not hurt the cane stalks because they are too full of juice to burn.

When sugar cane is cut by hand, the workers use long sharp knives. Each knife has a long hook on the back which the worker uses to strip off the leaves from the cane. The cane stalks are then loaded onto trucks which immediately take them to the sugar mill, or refinery. After they have been cut, no time must be lost in getting the cane stalks to the refinery because they dry out quickly.

The sugar refinery with its tall smokestack is the largest building on the plantation. Here the stalks are washed as they are carried along on a belt moved by machinery. Then large rollers and crushers squeeze the sweet juice from the sugar cane. The juice is treated with chemicals to purify it and cooked to turn it into a syrup. The syrup is boiled to form a brown mass of molasses and crystals. The sticky brown crystals are called raw sugar. Some of this brown sugar is packaged. But most of the raw sugar is further treated to make it white. The white sugar is then shipped to all parts of the country.

Lumber, fish, furs

We continue down the Mississippi River on our way to the Mississippi Delta. As we move farther south the trees grow thicker and thicker.

“Timber! timber!” As this warning cry sounds through the swampy forest, we hear a crash and then a heavy splash. Another giant of the forest has fallen under the workmen’s saws. The swampy delta region is covered with thick, tall grass and forests of cypress trees. Because of the heavy rainfall and warm climate, trees grow faster here than in any other part of our country. The captain tells us that the tall, straight cypress trees make fine lumber. Louisiana is the leading lumber state in the Southwest. But other parts of this area also have much lumber. Our Federal government has set aside some of these forests as national reserves. The most important of these are the forest reserve near Hot Springs National Park in Arkansas and the Ouachita National Forest in Oklahoma.

The captain tells us that many fishermen in small boats are on their way up from the Gulf with their catch of shrimp and oysters. The Louisiana and the Chesapeake Bay waters supply most of the shellfish in our country. The shrimp are either canned or frozen and shipped to all parts of the United States. But the oysters are packed in ice and shipped out in refrigerator cars. Probably you have eaten shrimp or oysters which were caught in Louisiana waters.

Trappers, too, often take their furs to market by boat. Their catch may include mink, opossum, muskrat, and raccoon skins. These animals live in watery places. Each

Lumber is a leading product of the Southwest. These Arkansas logs are ready to be shipped.

Arkansas Development Comm.
The diagram above shows the layers of earth and rock in which oil is most likely to be found. The derricks support the oil-drilling machinery. Oil is carried in pipes laid in the ground. The map below shows where oil is found in the United States. It also shows the main pipe lines.
year more than a million skins are shipped from the Mississippi Delta region. Many of these come from fur farms, where people make a living by raising the animals instead of trapping them. The skins of the opossum, muskrat, raccoon, and especially the mink sell for high prices.

MINING IN THE SOUTHWEST

Besides petroleum and natural gas there are many other minerals in the Southwest. Among them are large supplies of salt, sulphur, bauxite (bôksˈīt) — the ore from which aluminum is made — and a light gas called helium (hēˈli-əm).

Oil and natural gas

Oil derricks dot the fields throughout the Southwest. You will remember that cotton is sometimes called "white gold." Oil is often called "black gold." Can you explain this? The Gulf Coast and other parts of the Southwest have much petroleum and natural gas. See the map on page 304 for the main oil fields of the Southwest. The gas is piped to homes and factories, where it is used to give heat and light. Much of the oil is pumped through underground pipe lines to Northeastern refineries. The rest travels through pipe lines to refineries in Southwestern cities and to the Gulf Coast, where it is put into tankers. Petroleum, like cotton, is one of the chief products of the Southwest.

The state of Texas ranks first among the oil-producing regions in the United States. In fact, the largest single oil field in the world lies in eastern Texas. More than twenty-five thousand producing wells make up this giant East Texas oil field.

The story of sulphur

Over half of the world's supply of sulphur (stuhlˈfər) comes from the Louisiana and Texas Gulf Coast. Recently a huge bed of the important yellow mineral was discovered at Garden Island Bay in Louisiana. It lies on the delta, southeast of New Orleans. Sulphur lies deep in the ground below five hundred to fifteen hundred feet of gravel, sand, and clay. Under these materials the sulphur lies in a hard, solid layer. For almost fifty years after its discovery on the Gulf Coast, this sulphur could not be mined cheaply enough. Then a mining engineer found a good way to get out the sulphur.

Today the sulphur is mined according to this engineer's plan. A derrick similar to that used in drilling oil wells is built. Two hollow pipes are run down to the sulphur bed. The smaller pipe is placed inside the larger pipe. Hot water is forced down the smaller pipe. The hot water melts the sulphur because sulphur melts at a low temperature. Then air is forced down through a third small pipe. This pushes the melted, or liquid, sulphur to the surface through the larger pipe. A pipe line carries away the liquid sulphur and empties it into a huge storage bin. When the sulphur cools, it hardens into a huge solid block. Workers blast pieces out of this block of sulphur and haul them away until the block is all gone. Then a new supply of hot sulphur is brought up and poured into the storage bin, and another block is formed. The hot liquid sulphur cools into hard, solid blocks, but it breaks up easily into a fine powder.

Sulphur is important in the production of everything from explosives and steel to newsprint and rayon. It is used in tanning leather, in bleaching, dyeing, and making various medicines, ink, and paper. Liquid cleaners containing sulphur are used to clean sick rooms. Powdered sulphur is also used in preparations that are dusted on plants to kill insects. As you know, many farmers dust their cotton plants with sulphur preparations to protect them from the boll weevil. Chemists use sulphur to make sulphuric acid, an acid important for making explosives, fertilizers, and medicines.

Salt quarrying

Besides petroleum and sulphur, the Gulf Coast of Louisiana yields salt. Salt was first
discovered there during the War Between the States. Ever since then Louisiana has been a leading salt producer. The salt lies underground in thick beds of rock salt. The salt mines are like underground quarries. Oklahoma and Texas also produce salt.

Do you know that there are more than one thousand uses for salt? The most common use of salt is in the kitchen and at the table to season food. But the largest amounts of salt are used in industry. Salt is used in meat-packing plants, in chemical industries, and in hide and leather processing factories. Other groups such as bakers, cereal producers, and butter and cheese manufacturers use huge amounts of salt. The farmer feeds salt to his livestock. There are many other uses for it.

Bauxite mining

Arkansas has the largest deposits of bauxite in North America. In some years half of the world’s supply of bauxite has come from Arkansas. Bauxite is the ore from which aluminum is made. Bauxite, which looks like clay, is mined from open pits. Steam shovels scoop the bauxite from the pits. The ore is washed and crushed. Then the aluminum is extracted and melted.

Aluminum is a strong light metal which is important in the building of airplanes. Many kitchen utensils are also made from this metal.

Helium in the Southwest

The Southwest has one of the few sources of helium in the world. Helium is a very light gas which does not burn or explode. It is used in the blimp, which is a kind of balloon airship. A blimp is a gas bag that has no metal frame and collapses when the gas is taken out. In wartime, blimps are used for patrols because they can remain floating in the air while moving slowly about. This is possible when a light gas like helium is used.

This source of helium in the Southwest lies near Amarillo in the Texas Panhandle. As you may know, Texas is shaped somewhat like a large pan. The “handle” of the pan is the area that extends northward from the rest of Texas (see the map on page 13). The United States government controls and works this field. It can produce helium for the United States army and navy for many years. This helium plant is the largest in the world.

Lead, zinc, and asphalt

The Ozark-Ouachita Mountains are rich in lead, zinc, coal, and other minerals. Oklahoma is one of the chief producers of lead, zinc, and asphalt in our country. Asphalt is a brown or black mineral. Its most important use is in paving roads. Lead and zinc are usually found and mined together. Lead is
used to make water pipes, paints, pottery, bullets, and many other things. Zinc is needed to make brass. Articles made of iron and steel are coated with zinc to prevent their rusting. Zinc is also used in making refrigerators and radiators.

**LIVESTOCK RAISING IN THE SOUTHWEST**

Cattle and hogs are raised in every state of the Southwest. Most people in western Texas and Oklahoma make their living by raising cattle or sheep. Texas raises more cattle, sheep, goats, and mules than any other state. It also raises fine saddle and race horses, cow ponies, and work horses for use on farms. Texas leads in producing wool and mohair (mō'har'). *Mohair* is cloth made from the long, silky hair of a certain kind of goat.

The Edwards Plateau lies in southwestern Texas (see map on page 13). This plateau is almost as large as the state of Pennsylvania. Most of the people here make a living by raising cattle, sheep, and goats. Some of the ranches on the Edwards Plateau cover more than a hundred thousand acres.

The famous King Ranch, the largest in the United States, is on the Gulf Coast of Texas. Thousands of cattle are raised on this ranch each year. Fine horses for racing and work horses for use on the ranch are also raised.

**A new breed of cattle**

An important new kind of cattle has been bred on the King Ranch. In long periods of hot weather cattle sicken and die. On the low Gulf Coast, which the King Ranch borders, there are many insects. Cattle are troubled by these insects too. In the hot lands of India, a faraway country on the continent of Asia, scientists discovered a kind of cattle which is not bothered by heat or insects. It was decided to bring some of these cattle from India to Texas and to cross them with the best Texas shorthorns. The short-horns are fine for beef because they grow large and heavy. The result of crossing the two kinds of cattle was very successful. The new breed of cattle is, like the shorthorns, good for beef and, like the Indian cattle, is not bothered by heat and insects.

**Visiting a cattle ranch**

“Howdy. Welcome to the Bar-H ranch,” a smiling cowboy says to us as we arrive. The cowboy introduces us to Tex Smith, the foreman, who runs the ranch. Most ranches

*Standard Oil Co. (N.J.)*
Cowboys on horseback with their dog helper round up the cattle in this grazing area. Every few days the cattlemen drive their herds from one grazing area to another. This keeps the cattle from cropping the grass too close to the ground and gives it a chance to grow again.

have a foreman, because the owner is often away selling his cattle and buying supplies.

Tex says it takes careful planning and hard work to run these large ranches. Although the cowboys still ride horses to travel around the ranch, automobiles and supply trucks are also used. Roads are built to all parts of the ranch for fast travel in case of an emergency. We drive along one of these roads to a far corner of the Bar-H ranch. Along the way we see small cabins built of wood. These cabins are shelters that have telephone connections with the main ranch house.

We reach the end of the road and come upon a herd of cattle. From the days of the Spanish longhorns to the present, Texas has been famous for its fine cattle. Tex says that early American settlers in Texas found large herds of longhorns there. These were wild cattle that had come from the stock brought by Coronado. Through the years Texas ranchers have been improving their cattle and other livestock. At stock shows in Dallas, Fort Worth, and many other Texas cities ranchers enter their best livestock in contests. It is a very proud rancher who owns a prize bull, hog, sheep, or horse. Boys of the 4-H clubs are also raising fine cattle which help to improve the Texas herds.

We see cowboys on horseback moving the herd to fresh pastures. Tex says that most Texas cattle are sent to the Corn Belt after they become full grown on Texas pastures. In the Corn Belt they are fattened on corn and then are slaughtered and processed in meat-packing plants. Some of the full-grown cattle are fattened on Texas corn and prepared for market in Texas meat-packing plants instead of being shipped north.

CHIEF CITIES OF THE SOUTHWEST

The cities in the Southwest are chiefly trade and transportation centers. Some manufacturing is done. But most products of the Southwest are sent to manufacturing centers in the Northeastern and North Central states. The large cities in the Southwest are railroad and airplane centers. Some are also ports.

Little Rock, capital of Arkansas

In early times travel across the Ozark-Ouachita Mountains was difficult. Today
railroads cross these mountains. Near the middle of the state is Little Rock, the chief trade and railroad center. Little Rock, which is on the banks of the Arkansas River, is the capital and largest city of Arkansas. Little Rock ships cotton, lumber, rice, and minerals to manufacturing centers in the Northeast. Some people in Little Rock earn a living by manufacturing furniture from the lumber of the state's fine forests. Others work in factories which turn out cotton-seed products, in clothing factories, and in railroad yards. Aluminum processing is also important.

Shreveport, New Orleans, and Baton Rouge

Shreveport lies on the Red River in northwestern Louisiana. It is the chief trade center for the lumber, cotton, gas, and oil produced in this part of the state. Shreveport has cotton mills, railroad shops, oil refineries, and factories which make lumber products and machinery used in the oil fields. But it ships most of the lumber, raw cotton, and crude oil to manufacturing centers in the Northeast.

New Orleans is the chief trade and shipping center for the lower Mississippi Valley. It is more than a hundred miles above the mouth of the river. Because of this distance from the

The long arm of land which extends into the Gulf of Mexico is the Mississippi delta. It is formed by silt carried by the river. The city of New Orleans is nearly one hundred miles above the mouth of the Mississippi. The canal which connects New Orleans with Lake Pontchartrain (pōn'chēr-trān) helps to make the city into the great port that it is.

From New Orleans ships sail to United States ports and to many other ports all over the world. From New Orleans heavily loaded barges also travel the length of the river to and from the Great Lakes.
Gulf of Mexico, Gulf storms seldom reach its harbor. Cotton, sugar, rice, lumber, furs, and oil are shipped from New Orleans to northern manufacturing centers. But some oil and sugar refining, rice milling, furniture and paper manufacturing, and ship building are done in New Orleans. During World War II New Orleans shipyards produced many ships for the United States Navy. Early fruits and vegetables, shrimp, and oysters are shipped in refrigerated cars to large cities in the colder parts of our country.

Mississippi River traffic has grown in recent years. Products from the North Central states and the rest of the Mississippi Valley are sent down the Mississippi to New Orleans. From New Orleans they are shipped abroad by ocean freighter.

Freighters from the Northeast bring manufactured goods to New Orleans. Vessels from Central America and South America bring coffee, bananas, lumber, and many other things. These products are carried from New Orleans to various parts of the United States and to foreign countries by river boats, ocean freighter, truck, freight trains, and airplane.

The capital of Louisiana is Baton Rouge, a Mississippi River port about eighty-five miles northwest of New Orleans. Baton Rouge is the trade and shipping center of a rich farming region. It is an important oil-refining center. One of the largest oil refineries in the world is at Baton Rouge. In this city there are also chemical plants, rubber factories, and aluminum plants. Petroleum products are shipped from here by tanker to ports all over the world.

**Oklahoma City and Tulsa**

Have you ever seen a city with oil derricks throughout it? Such a place is Oklahoma City, the capital and largest city in Oklahoma. Here oil wells are at work on front lawns, in school yards, and even on the grounds of the capitol building. Large storage tanks are grouped near the derricks. Oil is chiefly responsible for the city’s growth.

Oklahoma City is the chief trade and shipping center for Oklahoma’s cotton growers. It has huge, open warehouses where cotton is stored before it is shipped. Many people in Oklahoma City have jobs in the trading and shipping of cotton, oil, wheat, and livestock. Cowboys, farmers, oil men, and ranchers use this big Southwestern city as a trade center.

Another important city is Tulsa, in northeastern Oklahoma. The discovery of oil deep beneath a cornfield near Tulsa turned it into a boom town. Tulsa has continued to grow. Today it is the headquarters for some of the biggest oil companies in our country. This modern, bustling city is the chief trade center for northeastern Oklahoma. Many people in Tulsa deal in cotton as well as oil.

Both Tulsa and Oklahoma City have aircraft plants. In other cities in Oklahoma there are also glass factories, meat-packing plants, flour mills, and petroleum refineries.

**Amarillo and El Paso**

In the far-western stretches of Texas are two important cities, Amarillo and El Paso. Amarillo, in the northwestern corner of this huge state, is the chief trade and shipping center of the Texas Panhandle. Most people in Amarillo earn their living by handling the wheat, oil, cattle, and sheep of the rich Panhandle area. A small part of the population of Amarillo earns a living by manufacturing.

El Paso, in the western corner of Texas, is often called the “Gateway to the West.” El Paso is the main trade center of western Texas, New Mexico, Arizona, and northern Mexico. These areas produce petroleum, crude ores, wheat, cotton, and cattle. Many people in El Paso work at the trading, processing, or shipping of these products. Others earn their living from the tourist trade. Many tourists stop in El Paso as they travel between the United States and Mexico.

**San Antonio and Austin**

In south-central Texas are the cities of San Antonio and Austin. These two cities have
one interesting historical point in common. Both have been capitals of the area now known as Texas. San Antonio was the capital while the area was under the flag of Spain. It was in San Antonio that the battle of the Alamo was fought when Texas was under Mexican rule. After Texas won its independence from Mexico, Austin was made the capital of the Republic of Texas. When Texas joined the United States, Austin continued to be the seat of government.

Austin is the trade and shipping center of a large farming and grazing region. Its industries include the manufacturing of brick, tile, and furniture. San Antonio is a trade and shipping center for cotton, oil, livestock, wool, grain, vegetables, and citrus fruits. San Antonio has oil refineries, meat-packing plants, flour mills, and factories where pottery, tile, brooms, and refrigerators are made. Near San Antonio are four great air fields. At Randolph and Lackland air fields young United States Air Force students receive their first instruction in flying. At Kelly and Brooks fields pilots receive more advanced instruction.

**Dallas and Fort Worth**

Located in north-central Texas are two important cities, Dallas and Fort Worth. These cities lie in the heart of one of the great petroleum regions of the world.

Dallas serves as the headquarters for several great oil firms and for oilfield tool and supply companies. Other important industries in Dallas are harness making and saddle shops, flour mills, iron and metal works, and meat-packing plants. Dallas is known as the fashion center of the South because it has factories where fine clothing is made. Dallas is also important in the aviation industry.

About thirty miles west of Dallas is Fort Worth. In early days it was an important trading and supply center for cattlemen. Today it is the largest meat-packing city in the South. Several aircraft factories and a number of large oil refineries are located here.

**Houston, great industrial center**

The largest city and chief port in Texas is Houston, named in honor of Sam Houston. It is located on Galveston Bay in southeastern Texas about fifty miles inland from the Gulf Coast. Until a few years ago only small ships could reach Houston. Then a channel was dug from the Gulf of Mexico to Houston. This channel goes across shallow Galveston Bay and up the San Jacinto River. The channel is wide enough to allow large ocean-
This fine modern building is the city hall in Houston. What is the purpose of a city hall?

going vessels to reach Houston. Since the digging of this channel Houston has grown very rapidly.

Today Houston is the largest railroad center and port between New Orleans and the Pacific Coast. Many people in Houston have jobs handling the city’s huge trade and transportation. Through Houston livestock and winter wheat are sent from western Texas to slaughter houses and mills in the North Central states. Petroleum from central Texas and the Gulf Coast is shipped by tanker to refineries in the Middle Atlantic states. Houston handles rice from the Gulf Coast. Most of the huge cotton crop of Texas also passes through Houston. Enormous warehouses store thousands of bales of cotton until shipment. Freighters carry cotton to manufacturing centers in our Northeast.

Houston is the largest manufacturing center in the Southwest. It is the world’s leading cotton market. Its factories turn out farm machinery used in the cotton fields, cotton textiles, and cottonseed products. Houston is also one of the leading oil centers of the world. Within a hundred miles of the city there are oil fields producing over two hundred million barrels of oil a year. Many important industries connected with petroleum production are located here. Houston also has rice mills, wheat mills, great slaughter houses, and meat-packing plants.

Farms on the Texas coastal plain supply fresh food for the people living in Houston, Port Arthur, Beaumont, Corpus Christi, Brownsville, and all the other cities along the Gulf Coast.

Galveston, an island city

A busy Texas port on an island off the Gulf Coast is Galveston. A bridge about three miles long connects Galveston with the mainland. Galveston was a busier port before Houston’s harbor was improved. Today Galveston is a popular resort town. Many people from the rest of Texas and other parts of the country spend their vacations on the island’s beautiful beaches.

Transportation between Texas cities

Texas is so large that great distances separate most of its cities. But it has excellent roads and highways connecting its cities. There are many United States highways, seven of which connect with roads in Mexico. Good roads also connect farming and ranching areas with market centers. Texas has more than seventeen thousand miles of railroad, which is enough to go two thirds of the way around the world.

Air transportation is coming more and more into use among the cities and towns of Texas. This is helped by good weather conditions and the great stretches of level land. Most of the larger cities in Texas have airports. The airport at Brownsville is an important stop for planes flying between Latin America and the United States.
TO HELP YOU LEARN

People and Places to Remember
Stephen Austin  Winfield Scott  The Alamo  Bernard de la Harpe
Santa Anna  Sam Houston  Pierre d'Iberville  Jean de Bienville
San Jacinto  De Soto

Words and Terms You Should Know
mission  asphalt  levee  reservation
blimp  gusher  bauxite  refinery
derrick  helium  flowing well  raw sugar
mohair  sulphur  dry farming

A Matching Test
The phrases below describe or define the words and terms listed above. Number a paper from 1 through 15. After each number write the word or term which matches the definition.

1. A well from which, when oil is struck, the oil shoots high in the air
2. The brown crystals which form when the juice of sugar cane has been boiled and allowed to cool
3. The framework built to support the machinery needed to drill an oil well
4. A church settlement built by the Spaniards in the New World to teach the Indians
5. Conservation of moisture in dry areas by the growing of only one crop every two years on the same plot of ground
6. An area set aside by the government for the use of Indians
7. A kind of airship which floats like a balloon when filled with a light gas
8. A bank of earth built along the side of a river to prevent it from overflowing its banks and flooding the land
9. A very light gas which does not burn or explode
10. A building where materials such as raw sugar and petroleum are purified
11. Cloth made from goat hair
12. A mineral substance which is one of the by-products of petroleum
13. An oil well which produces oil without being pumped
14. A soft yellow mineral
15. The ore from which aluminum is made

Can You Answer These?
1. Name the states of the Southwest. What is the capital of each?
2. What is a delta? How was the Mississippi Delta formed?
3. Name some of the natural resources of the Southwest. Which is its most important natural resource? Why?
4. What were the Spaniards looking for when they explored Arkansas? Were they successful?
5. Why did the French explorers start settlements in Arkansas? Why were they more successful than the Spanish explorers?
6. Why did Pierre d'Iberville think it was important to found a French colony at the mouth of the Mississippi River? Who went with Pierre to the New World? What city did he found?
7. How many flags have flown over Louisiana during its history? Tell the story.
8. Why did people from the United States follow Stephen Austin into Texas and settle there?
9. How did Texas gain its independence? Tell the story of the battle of the Alamo.
10. How did Texas become a part of the United States?
11. What brought about the war with Mexico? Who defeated Santa Anna? Who captured Mexico City?
12. How did our government try to take care of the Indians when settlers began to move westward in large numbers?
13. When was Oklahoma opened to settlers? Describe the "land rush" which followed.
14. What is the chief crop of the Southwest? Why? Look at the map on page 293 before answering this question.
15. Where is rice raised? Why is this a good region for raising rice? How is rice planted? How is it harvested?
16. In what state is sugar cane raised? Tell the story of sugar.
17. Name three important products of the Mississippi Delta region. Tell why the natural conditions of the region are right for each product.
18. What are some of the minerals of the Southwest? Where are they found? How are they mined?
19. What part of the Southwest is especially suited to livestock raising? What do we learn from our visit to a cattle ranch in Texas?
20. Name some of the important cities in the Southwest. For what is each important?

Can You Choose the Right Answer?
1. Two of the largest tributaries of the Mississippi River are the ____________ River and the ____________ River.
2. The chief mountains of the Southwest are the ____________
3. The French explorer, ____________, started a fur-trading post in what is now Arkansas.
4. ____________ brought the first American settlers to Texas.
5. The chief crop of the Southwest is ____________.
6. An important crop grown in the swampy parts of Arkansas, Louisiana, and Texas is ____________.
7. Citrus fruits are grown in Texas in the ____________ Valley.
8. Louisiana produces three fourths of the ____________ grown in the United States.
9. The largest oil field in the world is in ____________, where there are more than twenty-five thousand producing wells.

Using Maps
1. On the map of the United States on pages 250–251 locate the four states of the Southwest. Between what parallels of latitude do they lie? What kind of climate would you expect to find in this region?
2. On the same map trace the Mississippi River from its source in Minnesota down to the Gulf of Mexico. Of what states does it form the boundary? What are the most important tributaries of the Mississippi? Which of these drain the Southwest?
3. On the map on page 13 look at the key to find what kind of land makes up most of the Southwest. Where are the highlands? Where is the Edwards Plateau?
4. On the map on page 298 locate the Alamo. (The X symbol before this name is the sign for a battle.) What other battle of the war with Mexico was fought near by?
5. On the map on page 298 trace the route of General Taylor. How did General Scott and his army reach Mexico City? Where is the Gadsden Purchase? When did we acquire it?
6. Study the products map of the Southwest on page 293. What is the most important product of this area? What part of the area lies in the Cotton Belt? The map on page 40 will help you answer this. What other important crops are raised in this area?
7. On this same map find the minerals for which this region is famous. How do they differ from the minerals found in other states we have studied? Which state is noted for the furs it produces? Which states have important fisheries?
8. Using the scale of miles on the map of the United States, on pages 250–251, measure the distance across Texas at its widest point. Now measure the distance between Chicago and New York City. Which distance is greater? What does this tell you about the size of Texas? Where is the largest city in Texas? How did it become a great seaport?

Learning from Pictures
On page 299 is a painting of a famous event in the history of Oklahoma. Study the painting and answer these questions:

1. How many kinds of animals can you see?
2. Why do the men carry guns? What else are they carrying?
3. What will the man on horseback in the lower right corner do with his wooden stake?
4. Does this picture help you understand the kind of people who settled our West?

On page 295 is a view of the New Orleans waterfront in 1849. From this picture can you find the answers to these questions?

1. How many kinds of boats and ships are on the river? By what different means are they moved?
2. Why have the big ships come to this city?
3. Where do you think the flatboat may have come from?
4. What do you suppose the people who are carting away soil will do with it? What does this tell you about the soil along the Mississippi flood plain?

**Things to Think About**

1. Discuss in your class what would happen to our houses, factories, and to our transportation if all our oil wells suddenly ran dry. Make some careful notes before class. These are a few of the points to think and read about before making your notes:
   (a) What different products are made from petroleum?
   (b) How do we use these products?
   (c) Do we have enough oil to take care of our needs at present?
   (d) Is there any form of power which we have discovered lately which might help us if we should run short of oil?
2. You have learned how important the buffalo was in the lives of the Plains Indians. Can you see why the Indians thought they were right in trying to protect their hunting grounds from white settlers? Do you think the white settlers put the land to better use than the Indians did?

**Making a Chart**

Make a chart for the Southwestern states as you did for the Northeastern, Southeastern, and North Central states. List the name of the state, its capital and population, its largest city and population, and the most important products of the state.

**Interesting Things to Do**

1. The Mississippi River and its larger tributaries form a great inland waterway for the United States. Large barges carry products of many kinds up and down the rivers. Our government spends large sums of our tax money to keep this waterway in good condition. Collect all the information you can about this great waterway and make a report to your class. Use a map to show how barges and boats travel from New Orleans to St. Paul and Minneapolis, to Chicago, to cities in Ohio, and to other points. Tell what products they carry.
2. Make a model of a delta. Perhaps you can borrow the sand table from the kindergarten room and make your model in sand. Try to show how a river or a stream deposits soil at its mouth.
3. Make a list of the French and Spanish names which appear on the map of the Southwest, and read your list to your class.
4. Trace the story of cattle from the grazing lands of Texas and Oklahoma to the beef in a meat market — perhaps your meat market. Make a collection of pictures showing a round-up at a ranch, cattle being herded into freight cars, meat being inspected at a packing plant, beef being shipped by refrigerator cars. You might also make a list of the many by-products of cattle, and illustrate with pictures.
5. Your librarian will help you find many exciting stories about Western cattle ranching in the 1860's. At this time cattle were driven hundreds of miles along trails until they reached the "cow-towns" along the railroad. Find out and discuss how the coming of the railroads to the Southwest and the invention of refrigerator cars helped the meat industry to grow.
6. Your class might learn some songs which were sung by the cowboys in the old trail-driving days as they drove their cattle to the markets. Books which contain many of these songs are *Cowboy Songs* by John and Alan Lomax, *The American Songbag* by Carl Sandburg, and *Songs of the Open Range* by Ina and Repper Sires. If you can find one of these books in your library, try to borrow it for use in your class.
7. Make a film strip or a diorama to illustrate the early history of Louisiana. Some scenes you might show are the explorations of De Soto and La Salle on the Mississippi River, Pierre d'Iberville's visit to the king of France, Jean de Bienville founding New Orleans, and the raising of the flag of the United States over New Orleans.
The Far Western states are New Mexico, Arizona, California, Nevada, Utah, and Colorado. An air view of the whole Far West would show an area of varying landscapes. Deserts border irrigated garden spots. Mountains and plateaus tower above basins and valleys. A basin, as you know, is a low area in the midst of mountains.

We see the Rocky Mountains towering at the western edge of the Great Plains. In the United States the highest peaks of the Rockies are in Colorado. Pikes Peak and Longs Peak are over fourteen thousand feet above sea level. The peaks of the Rockies rise far above the timber line. It is too cold for trees to grow on the snowy tops of these mountains.

West of the Rockies lies a huge plateau and basin area. The plateau region is named the Colorado Plateau. The basin region is called the Great Basin. It is a little lower than the Colorado Plateau, which borders it on the north.

On the western border of this plateau and basin region rise the Sierra Nevada, or
The Far West

“Snowy Mountains.” These mountains are higher and narrower than the Rockies. Mount Whitney (14,495 feet) is the highest peak in our country, except Mt. McKinley, in Alaska, which is 20,300 feet high.

West of the Sierras is the Coast Range, low mountains which border on the Pacific. Separating the Coast Range from the Sierras is the wide Central Valley of California. Between the Coast Range and the Pacific Ocean is a very narrow coastal plain. In some places in California the coastal plain is several miles wide. At a few points along the Pacific Coast, however, there is no coastal plain. Here the mountains come down to the water.

Three important rivers, the Arkansas, the Rio Grande, and the Colorado, rise in the Colorado Rockies. The peaks of the Rockies are so high in this area that they form a dividing line on the North American continent. All the rivers on one side of the ridge, or highest point of the mountain range, flow to the east. On the other side of the ridge the rivers flow to the west. This ridge is called the Continental Divide. The Continental Divide separates the rivers that flow into the Mississippi and the Gulf of Mexico from those that flow into the Pacific Ocean.

The Arkansas River tumbles down the eastern slopes of the Rockies. Then it flows eastward and southward to the Mississippi. As the Rio Grande leaves the Rockies, it flows south through New Mexico then southeast to the Gulf of Mexico. The great Colorado River and its tributaries run down the western slopes of the Rockies to the Gulf of California. The Colorado River drains much of the Colorado Plateau and the Great Basin.

In this unit we will discuss these questions:

1. What is the Far West like?
2. How was the land east of the Sierras explored and settled?
3. How did California become a state?
4. How were Nevada and Colorado settled?
5. How were the East and West connected?
6. How do people in the Far West earn a living today?
WHAT THE FAR WEST IS LIKE

Two of the Far Western states are among the largest in our country. California is the second largest, and Nevada is the sixth largest state in the Union.

Population of the Far West

With the exception of California, which has more than ten million people, the Far West is a thinly populated area compared with some other parts of our country. Nevada has the fewest people for its size of any state in the United States. It has an average of only one and one-half persons to each square mile. What do the dots on the map on page 36 show us about the number of people who live in the Northeast compared with the Far West?

Resources of the Far West

The Far West has large deposits of gold, silver, copper, lead, and zinc. California is the chief mining state in the Far West. It produces large amounts of petroleum and natural gas.

Another important resource of the Far West are the forests of huge pine trees. Northern California has many trees. Pines that are found only in California are the redwood and the giant sequoia (sè-kwoi'â). Many of the sequoia trees are between three and four thousand years old. Some of them are nearly three hundred feet high and have trunks more than twenty-five feet thick.

The waters off the coast of California have tuna, salmon, sardines, flounder, mackerel, and crabs. All these fish, except the salmon, are caught in coastal waters.

Climate of the Far West

Most people find the mild winters and cool summers of the Pacific Coast very pleasant. The valleys between the Coast Range and the Sierras have cooler winters and warmer summers. The plateau and basin region between the Sierras and the Rockies has much colder winters and hotter summers.

Moist winds from the Pacific Ocean give the coastal area of the Far West enough rain for farming. The rain falls during the winter season, and the summers are dry. Rain clouds from the Pacific lose their moisture in the form of rain or snow as they become cooled over the Sierras. Because of this the land east of the Sierras is dry. (See page 35.)

The climate varies greatly from place to place in the Far West. Parts of this area are too dry for farming without irrigation. Other parts, such as the northern Pacific Coast area, have plentiful rainfall. The southern lowland section has almost no snow. But the higher mountain areas and the plateau and basin regions east of the Sierras and the Rockies usually have bitterly cold winters and heavy snow. We shall learn more about the climate of the Far West as we study each of the sections.

SETTLING THE LAND EAST OF THE SIERRAS

“Far to the north are seven cities of gold. Some of my people have seen the houses gleaming in the distance,” says an Indian to a group of Spanish explorers.

“I must find these seven cities of gold,” declares the Spanish adventurer Coronado. “Then I will fill Spain’s treasury and win honor and a great fortune for myself.”

SPANISH EXPLORATIONS

Hoping to find treasure, Coronado marches north from Mexico. With him are many horsemen and foot soldiers and almost a thousand Indian servants and guides. These Spanish adventurers are the first white men to explore the Far West.
During months of hardship and suffering many of Coronado’s men fall ill and die. Still Coronado pushes on. Then one day he sees a city in the distance which looks bright and beautiful as the sun shines upon it. But when he finally reaches his goal, he finds that the city is only a group of poor Indian villages. The Spaniards are weary and almost starving. They battle with the Indians before they can enter the villages. Finally they force their way inside to get the food they need. They find neither gold nor silver and are greatly disappointed. Still they push on.

**Discovery of the Grand Canyon**

Coronado and his men break up into several groups. They continue to travel and to look for treasure but find none. One of these groups, however, does make a great discovery. While following the Colorado River, the adventurers come to the Grand Canyon. This is a deep wide valley worn away by the rapid waters of the Colorado River. The men are amazed by the great size and beauty of the Grand Canyon. Its walls sparkle with brightly colored rock. A mile below, the broad Colorado River looks like a tiny stream lost in the huge canyon.

After a while Coronado’s men leave the canyon and continue to search for gold. They find no treasure and leave no settlements in the Far West. But they have discovered one of the wonders of the New World — the Grand Canyon of the Colorado.

**The Indians of the Southwest**

One of the pueblos, or Indian villages, that Coronado found in his travels is still standing today. It is the oldest North American pueblo in which Indians have lived continuously. This pueblo stands high on the flat-topped mountain of Acoma (ä’kô-mä) in New Mexico. Such a mountain top is called a mesa (mä’sa). This village was already very old when Coronado’s men found it.

The Pueblo Indians were thrifty, peaceful farmers. But they had warring neighbors, the Apaches (á-päch’éz) and Navajos (näv’ä-höz). Because of them the Pueblo Indians stayed in their village on the mesa as much as possible. They went down to the plains only to work in their fields and to get supplies. The Navajos and Apaches were shepherds who moved about looking for fresh pastures for their sheep. They lived in houses called hogans, which were built of logs and mud.

Most of the Pueblo Indians of today are also farmers. The Navajos and Apaches are still shepherds. But some of the Pueblo Indians earn a living by making pottery, baskets, and silver jewelry. The Navajos are famous for their brightly colored blankets, which are woven of wool from their own sheep. The Navajos are also known for their handsome silver jewelry set with turquoise (túr’koiz), a beautiful blue-green stone.

**MISSION SETTLEMENTS**

Two priests, who came to the Far West in early times, were Father Kino (kë’nô) and
Father Serra (sərˈrâ). They were missionaries who had come to teach the Christian religion to the Indians. Father Kino started several missions in what is now Arizona. Father Serra founded at least nine missions in California. Altogether twenty-one missions were built in California by his followers. They were a day’s journey apart along the road from San Diego to San Francisco. This road was called El Camino Real (el kāˈmēnō râˈāl), which in Spanish means “The King’s Road.”

For many years the Far West had very few settlements besides these missions. Let us visit a mission settlement in those early days.

We enter this mission settlement through a gate in a thick stone wall. The wall has been built around the settlement to protect the people inside. Besides this stone wall, a fort and soldiers guard the settlement.

Many Indians are busily at work. Some are tanning hides. Some are pressing grapes for wine. Others are making olive oil. We see a priest teaching a group of Indians how to make pottery. They are shaping cups, vases, and bowls. Some pieces of pottery are standing in the sun to dry. Then they will be put into a hot oven to be fired, or baked. When the pottery is taken out of the oven, it will be hard and have a shining surface.

Clang, clang, clang! An Indian blacksmith is working before a great fire. He is making horseshoes, wagon wheels, and other useful things. Farther on, we see Indian carpenters making benches for the church and chairs and tables for their homes.

We come to a group of Indian women working near a stone oven. They are baking loaves of wheat, corn, and barley bread. Some women are kneading dough on large, flat stones to prepare it for baking. Others are taking brown loaves out of the oven.

Farther along we pass a building where women are weaving cloth. Sheep are part of the livestock which are grazing in the fields of this mission settlement. From the sheep the Indians get wool to make cloth. Besides sheep, this settlement has horses, cows, and oxen. The grazing lands are outside the wall.

The farmlands of this mission settlement also lie outside the stone wall. As we leave, we see Indians working in the fields. A canal has been dug from a near-by stream to irrigate these fields. Oranges, lemons, limes,
and figs grow in the orchards. Grapesvines, grains, and vegetables grow in the fields.

**Founding of Santa Fe**

About the time that the English settled Jamestown, Santa Fe was founded by Spaniards who had journeyed north from Mexico. Santa Fe is the oldest town in our Far West and the second oldest city in the United States. It is also the capital of New Mexico.

Most Spanish settlers in the Far West had to grow all their own food. They had to build their houses and make their furniture, clothing, and everything else they needed. But the settlers along the coast of California got what they needed by trading with ships from the United States. Several of these trading vessels made the long voyage from the eastern coast around South America. They brought furniture, cloth, needles, plows, tools, and other manufactured goods. They took back hides and other ranch products.

**The Santa Fe Trail**

After the Louisiana Purchase many pioneers moved westward. Traders from the East brought manufactured goods to settlements in the Louisiana Territory. Then some traders began to make the longer journey to Spanish settlements in Texas and New Mexico. They traveled over a route called the Santa Fe Trail.

The traders started from Independence on the Missouri River. Then they journeyed southwest across wide, flat plains to a point on the Arkansas River. Here the trail divided. The shorter, more dangerous route crossed a desert where there was no water for sixty miles. The longer, safer trail went through part of the Rocky Mountains. The two trails joined again before Santa Fe was reached. Follow the route on the map on page 320. The trail covered almost eight hundred miles from Independence, Missouri, to Santa Fe, New Mexico. The Santa Fe Trail was an important trade route in those early days.

Because of the danger of Indian attacks, traders on the Santa Fe Trail traveled in large groups. At first they used pack mules to carry the goods. Then as the trail became wider, they began to travel in covered wagons. A wagon train on this trail usually had twenty-six wagons. Each wagon was pulled by ten oxen or mules and could carry a load of about six thousand pounds. A wagon train could go about fifteen miles a day.

After a time stagecoaches made the journey and carried passengers to the Far West.

_Bettmann Archive_

Many settlers in the West lived in log cabins at the edge of a clearing like this. Why is the chimney built of stone? Why is the bucket hanging at the roof?
It cost two hundred and fifty dollars, and the journey from Santa Fe to Independence took about two weeks. Today a fast train could travel the whole length of the Santa Fe Trail in about ten hours.

THE MORMONS IN UTAH

An important city through which northern trade routes in the Far West passed was Salt Lake City in Utah. This city was built by the members of a religious group sometimes called Mormons.

Brigham Young, Mormon leader

The leader of the Mormons in their westward travels was a man named Brigham Young. The Mormons were searching for a place where they could worship as they wished. First they had tried to settle in Ohio. Then they moved on to Missouri and later to Illinois. But wherever they tried to settle, neighboring people objected to things the Mormons believed.

The Mormons decided that they would have to find an unsettled region where there were no people to object to their ways of worship. So they made up their minds to move out of the United States. Under Brigham Young’s leadership about two hundred Mormons started west in the spring of 1847. They traveled a thousand miles to the shore of the Great Salt Lake. This land then belonged to Mexico. No other settlers had stopped there. There were no neighbors to make the Mormons leave.

The building of Salt Lake City

All the Mormons worked together under Brigham Young’s wise leadership to build a new settlement. They dug ditches to irrigate the land. They plowed the fields and planted crops. They built barns, houses, and a church which they called a temple. They also planned and laid out wide, straight streets. In the second year of their stay their crops were threatened by a huge swarm of Rocky Mountain grasshoppers. But before the grasshoppers destroyed the crops, flocks of sea gulls appeared and devoured the grasshoppers. The Mormons were so grateful that they set up a statue to the sea gulls which saved them.

Within a few years several thousand other Mormons joined this settlement. Everyone worked hard. Today Salt Lake City is one of the most important cities west of the Mississippi River.

HOW CALIFORNIA BECAME A STATE

AMERICAN EXPLORERS

As more people from the United States settled in California, the United States government became interested in this distant, western land. It sent men to explore it.
Frémont, the Pathfinder

John C. Frémont, a young explorer, took charge of an expedition to the Far West. This group reached California and then returned safely under Frémont’s leadership. Frémont’s notes told so much about the region he explored that he won the name of “the Pathfinder.” Later on he was put in charge of other expeditions to the Far West.

On his last trip Frémont went as a colonel in the United States Army. He reached California shortly before the War with Mexico started in the Southwest. Frémont led a rebellion of United States settlers in California against Mexican forces. Without consulting anyone, they decided to set up a Republic of California.

They made a flag by painting a bear and a star on white cloth. Then they raised the “Bear Flag” over the camp. When Frémont heard that war with Mexico had begun, he took down the Bear Flag. In its place he raised the Stars and Stripes.

As you know, the war ended with the defeat of Mexico. Mexico lost not only Texas but also what is now our Far West. After this war the United States stretched from the Atlantic to the Pacific.

Kit Carson, famous scout

Frémont’s chief guide was the famous scout and trapper, Kit Carson. Kit lived an exciting life. He was born in Kentucky. His family moved farther west to Missouri while he was a child. When he grew up, he became a trapper. He became a very skillful hunter and scout. Living in the forests, he became acquainted with many Indians and learned their ways.

Kit Carson was sent by the United States government to look after the Indians at Taos (tä’ōs), New Mexico. As an Indian agent, he used his knowledge of Indian languages and customs to keep peace between the Indians and the white settlers. During the War Between the States, Kit was a Union scout in the Far West. After the war, the government gave him the title of general to honor him for his outstanding service. Then Kit returned to his post as Indian agent. He worked for peace between the Indians and settlers until his death.

A GREAT DISCOVERY

In 1848, shortly before the end of the war with Mexico, gold was discovered on Captain John Sutter’s ranch in California. This ranch of several thousand acres was at the foot of the Sierras near the present city of Sacramento (see the map on page 14).

Gold! Gold! Gold!

It was James Marshall, one of Captain Sutter’s workers, who discovered the gold. While building a mill on a river that flowed through Sutter’s land, he saw shining grains in the water. These gleaming grains were not sand, but gold!

The forty-niners

News traveled slowly in those days. Almost a year passed before the East heard of this discovery of gold in California. When the news finally reached the East, people went wild with excitement. Thousands left their homes to go to California. Since this rush began in 1849, the gold seekers were called “the forty-niners.” A favorite song of the forty-niners as they traveled westward was “Oh! Susanna!” by Stephen Collins Foster.

The forty-niners used three main routes to California. Some gold seekers used the all-water route. They sailed from the Atlantic Coast, around South America, and up the Pacific Coast to San Francisco. This was a long, expensive voyage. Others went by ship to Panama. Then they traveled on foot through the hot, dangerous jungle of the Isthmus to the Pacific Ocean. After this they took a ship to California. The third route, along the overland trails to California, was dangerous also. Indian attacks, burning deserts, and snowstorms in the mountains killed many. But the forty-niners kept on.
This poster advertises the sailing of a fast ship from New Bedford, Massachusetts, to San Francisco. On the map, page 8, trace the route the ship took around South America.

Most land travelers to California used the Oregon Trail (see the map on page 320). They started at Independence, Missouri. After crossing the Platte River, they went on to Fort Laramie, in what is now Wyoming, and then to Fort Hall. At Fort Hall the trail divided. The part that went toward the south became known as the California Trail. Another branch of the Oregon Trail, known as the Mormon Trail, went south to Salt Lake City. It then went southwest across the desert and mountains to Los Angeles.

SETTLEMENT OF NEVADA AND COLORADO

Not all the forty-niners found gold in California. But most of them found other kinds of work there. Some left to search for gold or silver in other parts of the Far West.

These men are “panning” for gold. One man shakes a pan of gravel and water looking for gold at the bottom of the pan. The cradle near by is also used in testing for gold.

Becoming a state

Gold seekers kept flocking to California. Cities were built overnight. Less than two years after Marshall’s discovery, California’s population jumped to more than a hundred thousand persons. California now had enough people to become a state. At a meeting in Monterey (mōn’tē-rā′) the people wrote a constitution. In this constitution they said that there was to be no slavery in California. When California joined the Union in 1850, it came in as a free state.

The Comstock Lode

Ten years after the discovery of gold in California, silver was discovered on Mount Davidson in Nevada. The discovery of silver
brought many people to the area. The next year another huge deposit of gold and silver was discovered in western Nevada. This mine was called the Comstock Lode. News of it brought many adventurers to Nevada.

One adventurer who went to Nevada in the days of the Comstock Lode later became famous as a writer. His real name was Samuel Clemens, but he used Mark Twain as a pen name. Mark Twain’s stories, published in a newspaper, give us a good picture of the early days in Nevada. Later he became famous as the author of The Adventures of Tom Sawyer and The Adventures of Huckleberry Finn, stories of two young boys and their exciting experiences.

“Pikes Peak or Bust”

When the Comstock Lode was discovered, gold was also found in the Pikes Peak region of Colorado. This discovery drew people to Colorado in large numbers. Some traveled on foot, some rode on horseback, and others went in covered wagons. Many covered wagons had signs reading “Pikes Peak or Bust” printed on the wagon covers. Some of these wagons went home a year later. Their covers carried the word “Busted.”

CONNECTING EAST AND WEST

During the days of the gold rush it took months for mail sent from the East to reach the Far West. After California became a state, it was necessary to find faster and better ways to send the mail to the west.

TRANSCONTINENTAL MAIL SERVICE

To speed up the mail to the Far West the Federal government started an overland mail service from St. Louis to the Pacific Coast.

The Overland Mail

By this new service the mail was taken to St. Louis by train, where it was placed on stagecoaches. The coaches carrying passengers and mail traveled day and night. At stations along the way fresh horses were kept. At these stations the passengers ate quick lunches. Travelers found the journey hard and dangerous. There was always danger of

The stagecoaches of the Overland Mail carried letters and passengers. Why was the pony express started? Between what cities did the pony express carry the mail? When was the first transcontinental railroad completed?
attacks by Indians or robbers. The journey from St. Louis, Missouri, to San Francisco, California, took about twenty-five days. This was our first transcontinental mail service. Transcontinental means "across the continent."

The Pony Express

The Overland Mail was not fast enough for many businessmen in the East and in California. So a faster transcontinental mail service, called the Pony Express, was started to speed letters across the country. It ran from St. Joseph, Missouri, where the railroad ended, to Sacramento, California. The Pony Express schedule called for ten days to carry the mail over the entire route.

The riders were all light in weight, young, and brave. They could ride with or without a saddle. Their orders were never to fight the Indians or bandits if they could escape by running. Their job was to get the mail through, no matter what happened. Each rider galloped at top speed to the next station, ten or fifteen miles away. Here he mounted a fresh horse and rode on. After riding about fifty miles he handed over his saddlebags to another rider, who in turn sprang to the saddle and dashed away. The mail was carried in two waterproof leather saddle bags.

The Pony Express lasted for nineteen months. Its most famous rider was "Buffalo Bill." His real name was William Cody, and he was only fourteen when he became a Pony Express rider.

The Invention of the Telegraph

It was the telegraph that put the Pony Express out of business. Samuel F. B. Morse was the inventor of the telegraph. After working on his invention for ten years, Morse asked Congress to help him. Congress granted Morse thirty thousand dollars to build a telegraph line to test his invention. The line stretched from Baltimore to Washington, a distance of forty miles. Let us watch Morse as he tries out his invention.

The date is May 24, 1844. A group of men wait quietly in a room in the Capitol in Washington. Morse is seated before his invention. He raises his hand and taps out this message: "What hath God wrought!" Almost immediately the same words are flashed back over the wire. The answer proves that Morse's message was received in Baltimore.

Soon telegraph lines were built all over our country. In October, 1861, the first telegraph line connecting California with the East replaced the Pony Express.
FIRST TRANSCONTINENTAL RAILROAD

Soon after the telegraph reached California, two railroad companies decided to extend the railroad to the west coast. According to plan, two crews of workers started laying tracks from opposite directions, and worked toward each other. The workers on the Central Pacific Railroad pushed eastward from Sacramento, California. Those on the Union Pacific Railroad worked westward from Omaha, Nebraska. Trace these two routes on the map on page 325.

Both crews had great difficulties to overcome. For almost seven years thousands of men labored with axes, picks, and shovels. Central Pacific men working eastward had to dig tunnels through the high Sierras. Union Pacific workers pushing westward across the plains were always in danger of Indian attacks. When they reached the Rockies, they had problems like those of the workers who laid tracks through the Sierras.

Toward the end it became a race to see which railroad crew could finish first. On May 10, 1869, the tracks finally were joined at a point near Ogden, Utah. A large crowd of people traveled great distances to see the completion of the railroad.

If we could join the crowd, we might hear the men boasting and joking. Each crew is trying to prove that it has done a harder, better job. Then all talking stops. A Union Pacific officer and a Central Pacific officer take turns hammering into place the last spike, a gold one. The Union Pacific locomotive and the Central Pacific locomotive draw together until they touch. The telegraph flashes the news of the completed railroad to the whole country. Now the East and the West are tied together by steel bands — the first transcontinental railroad.

Small settlements like this sprang up along the new railroad which connected East and West. Some of them grew into important towns. This settlement already has a school and a church.
EARNING A LIVING IN THE FAR WEST

In the Far West are many kinds of land. Much of the land between the Sierras and the Rockies is too dry for farming or grazing. But at the foot of the Sierras and the Rockies are some winter pastures. Summer pastures are on the lower slopes of these mountain ranges. On the ranches near the mountains the summer sun dries the streams and turns the grass brown. But melting snow makes streams and keeps the grass green on the mountain sides in summer.

EAST OF THE SIERRAS

Most of the land lying between the Sierras and the Rockies has very little water. Irrigation brings needed water to some areas. Other regions are covered with coarse grasses. Still other areas have almost no vegetation.

Sheep grazing east of the Sierras

The grasslands of the Far West are used mainly for sheep grazing. Many more sheep than cattle are pastured here. The reason is that sheep can live on less water and poorer grass than cattle can. Streams are often far apart in the Far West. Sheep can climb much more easily than cattle and can graze on mountain slopes.

During the winter the sheep grow a thick, warm wool covering, called a fleece. In spring the sheep are rounded up and their fleeces are clipped off. This is called shearing the sheep. At shearing time the ranch hums with activity. The ranch hands round up the sheep. Then they bring them to the shed where several men are shearing sheep.

Each man throws a sheep to the floor and holds it down. Then he uses large, electric clippers to clip off the sheep's coat of wool. Quickly, painlessly the sheep loses its dirty, heavy fleece.

The rancher waits until there is no danger of a late snowfall on the mountain slopes. Then he sends the shepherds with the flocks of sheep to the fresh pastures. Each shepherd keeps his sheep from grazing in one place.

A. Devaney

Wool is cut off the sheep by these men using electric shears. A skillful worker can shear a sheep in just a few minutes' time.
Many dams have been built by the government to help prevent floods and to provide water for irrigation. When water is brought to them through irrigation large desert areas have been turned into productive farm land. In what states of the Far West has irrigation been used?

more than three days. In this way they do not eat the grass so close that it will not grow again. Sheep like the taste of salt. The shepherd gets his herd to move on by sprinkling salt in the next pasture.

The shepherd stays near his flock day and night. The sheep dogs help him guard the sheep from harm. They keep wild animals away from the flocks. These dogs are the trusted friends of the shepherd and the sheep. In the late fall the shepherd takes the sheep back to the ranch for winter feeding.

**Farming east of the Sierras**

The dry land east of the Sierras has irrigation water for only a very small part of its huge area. Many different crops are grown in these irrigated regions. Irrigated land in New Mexico produces corn, wheat, and alfalfa. The huge Elephant Butte (büt) Dam provides water from the Rio Grande.

Some of the finest cotton in the world comes from Arizona. Arizona’s cotton farmers get irrigation water from Roosevelt Dam on the Salt River. Arizona is also known for its lettuce, melons, oranges, and other fruits. These crops grow on land irrigated by water from Hoover Dam (once called Boulder Dam) on the Colorado River. The reservoir made by this dam is called Lake Mead. This reservoir is one hundred and fifteen miles long. It holds more water than any other dam.
Hoover Dam, on the Colorado River, is on the boundary between Arizona and Nevada. Lake Mead, the reservoir formed by it, is the largest man-made lake in the world. Lake Mead stores water to irrigate parts of California and Nevada as well as Arizona. Nevada is one of the driest states in our entire country. Only a very small part of its area is irrigated.

In much of Colorado the Rocky Mountains make farming difficult. Without irrigation farming would be hard in the rest of this state. Near the Continental Divide lie flat grasslands partly covered by forests and surrounded by mountains. They are irrigated by water from streams formed by melting snow from the surrounding mountains. The farmers here specialize in sugar beets, lettuce, peas, beans, potatoes, cauliflower, carrots, and celery.

Utah produces these vegetables and the famous Utah peaches too. Strawberry Dam on the Green River supplies irrigation water for some farming in Utah.

FARMING IN CALIFORNIA

The land west of the Sierra Nevada has enough rain and irrigation water for farming.

Farming in southern California

We visit rich Imperial Valley in southern California. This was once a desert, but a
Study this map of the products, natural resources, and manufactures of the Far West. Are there any crops raised here that are not raised in other parts of our country? Compare this map with the earlier products maps before you answer. Where in the Far West is steel made?

The Central Valley of California

We enter the Central Valley of California at its southern end and fly north. The Central Valley lies between the Sierra Nevada and the Coast Range. It is four hundred miles long and almost fifty miles wide. Most of the Central Valley is used for farming. You will remember that California gets its rain in winter. For this reason irrigation is needed during the summer.

Irrigation water and electricity for the Central Valley come from dams on the Sacramento and San Joaquin (wa-kën') rivers. The San Joaquin River flows north from the lower end of the valley. The Sacramento River flows south from the upper end of the valley. These rivers meet near the middle of
Coastal valleys of California

California also has rich farm land in the valleys of the Coast Range. These valleys produce flowers, fruit, vegetables, dairy products, and poultry. The Santa Clara Valley is famous for its fine prunes. The region around Monterey Bay is known for its apples. The Salinas (sā-lē' nās) Valley, a few miles inland from Monterey Bay, is the greatest lettuce-growing area in the United States.

LUMBERING IN THE FAR WEST

Because of its dryness much of the Far West has no trees for lumbering. But the western slopes of the Sierra Nevada are covered with thick forests of towering white and sugar pines. Forests of gigantic redwoods grow on the Coast Range north of San Francisco. The redwood is a kind of pine tree that grows only in Northern California. The redwood and the white and sugar pines are softwoods. Many people in California earn a living by lumbering, working in saw mills, making furniture, and manufacturing wood pulp for paper.

MINING IN THE FAR WEST

The Far West produces gold, silver, lead, zinc, and copper. Much silver is mined in Nevada. Arizona is one of the chief copper mining states in the entire country. Copper is used to make water pipes, faucets, pots, and pans. Copper is used in all telephone, telegraph, and other electric wiring.

The Far West has important deposits of petroleum and natural gas. California is one of our country's leading producers of petroleum and natural gas. Oil is found under the ocean off the coast of southern California. The coastal lands at the southern end of the Central Valley are rich in oil. Petroleum is also produced in Utah and Colorado.

Lead is found in good quantities in Utah, Arizona, and Colorado. Its chief uses are for covering wires that are laid under ground and for water pipes. Large quantities of zinc are found near Butte, Montana. The
This large modern oil field is at Signal Hill, near Long Beach. Many large and small oil fields have made California a leading producer of oil and oil products in our country.

The most important use of zinc is in coating iron and steel to make it rustproof. It is also used to make roofing, tank linings, jar tops, and other articles that get wet when in use. It is also combined with copper to make brass and bronze.

**FISHING**

Many people living along the coast of California earn a living by fishing or canning fish. Fishing fleets set out empty from San Diego, San Pedro, and San Francisco and return filled with fish. Most of the tuna, sardines, and salmon are canned. But the flounder, mackerel, and crabs are eaten fresh by people in California's cities. In what other states do people earn a living by fishing?

**CHIEF CITIES OF THE FAR WEST**

Most of the Far West has a small population in comparison with the large number of people in some other areas of the country (see the map, page 36). But two of California's cities, Los Angeles and San Francisco, are among the dozen largest in the United States.

**The Los Angeles area**

Los Angeles is the chief manufacturing, trade, and shipping center of southern California. Fruit, vegetables, and fish are all sent to its factories in large amounts. Los Angeles has many factories where clothing is made. Large amounts of rubber tires and tubes are manufactured in Los Angeles. Southern California is the greatest aircraft assembly center in the world. Airplane factories are located in Glendale, Burbank, Santa Monica, San Diego, and other cities in southern California.

Southern California is rich in natural gas and petroleum. It uses these fuels in homes.
The great harbor of Los Angeles is fifteen miles away from the center of the city. Ships of many nations dock here to unload their cargo and to take on new loads of American products.

Los Angeles Harbor Department
In this air view of San Francisco the business center and most of the city’s fine harbor can be seen. How is this view different from the one of the Los Angeles harbor shown on page 334?

**The San Francisco area**

San Francisco is the chief manufacturing, trade, and shipping center in northern California. One of the largest iron works in the world is in San Francisco. Great shipyards were built in the San Francisco Bay area during World War II. San Francisco Bay is one of the best harbors in the world. It is large, deep, and safe from storms blowing in from the Pacific Ocean. The water front stretches for about fifteen miles around San Francisco Bay. Dozens of ships lie beside large crowded wharves. Lumber, canned fish, fruit, vegetables, and manufactured goods are loaded on these ships. Coffee, sugar, spices, and other things brought in from foreign ports are used in factories in San Francisco or shipped to other parts of the United States.

The Golden Gate Bridge over San Francisco Bay is the world’s longest suspension (or hanging) bridge. It connects San Francisco, which is on a peninsula, with the north coastal counties. San Francisco is connected with the cities across the bay by the San Francisco-Oakland Bay Bridge. Berkeley and Oakland are two of the larger cities across San Francisco Bay. Oakland is the third largest city in California. It is an industrial center. One of the leading industries is the canning of vegetables and fruits from the farming regions of the state. It handles a great deal of freight and is the railroad station for passengers traveling between San Francisco and the East. Ferries
The San Francisco mint is one of three mints in the United States. Can you tell why a mint was built in this city? In what cities are the two other mints?

San Francisco C. of C.

carry passengers and freight across the bay between San Francisco and Oakland.

In San Francisco is one of the United States mints, where money is coined. This city is one of the chief banking centers in our country.

San Francisco and Los Angeles are the largest, most important cities in the Far West. But several smaller cities have become trade centers in other areas of the Far West.

OTHER CITIES OF THE FAR WEST

The largest city in New Mexico is Albuquerque (ælˈbjuːkərˈkeɪ). Because of its healthful climate Albuquerque has many hospitals and rest homes. Another trade center is Santa Fe. It is the capital of New Mexico. Santa Fe, you will remember, is the oldest city west of the Mississippi River. Many tourists visit here during the winter.

A. Devaney

Here in the capitol in Denver the lawmakers of Colorado meet to make the laws of the state. The statues were erected in memory of the cowboys of the early days who helped develop the West.
Arizona's chief cities are Tucson (too-sōn'), Phoenix, and Yuma. Tucson is the trade center of the copper-mining region and of irrigated farms. Phoenix, the capital of Arizona, is in the heart of a farming area irrigated by Roosevelt Dam. Yuma is another irrigated garden spot in the desert. Its irrigation water comes from the Colorado River. Tucson, Phoenix, and Yuma are popular vacation resorts.

The largest city and chief trade center in Nevada is Reno (rē'no). This city handles the products of the farms and mines near the foot of the Sierras. Near Reno is Carson City, the capital of Nevada. It was named in honor of Kit Carson, the famous scout and Indian agent. The second largest city in Nevada is Las Vegas. It is located only twenty-five miles from Hoover Dam. The people who go to see this dam have helped to make Las Vegas a tourist resort.

The capital and largest city of Colorado is Denver. Mining, the tourist business, and irrigated farms give Denver its trade. Denver is the chief banking and trade center of the Colorado Rockies and the Great Plains. Denver also has a United States mint. It is one of the biggest cattle and sheep markets in the world.

Another important city in Colorado is Pueblo. Pueblo is one of the large steel centers between Chicago and the Pacific Coast.

The capital and most important trade center of Utah is Salt Lake City. Salt Lake City is a trade and banking center. North of Salt Lake City is Ogden, which is the chief railroad center in Utah. A steel plant was constructed during World War II in Geneva, a small city on Utah Lake. Geneva's steel industry has become the fourth largest producer of steel plates in the United States.

A white-hot steel ingot is being lifted out of the heating pit in this plant in Geneva, Utah. Is white-hot hotter than red-hot? United States Steel Corporation

On these huge rollers in the Geneva plant, in Utah, steel is rolled into thin sheets. These great sheets are eleven feet wide. United States Steel Corporation
Our government has many national parks and national forests. In these parks places of great natural beauty are protected. All people are encouraged to visit the parks and stay at the camps that have been built for their use. The national forests are large areas of timber land in which the trees and wildlife are protected by law.

**SCENIC WONDERS OF THE FAR WEST**

Many tourists visit California to enjoy the sunny climate, beautiful scenery, and marvels of nature. On California’s eastern border there is a great desert known as Death Valley. This desert is two hundred and eighty feet below sea level. It is the lowest land in the United States. West of Death Valley is Mount Whitney. Mount Whitney is the highest point in the United States. This peak of the Sierra Nevada rises almost fifteen thousand feet above sea level. Parts of the Sierras have been set aside as national parks.

**National Parks of California**

Among California’s parks are Sequoia National Park and Yosemite (yo-šé-mé-té) National Park. The beautiful scenery attracts many tourists. Sequoia National Park is

The sand of Death Valley moves constantly in the wind. As it moves, it forms new hills and valleys. That is why so many early pioneers lost their way when trying to cross this desert. Only a few sturdy desert plants grow in this valley. Can you find some of them in the picture?
Utah's national parks

In southwest Utah is Zion National Park. This park has as its chief attraction a beautiful canyon. Zion Canyon is a half mile deep in some places. At the bottom of the canyon is a layer of dark red sandstone. Just above is a layer called The White Cliffs. Towering over these are higher cliffs which visitors can climb to view the beauty of Zion Canyon. One of these cliffs, the Great White Throne, is too steep for any kind of trail. Not far away is Bryce (bris) Canyon. Bryce Canyon, another of Utah's scenic wonders, has also been set aside as a national park. Visitors admire this "box" canyon with its strangely formed cliffs and lofty peaks.

Arizona's scenic wonders

One of the greatest natural wonders of the world is the Grand Canyon of the Colorado River. This canyon, which has been cut by the waters of the Colorado through the high plateau of Arizona, is two hundred miles from side to side. The vast area of the canyon is a breath-taking sight. The visitor who stands at the rim and gazes downward sees a succession of cliffs and terraces like a giant staircase, each several hundred feet high. Far below at the bottom of the canyon, looking like a tiny thread, is the swift-flowing Colorado. Many layers of rock have been laid bare by the force of the rushing river. But the most startling beauty have comes from the colors of the rocks. These colors, which change in the shifting sunlight, range from brilliant red to lavender brown.

In Arizona are other natural wonders. One of these is the Painted Desert. Like the Grand Canyon, the Painted Desert is also famous for its wonderful colors. To travelers who see the desert from a distance the bright reds, yellows, and purples of its sands and stones look like a huge painted picture. In Arizona too is the Petrified Forest. This "forest" is strewn with logs of an old woodland now turned to stone.

Giant old sequoia trees, like this one, grow only in the mountains of California. These trees are the oldest living things on earth. It is against the law to cut the trees down.

famous for the giant sequoia trees. Some of them are thousands of years old.

About two hundred miles east of San Francisco is Yosemite. This beautiful park lies in the heart of the Sierra Nevadas. It is noted for its waterfalls. One of these is famous for its rainbow colors. Another, which is called Bridalveil Falls, drops more than six hundred feet in a very slender column. Many tourists visit Yosemite National Park each year to gaze at the falls and to ride on its mountain trails. They often stay overnight at the Meadows, a favorite camping site in the park.

Lassen Peak, in Lassen National Park, is the only active volcano in the United States. Kings Canyon National Park is noted for its beautiful canyon and sequoias.
TO HELP YOU LEARN

Persons and Places to Remember
Navajo Father Kino Comstock Lode Lassen Peak Mount Whitney
Apache Grand Canyon John C. Frémont Death Valley Hoover Dam
Pikes Peak Brigham Young Father Serra Yosemite Samuel F. B. Morse
Kit Carson Oregon Trail Sante Fe Trail Zion Canyon Samuel Clemens

Words and Terms You Should Know
Mormons pueblo hogan shearing
sequoia mesa forty-niners Contention Divide
fleece El Camino Real transcontinental
division suspension bridge

A Matching Test
The phrases below describe or define the words and terms listed above. Number a paper from 1 through 12. After each number write the word or term which matches the definition.

1. An Indian house of logs, sticks, and mud
2. People who went to California after the discovery of gold there
3. A kind of pine tree which reaches a great height and lives to be very old
4. A bridge, held up by strong ropes or chains, which reaches across a river or a bay
5. A dividing ridge in the Rockies which separates the rivers flowing east from the rivers flowing west
6. To cut off the wool of sheep
7. An Indian village built of stone or sun-dried bricks
8. The old road from San Diego to San Francisco whose Spanish name means “The King’s Road”
9. A religious group who built Salt Lake City
10. A high, flat-topped mountain
11. Extending across a continent
12. The thick wool of a sheep

Can You Answer These?
1. Name the states of the Far West. Which state is largest? Which is smallest? Which has the most people? The fewest?
2. What are the chief resources of the Far West?
3. Who were the first white men to explore the Far West? What did they discover?
4. How did the Indians of the Far West make their living before the white men came? How did the Spanish missions in the Far West help the Indians to live better lives?
5. How did traders from the East travel to the Far West before the building of the railroads? Name the two routes by which they traveled.
6. Why did the Mormons decide to move westward and settle in Utah?
7. How did John C. Frémont come to be called “the Pathfinder”?
8. How did Kit Carson serve his country?
9. Tell the story of the forty-niners as they traveled to California.
10. How did California become a state?
11. What was the Comstock Lode? How did its discovery help to settle Nevada?
12. How was Colorado settled?
13. How was the mail first carried across the continent? Tell the story of the Pony Express.
15. How did the first transcontinental railroad come to be built?
16. How did the invention of the telegraph and the building of the transcontinental railroad help in developing the Far West?
17. Why are sheep raised on the grasslands of the Far West? What is life on a sheep ranch like?
18. Describe the farming lands of the Far West. What are the chief crops of each area?
19. In what other ways do people make a living in the Far West?
20. Name the two largest cities of California. Where are they located? Why is each city important?
21. Name some of the other cities of the Far West. Which is the oldest? Which is the largest?
22. Why do many tourists visit the Far West?
Can You Complete These Sentences?
Number a sheet of paper from 1 to 20. After each number write the word or name which completes the sentence.

1. The area in the midst of the Rockies which is lower than the surrounding mountains is called the ___ ___.
2. The chief mining state in the Far West is ___ ___.
3. Two kinds of trees found only in California are ___ ___.
4. Coronado’s men discovered the ___ ___.
5. Two Spanish priests who came to the Far West in early times to teach the Indians were ___ ___ and ___ ___.
6. Early traders from the East traveled to Texas and New Mexico over the ___ ___ ___.
7. ___ ___ ___ explored the Far West for the United States government.
8. A famous Indian agent and scout was ___ ___.
9. A large deposit of gold and silver discovered in western Nevada was called the ___ ___.
10. The first government mail service to the Far West was called the ___ ___ ___.
11. A faster mail service from Missouri to California was the ___ ___.
12. ___ ___ ___ invented the telegraph.
13. Lake Mead stores up water for ___ Dam, which irrigates parts of three states, California, Nevada, and Arizona.
14. A rich farming area lying between the Sierra Nevadas and the Coast Range is the ___ ___ of California.
15. One of the chief copper-mining states in the country is ___ ___.
16. The highest point in the United States is Mount ___ ___ The lowest land in the United States is ___ ___.
17. The chief manufacturing, trade, and shipping center of northern California is ___ ___.
18. In southern California it is ___ ___.
19. The world’s longest suspension bridge is ___ ___ over San Francisco Bay.
20. The capital and largest city of Colorado is ___ ___.
21. Some of the scenic wonders which bring tourists to the Far West are the ___ ___ of Colorado, ___ Park in California, and the ___ Desert of Arizona.

Can You Choose the Right Answer?
1. The highest peak in the Colorado Rockies is: (a) Longs Peak (b) Mount Whitney (c) Pikes Peak (d) Colorado Plateau
2. The highest peak in the United States is: (a) Mount Mitchell (b) Mount Whitney (c) Pikes Peak (d) Longs Peak
3. Low mountains which border the Pacific Ocean are: (a) Sierra Nevadas (b) Coast Range (c) Appalachians (d) Rocky Mountains
4. The Old Spanish road from San Diego to San Francisco was called: (a) Oregon Trail (b) Santa Fe Trail (c) California Trail (d) El Camino Real
5. The oldest town in the Far West is: (a) San Francisco (b) Phoenix (c) Santa Fe (d) Salt Lake City
6. A city built by the Mormons is: (a) Denver (b) Carson City (c) Salt Lake City (d) San Francisco
7. The leader of the Mormons on their westward travels was: (a) Brigham Young (b) John C. Frémont (c) Father Serra (d) James Marshall
8. The tracks of the first transcontinental railroad met at: (a) Omaha, Nebraska (b) Reno, Nevada (c) Ogden, Utah (d) Albuquerque, New Mexico
9. The grasslands of our Far West are used mainly for: (a) truck farming (b) raising citrus fruit (c) dairy farming (d) raising sheep
10. The reservoir made by Hoover Dam is: (a) Great Salt Lake (b) Lake Mead (c) Lake Superior (d) Utah Lake

Using a Time-line
Add to your time-line the important happenings in the text. The pictured events at the opening of this unit will help you.

Using Maps
1. On the map of the United States, on pages 250–251, locate the Far Western states. Find the great Rocky Mountain chain. What rivers drain the eastern slopes of these mountains? The western slopes? In what part of this region do we find the highest peaks? What is meant by the Continental Divide? Where is it?
2. On the map on page 14 find and name the natural regions of the Far Western states. Between what parallels of latitude do these states lie? What effect do the mountains have on the climate? Look at the diagram on page 35 before answering this.

3. Make an outline map of the Western Hemisphere. On it trace the three main routes which the forty-niners took to California. The map on page 320 will help you. Which was the shortest route? Which was the longest?

4. Make an outline map of the United States. On it trace the route of the first transcontinental railroad as shown on the map on page 325. Where did the Union Pacific begin? Where did the Central Pacific begin? Where did the two railroads meet? Can you tell why the building of the Central Pacific was a harder job than the building of the Union Pacific? Look at the map on page 14 to answer this.

5. On the map on page 329 find and name the dams which supply water to dry lands in this region. Which is the largest dam? What states does its water irrigate?

6. Turn to the products map on page 331. Which crops are made possible by irrigation? What minerals are found in this region? What animals find pasture in the grazing lands? Where are sugar beets raised? Where are citrus fruits grown? Where are vineyards found?

7. Look at the map on page 339. What national parks are in this region? Which states have national forests? Why does the government set aside these large areas?

8. On the map on page 14 locate the principal cities of the Far West. For what is each noted?

Making a Chart
Set up a chart of the Far Western states giving the name of the state, its capital and population, its largest city and population, and the most important products.

Interesting Things to Do

1. Pretend you are an early trader going from Independence, Missouri, to Santa Fe, New Mexico, over the Santa Fe Trail. Write a diary of your trip. Describe the scenery, the different tribes of Indians and how they live, the pioneer settlements, and life in the missions.

2. Choose one of these explorers or early settlers in the Far West, and give a report on his life and adventures: Coronado, Father Kino, Father Serra, Brigham Young, John C. Frémont, Kit Carson. Try to find pictures of the man you tell about to show to the class as you give your report. On a large classroom map trace the route he followed.

3. Make a frieze to show the growth of the means of communication between East and West from the earliest days to the present. Some subjects you will want to include are the Santa Fe and Oregon trails, the Overland Mail, the Pony Express, the first telegraph, and the first transcontinental railroad.

4. If any member of your class has visited Sequoia or Yosemite National Park, he might tell about his trip and show the folders and picture postcards collected on his trip.

5. For your social-studies scrapbook, find pictures of some of the huge dams which provide irrigation water in the Far West. Under each picture write the name of the dam, its location, and where the water comes from. Then make a list of the important crops grown on the land irrigated by water from each dam.

Things to Think About

1. If gold was discovered in California today, what means of transportation would people use to reach the gold fields? Would any of these be the same as those used by the people who went west in 1849?

2. “The wilderness shall be glad, and the desert shall blossom as the rose.” These words, found in the Bible, were spoken by a man who lived many hundreds of years ago. Do you think his words have come true?
The Northwest includes these five states: Wyoming, Idaho, Oregon, Washington, and Montana. Let us pretend that an air view could show us the Northwest and the Far West at the same time. We would see the three main mountain ranges of the Far West. But only the Rockies and the Coast Range continue through the Northwest. The third stretch of mountains is really two different ranges. They are the Sierra Nevada in our Far West and the Cascade Mountains in the Northwest. The Sierras end and the Cascades begin near the California-Oregon border.

Most of Montana and Wyoming lie on the Great Plains, east of the Rocky Mountains. West of the Rockies is a high tableland called the Columbia Plateau.

The Columbia Plateau covers northern Idaho and Oregon and eastern Washington. It is drained by the Columbia River. The chief tributary of the Columbia is the Snake River. The Snake River Plateau covers
The Northwest

southern Idaho and eastern Oregon. Much of this plateau is too dry for farming because of the Cascade Mountains. They rise on the western border of this plateau area. These mountains keep the moist, Pacific Ocean winds from reaching the Columbia and the Snake river plateaus. Wheat is raised on some parts of these two plateaus by dry farming. Dry farming is a method used where there is little rain and no source of water for irrigation. Part of the land is planted one year, while the remainder has no crop and is able to keep its moisture. The next year crops are planted on the remainder and the first part is allowed to rest.

West of the Cascade Mountains lies the Willamette Valley. This valley is separated from the coast by the Coast Range. The Coast Range is low enough to let moist winds from the Pacific Ocean reach the Willamette Valley. This valley gets more rain than the Central Valley of California. Look at the diagram on page 35, to see why this is so.

The chief rivers of the Northwest rise in the Rocky Mountains. The Missouri, the Yellowstone, and the Platte rivers rush down the eastern slopes of the Rockies. The Missouri and the Yellowstone rivers flow through Montana. The Platte River flows through Wyoming. These three rivers continue eastward across the Great Plains to empty into the Mississippi River. The fourth important river that rises in the Rockies is the Snake River. It tumbles down the western slopes of these mountains and flows westward to empty into the Columbia River. The Columbia River rises in the Canadian Rockies and flows into the Pacific Ocean.

This unit will give you the answers to the following questions:

1. What is the Northwest like?
2. How was Oregon settled? What is the story of the Lewis and Clark expedition?
3. How do people in the Northwest earn a living today?
WHAT THE NORTHWEST IS LIKE

The largest of the Northwestern states is Montana. It is the third largest state in the Union. Washington, the smallest state in the Northwest in area, has the largest population.

Resources of the Northwest

Huge forests of Douglas fir, sugar pine, and some redwood are the chief resource of the Northwest. The Coast Range and the western slopes of the Cascade Mountains have the finest forests in our country. This area supplies more than one third of the total lumber output of the United States. The western slopes of the Rockies in northern Idaho and Montana also have good forests.

Another important resource of the Northwest is the mineral deposits in the Rockies of Montana, Idaho, and Wyoming. Large amounts of copper are mined there. Next in importance are the silver, zinc, and gold mines of these states. Some coal and oil are also found in the mountains.

Perhaps you have seen cans of Columbia River salmon on your grocer’s shelves. The Columbia River is rich in salmon. At one time most of the salmon used in our country came from the Northwest. But too many were caught, and the number of salmon grew much smaller. Today only 10 per cent of our salmon supply comes from the Northwest. The Federal government has passed laws to keep fishermen from catching so many salmon. It has also set up fisheries where baby salmon are safely hatched. During our

List the crops that are raised in the Northwest. How do they compare with those of the Far West? What natural resources are found in this region? What livestock is raised in these states?
trip through the Northwest, we shall learn more about the salmon.

Climate of the Northwest

Many people enjoy the climate of the coastal area in the Northwest. The winters are mild, and the summers are cool there. The Columbia Plateau has hotter summers and colder winters than the coastal region. The Great Plains area of Montana and Wyoming has hot summers and severely cold winters with heavy snow and icy winds.

THE SETTLEMENT OF OREGON

Before the Northwest became a part of the United States, a large part of it was included in the Oregon Country. The Oregon Country included the land that is now Idaho, Oregon, Washington, and southwestern Canada. (See the map on page 351.) Brave seamen seeking a waterway across North America were the first to discover this land.

EARLY EXPLORERS

In the early days of Spanish exploration several Spanish sea captains, sailing northward, may have gone as far as Oregon. In 1579 the Englishman Francis Drake, looking for a northern sea passage from the Pacific to the Atlantic, sailed along the Oregon Coast. But for the next two hundred years this region was forgotten. Then the famous explorer Captain James Cook, also searching for a passage through North America, sailed far north in the Pacific and saw the shores of Oregon.

After the War for Independence United States ships began to sail far north on the Pacific Coast. You will remember that the American sea captain, Robert Gray, was put in charge of a trading vessel that was bound for China.

After he reached the Pacific, Captain Gray sailed along the coast of Oregon and Washington. He found the mouth of a broad river which emptied into the Pacific Ocean. He named this river the Columbia for his ship, the Columbia. Through the discovery of this river Captain Gray gave the United States a claim to the whole country drained by its waters. But many years were to pass before the country was explored and settled.

The Lewis and Clark Expedition

"Now the United States owns the Louisiana Territory," said President Jefferson in 1803. "I can send men to explore that great unknown area west of the Mississippi River."

President Jefferson chose his young secretary, Meriwether Lewis, to lead an expedition to the distant West. Lewis took as his helper William Clark, younger brother of the famous George Rogers Clark. Both Lewis and Clark had served in the army and knew something about frontier life. They were known to be brave leaders and careful map makers.

In the spring of 1804 Lewis and Clark with about forty men started their journey from St. Louis, Missouri. They took food, clothing, tools, guns, bullets, knives, and gifts for the Indians. They rowed up the Missouri River in three large boats filled with these supplies. They kept daily records of everything they saw and of what happened along the way. They took notes on the soil, plants, animals, and climate. And they drew maps of the rivers, lakes, and mountains that they passed.

Late in October they reached a place in North Dakota where they set up winter camp. During this first winter they met an Indian woman who agreed to be their guide. With her were her husband who was a French trapper and her baby. The Indian woman was called Sacajawea (să-kā'jā-wā'ə). Her name in the Indian language meant "Bird Woman." As a child, she had been stolen from her own tribe and brought east of the Rockies. Bird Woman, with her baby
In this painting in the Capitol at Salem, Oregon, Captain Robert Gray is shown at the mouth of the Columbia River. He claimed the river and near-by lands for the United States in 1792.

and her husband, went with the explorers as their guide when they broke camp in the spring.

Sacajawea was a good guide through the wild, rough country where she had once lived. Following her directions the explorers crossed the Rocky Mountains. Then they reached the Snake River and followed it to the Columbia River. They traveled to the mouth of the Columbia and finally the Pacific Ocean.

They spent an uncomfortable winter on the coast because of the cold weather and lack of food. Lewis and Clark made friends with the Indians. They found these Indian tribes peaceful and poor. They learned from them how to find roots and berries which could be eaten. In the spring Lewis and Clark led their party back.

Lewis and Clark returned to St. Louis after an absence of almost two and a half years. They had traveled thousands of miles through land which white men had never before seen. They brought back maps and records of the land through which they had traveled. Lewis and Clark had blazed a trail to the Oregon Country. Years later many trappers, traders, and settlers journeyed to the Oregon Country because of their reports.

**The founding of Astoria**

Lewis and Clark's reports of fur-bearing animals interested a New York fur trader named Astor. Astor sent a group of trappers to the Oregon Country. Near the mouth of the Columbia River they built a trading post called Astoria. Here Indians and trappers came together once a year in early spring to sell their furs. At the trading post they bought their yearly supplies. Let us look upon one of these fur sales in the early days.

Hundreds of tents and tepees dot the river banks near the trading post. Everywhere we look we see skins of beaver, fox, wolf, bear, and many other fur-bearing animals. Some furs are tied to long sticks stuck in the ground in front of the tents and tepees. Others hang in bunches from the top of the door flaps. Large piles of furs are stacked on the ground inside the tents and tepees.

The weather is still cold here, and the men are wearing their fur-lined winter clothes. Laughing and talking they stand around fires
they have built. Many of them have not seen their friends all winter. They visit each other and examine the year’s catch. They come and go between their tents and the trading post.

After they have sold their furs, the trappers buy sugar, tea, flour, and other supplies. These goods have been brought west by mule trains. On their return trip to the East the pack trains carry loads of furs. In about a week the trappers finish their business and return to the forests.

Astoria, a fur-trading post built by John Jacob Astor in 1811, was the first American settlement in the Oregon Country. A few years later the Hudson’s Bay Company, an English group, also built trading posts in the Oregon Country. For many years English and American fur trappers and trading companies shared this rich land.

Marcus and Narcissa Whitman

In 1836 two missionaries journeyed to the Oregon Country in a covered wagon. These missionaries were Marcus and Narcissa Whitman. They taught Christianity to the Indians there. Marcus was also a doctor. He took care of the Indians when they became sick. Narcissa Whitman was one of the first white women in the Northwest.

Dr. Whitman made several trips back to the East. He told the people what a rich land the Oregon Country was. On one of his return trips to Oregon he helped a covered wagon train reach the Oregon Country in safety. The settlements he helped to start there strengthened the United States’ claim to the region. The route these early pioneers took to the Oregon Country became known as the Oregon Trail.

The Oregon Trail

“We’re on our way to Oregon. There the soil is rich, and the climate is healthful,” says a pioneer as he stops his wagon in a small town on the Missouri River.

“My family and I would like to join your wagon train. We have often talked of settling in such a land,” a farmer answers.

“We’re stopping here for a few days to rest and to get fresh supplies. Get your things together and come along, friend.”
Conversations of this kind happened often in the years of the westward movement. Most of the pioneers who traveled to the Northwest followed the Oregon Trail. It was about two thousand two hundred miles long (see the map on page 320). The Oregon Trail had first been worn by the wagon wheels of the traders and trappers who built Astoria. The first important group of settlers came to Oregon in 1843. This group of about one thousand persons traveled over the Oregon Trail and settled in the Willamette Valley.

Each family rode in a covered wagon drawn by horses or oxen. To travel in safety families would band together. A train of forty or fifty covered wagons would set out together from Independence or some other point on the Missouri River. They took with them their household goods, seeds, farm tools, food, and guns. They were going to make their homes in the Northwest.

A scout, or guide, went along with each wagon train. He would ride ahead on horseback to look for water and for signs of Indians. Then he would return to direct the wagon train. While crossing the Great Plains, the wagons were often attacked by Indians.

As they pushed westward, the pioneers had to cross towering mountains. Snowstorms raged there. Sometimes the oxen slipped on the icy ground. Often wagons became stuck in huge snow drifts. At times the food supply ran low. Many of the pioneers became sick on the journey, and some of them died. Finally after several months of travel, the wagon train reached open country.

**Clipper ships**

Some other pioneers went to the Oregon Country by ship. Starting from the East, they sailed around South America, up the Pacific Coast to the mouth of the Columbia River. In the shipbuilding parts of the East a new, faster kind of sailing ship, called a clipper ship, was developed. This fast, graceful vessel had a long, slender body, high masts, and large sails.

By the 1840’s many clipper ships visited the coast of the Oregon Country on their way to China. They brought loads of manufactured goods from the eastern part of the United States. They traded the manufactured goods for shiploads of furs to be sold in China. On the return trip these clipper ships brought silks, tea, finely carved woods, and other Chinese goods. The captain of a clipper ship could always get good prices for these Chinese goods in Boston.

Fast clipper ships were important in the Chinese tea trade. In those days tea quickly lost its flavor while stored in the hold of a ship. So every year tea merchants offered prizes to the ship which transported the new crop of tea fastest. Each captain and his crew worked hard to win the race. As the time for the ships to arrive drew near, people became very much excited. When the first clipper carrying tea arrived, crowds were waiting at the dock to cheer the winner. By the 1870’s these races ended because the clipper ships were replaced by steamships. But the clipper ships had been very useful in trade and in carrying settlers to the Far West.

**Early government in the Oregon Country**

In 1843 a large group of people from the United States came overland to the Oregon Country. They settled in the northern part of the Willamette Valley. These settlers soon realized they would need some kind of government. Let us look in upon a group of them as they meet to decide on the laws under which they will live.

A tall, sun-burned farmer stands up to talk to the group. “We need laws to live by,” he says. “The Pilgrims met in the cabin of the Mayflower to make their compact before they built Plymouth. After the Revolutionary War representatives of the thirteen states met in Independence Hall to write a Constitution for the new nation.”

Another pioneer catches the spirit of the first speaker. “Texas set up its own government for its republic. We too should make laws
This map shows how rapidly the United States grew until it stretched all the way from the Atlantic Ocean to the Pacific Ocean. Name the areas that were added after the Louisiana Purchase. What states were made from each new area? What was the last area that was added?

for our community for the purposes of protection and to secure peace among ourselves.”

And so the meeting went. Everyone was free to speak. And the group listened to what each one had to say. After these pioneers had agreed upon the laws under which they were to live, they wrote the laws down. In this way the people in this early settlement in Oregon learned to govern themselves as people in our country have always done.

**Becoming a part of the United States**

For almost thirty years Great Britain and the United States shared the resources. But in 1846 the two countries set a boundary at the forty-ninth parallel. Great Britain kept the northern part of the region and the United States the southern. This is the boundary line which separates Canada from our Northwest to this day. The United States and Great Britain settled their claims peacefully. There are no forts or soldiers along the border between the United States and Canada.

Soon after this settlement of the boundary line the southern part of this region had enough people to become a territory. A territory is under the direction of Congress. It is governed in much the same way that a state is, but it does not have its own constitution. Pioneers kept on coming to the Oregon Territory. A few years later Oregon leaders wrote a constitution and applied for statehood. Two years later in 1859 the state of Oregon was admitted to the Union. Thirty years later Washington and Montana became states. In the next year Wyoming and Idaho were admitted to the Union.
"Yippee!"
"Ride him, cowboy," shouts a group of excited people. They are watching a cowboy on a bucking bronco, or wild horse, at a rodeo. As you may know, a rodeo is a contest in which cowboys show their skill in riding horses.

This rodeo is part of the Frontier Days celebration held each year in Cheyenne, Wyoming. Here we start our tour of the Northwest. Cheyenne was once a wild frontier town. The days of the frontier live again during this celebration. Cowboys and Indians fill the streets. Most of the town people are also dressed like cowboys. They are wearing boots with high heels, blue jeans, and bright shirts. Some also have gay scarves and large hats. Indians from near-by reservations have come into Cheyenne to dance in their tribal costumes.

FARMING IN THE NORTHWEST

Our airplane tour of the Northwest shows us that large parts of this area are very dry. "But," our airplane hostess tells us, "the soil is rich. Where water can be found for irrigation, farmers grow fine crops and pastures for livestock."

East of the Rockies

Two states in our Northwest — Montana and Wyoming — lie mainly east of the Rockies. These states get very little rain. Some of the land near the foot of the Rockies can be irrigated. Water from streams formed by melting snow in the Rockies irrigates ranches near these mountains. The Missouri River is formed by streams that rise in the Rockies.

On the Missouri at Fort Peck, Montana, is the largest earth dam in the world. People earn a living by pasturing cattle or sheep on the irrigated land. Montana has large valleys in the Rockies where there are irrigated farms. The rest of Montana and Wyoming is very dry.

A great public-works program, called the Missouri Valley Authority, is now under way in the Missouri River Valley. Government engineers are building dams on the great river to store the water for irrigation. It will take many years to complete the project. When the five big dams and thousands of small ones are finished, the Missouri in this area will be a chain of clear, blue lakes. The dams built here will prevent

Grand Coulee Dam, on the Columbia River, is one of the largest dams in the world. It supplies power for industry and water for irrigation. Find this dam on the map on page 329.
Potatoes are a leading crop in Idaho. Here the men are sorting them and putting them in baskets. The potatoes will then be put into sacks, and shipped to all parts of the country.

Bureau of Reclamation

Flooding in other states. And the states in this area will have water for irrigation and electric power in plenty.

**Between the Rockies and the Cascades**

The land between the Rockies and the Cascades also gets very little rain. Here the two largest rivers are the Snake and the Columbia. An airplane flight over the Columbia River would show us Grand Coulee (kō'ō-lē) Dam. This dam is three thousand feet long. It is as high as a forty-six story building. The concrete used to build the dam could make a two-lane highway twice the distance from New York City to Seattle.

Grand Coulee Dam was completed in 1941 after almost eight years of work. This dam can irrigate more than a million acres of land on the Columbia Plateau. Irrigated areas in the Northwest supplied by water from this dam are becoming famous for their fine crops. Grand Coulee Dam also supplies huge amounts of electric power for factories and homes in the Northwest.

Have you ever eaten an Idaho potato? The large, smooth Idaho potato is said to be the best potato in the world for baking. Idaho is one of the two chief potato-growing states in the United States. Can you name the other? The waters of the Snake River are used to irrigate much farm land in southern Idaho. Irrigation canals lead from the Snake River into these dry regions and turn them into fields of potatoes, sugar beets, wheat, alfalfa, beans, and fruits. Idaho's vegetables are grown not only to produce food but also to produce seeds. More than one third of the vegetable seeds in the whole country are grown in Idaho. Along the Snake River on the Idaho-Oregon border fruit orchards grow on irrigated land.

Have you ever noticed the label on a crate of apples? Many of the apples eaten in all parts of the United States come from Washington. It is the chief apple-growing state in our nation. Washington is also the biggest producer of raspberries and blackberries. It is second in the growing of pears and peaches. The chief fruit-growing areas in Washington are the Yakima (yāk'ī-mā) and Wenatchee (wē-nāch'ē) river valleys. Apples are the chief crop of the Wenatchee Valley. The Yakima Valley grows various other fruits in addition to apples. Water from the Columbia River irrigates large parts of eastern and southern Washington. In areas where there is no water for irrigation, wheat is grown by dry farming. With irrigation, farmers in this area raise fine crops of apples, pears, plums, and other fruit.
The Willamette-Puget Sound Valley

Between the Cascades and the Coast Range in the Northwest lies a lowland. North of the Columbia River it is called the Puget (pu'jet) Sound Lowland. South of the Columbia it is called the Willamette Valley. This entire lowland is called the Willamette-Puget Sound Valley. The Coast Range is low enough to let rain clouds reach this valley. The Puget Sound Lowland is too swampy for much farming. It is used chiefly as pasture.

The Willamette Valley has become famous for its apples, prunes, pears, and strawberries. It is one of the leading fruit-and-vegetable canning centers in our country. The Willamette Valley also has many poultry and dairy farms. Here dairy farmers make some of their milk into cheese which is shipped away to market. Much of the milk is canned and then shipped out. The Willamette Valley is an important producer of canned milk.

Many farmers in the Willamette Valley grow hops and flax. Hops are plants used in the making of beer and of certain medicines. Flax is a plant with two uses. From flaxseed, you will remember, linseed oil is made. Which region in the United States grows flax for linseed oil? In the Willamette Valley flax is grown for its fiber. The fiber of the flax plant is woven into linen. The Willamette Valley is our country’s chief producer of flax used to make linen. It also grows half of our nation’s hops.

LUMBERING IN THE NORTHWEST

Do you know that most of the match sticks you use in your home are made from Idaho white-pine trees? The slopes of the Rocky Mountains in Idaho yield most of the white pine cut in the United States. White pine is a soft wood which is easy to work with. It is used for making furniture, shingles, matches, and many other things.

Pine trees grow on the eastern slopes of the Cascades. The forests are thicker near the mountaintops. Flying over the mountains, we see their western slopes covered with very thick forests. Spruce, Douglas fir, cedar, and redwoods grow here. These trees are gigantic. Some are as high as a forty-story building. The Coast Range is also covered with thick forests. Their towering trees grow right down to the water’s edge.

These forests have made Oregon the leading lumber state in the whole United States. More timber is cut in Oregon than in any other state. Oregon’s northern neighbor, Washington, also produces much lumber. In the forests of Oregon and Washington the trees are large, and they grow close together. Lumber is one of the leading products shipped

On this map point out the two states which have the greatest amount of lumber. Study the map on page 339, which shows the national forests. Are the lumber regions and the national forests in the same states?
After a forest fire the land looks like this. Valuable lumber has been destroyed. After a time rains will wash away the rich topsoil.


Visiting a lumber camp

Chop! Chop! Chop! As we enter the tall, shadowy forests, we hear the sounds of axes and saws. Our plane has landed in a clearing and we board a bus to visit a lumber camp. We turn into a narrow road and stop before a group of low, wooden buildings. From the building marked "Office" steps a tall, strong-looking man, who is the boss of this camp. Everyone calls him Big Jim.

We drive over a bumpy dirt road deeper into the forests. The bus stops, and we climb out. Big Jim tells us where to stand so that we will be safe from falling trees.

We watch a lumberjack start to cut down a huge tree. First he decides in which direction he wants the tree to fall. He is careful to make the tree fall into a clearing and not crash into other trees. A saw is used to make a shallow cut into the tree. Then with an axe he chops away some of the tree directly above the cut. This cut controls the direction of the fall. Then the tree is sawed almost through from the side opposite the cut. "Timber! Timber!" shouts the lumberjack to warn others that the tree will soon fall. A wedge is used at the last moment to topple the tree. With a loud crash it falls to the ground.

The logs are then taken to sawmills on rivers that empty into Puget Sound. There they are kept in log ponds until needed. In the mills, machines remove the bark and saw the logs into lumber. Then machines smooth away the rough edges, and the lumber is ready to be used.

These lumberjacks wear boots with spikes and carry poles which have sharp points. The men ride the logs to prevent them from jamming.
Copper ore and metal balls like those in the bin are rotated in drums called grinders. In the process the ore is ground as fine as sand.

The copper is next put into this huge oven where it is baked to remove the sulphur.

The ore is now put in a liquid with certain chemicals. Air is blown in and bubbles rise. The copper clings to them and is skimmed off.

The copper is melted in the converter and poured into molds. Then it is cooled.

Anaconda Copper Mining Co.
MINING IN THE NORTHWEST

The Rocky Mountains are rich in minerals. In the Northwest these mountains cover part of three states — Wyoming, Idaho, and Montana. Lead, zinc, copper, silver, and coal are mined here. Wyoming is the chief coal producer west of the Mississippi River. Idaho is one of the leading silver and lead states, and Montana leads in producing copper.

The largest copper mine in the world is located in Butte, Montana. In this mine both day and night, above ground and below, men are at work. The ground below Butte is filled with tunnels where men mine the copper. Above ground, huge smelters refine some of this copper. But most of this copper is smelted in Anaconda, Montana. Here on top of a hill stands one of the largest copper smelters in the world. Its chimneys were built very high to keep people living near by from breathing the poisonous smoke. Some copper smelting is also done in Great Falls, Montana.

FISHING

"Open the door in the trap," orders the owner of a salmon fishing vessel. "Now lower the net."

A fisherman works a pulley which lowers and raises a large net. Silver scales sparkle on the leaping salmon as the net scoops them up from the fish trap. Then the salmon are dumped into the fishing vessel. The day's catch by salmon fishermen pays them well. Salmon is the most plentiful and the most valuable fish in the Northwest. There are many salmon in all the streams that flow westward into the Pacific Ocean.

In two Northwestern states — Washington and Oregon — many people earn a living by fishing. They catch salmon, halibut, and oysters. They find salmon along the coast and in the rivers which empty into the Pacific Ocean. A huge number of salmon are caught in the Columbia River, many with nets, some with a hook and line. Halibut are caught in the ocean. Oysters come from Puget Sound and are sold fresh in near-by cities. Some of the salmon is shipped fresh in refrigerator cars to large cities in the United States. But most of the salmon is canned. Many people earn a living by working in these canneries.

The story of the salmon

Each spring and fall millions of salmon swim in from the Pacific Ocean and enter the mouths of rivers which flow into the ocean. The salmon make their way upstream swimming against the current and leaping over waterfalls. They are on their way to the fresh waters of the rivers where their lives began. This journey is so hard that their bodies get bruised, their fins torn. But they keep fighting their way upstream.

The salmon often swim hundreds of miles until they find a spawning, or nesting, place in fresh water. Then in quiet water the mother fish swim their tails to clean the rocks for their nests. Here they spawn, or lay their eggs.

These Columbia River salmon are swimming against the falls as they make their way upstream to lay their eggs. When this is done, they swim back downstream to the ocean and die.

U.S. Fish and Wildlife Service
In two or three months the baby salmon hatch. At the end of their first year the young salmon are about five inches long. Soon they start to float downstream toward the ocean. On the way many of these little salmon are eaten by birds or bigger fish. Some die in shallow water or places poisoned by waste materials from factories and cities. But thousands reach the ocean. They are a small part of the huge numbers which started downstream. The salmon spend the next three or four years in the ocean eating and growing. They swim great distances. They stay in the ocean until they are four or five years old. Then they return to spawn where they were born.

Most salmon fishing is done on the Columbia River when the salmon begin their journey upstream. It is very easy to catch the salmon at this time. Our Federal government has passed laws which limit the salmon fishing season. This is to keep the salmon from being killed in too great numbers. Government agents patrol the fishing grounds by boat and plane. They watch to see that the fishing laws are carried out. The Federal government has also set up fisheries. In these fisheries millions of baby salmon are hatched and taken care of. The large dams on the Columbia River keep the salmon from swimming upstream. The government has built fish ladders to help the salmon cross these dams.

Every day dozens of boats bring their daily catch of salmon to canneries along the coast and the rivers. As the boats dock, the salmon are unloaded. A heavy stream of water washes the fish onto a moving belt called a conveyor. The conveyor carries them into the long cannery shed. Here the different kinds of salmon are separated and put into bins.

After the fish leave the bins, machines do most of the work. A moving belt carries the salmon from the bins to a cleverly made machine. In the machine the fish are speedily cleaned, split open, washed, and made ready for canning. Meanwhile the cans are rounded out and the bottoms fastened to them. The cans have been shipped flat from northeastern manufacturing centers to save space. Another machine cuts the fish into pieces and puts them into the bright, shining cans. The machine puts exactly the right amount of fish into each can. To make sure, another machine weighs the cans as they move along. If a can is not the right weight, it is put to one side. Workmen take care of it. After the sealing machines close the filled cans, the cans are taken to large pressure cookers. Here the salmon is cooked. Later the cans will be labeled, packed, and made ready for shipment to all parts of our country.

**CHIEF CITIES OF THE NORTHWEST**

The most important cities of the Northwest are in the coastal states. Salem and Portland are Oregon's largest cities. Tacoma, Seattle, and Spokane are the largest in Washington. Other states of the Northwest do not have as large or as busy cities as those in Oregon and Washington. Can you tell why?

**Salem and Portland**

Salem, the capital of Oregon, is located on the Willamette River. This city is about fifty miles from the mouth of the Willamette, which flows into the Columbia. Salem is the trade and manufacturing center for the farm lands in this valley. Salem supplies lumber camps in the mountains with fruit, milk, butter, cheese, eggs, and poultry. Many people here earn their living in canneries. Berries, pears, peaches, and other fruit are grown near by and canned in Salem. Some people work in sawmills, where trees from the Cascade and Coast ranges are cut into lumber. Others work in factories where flax is spun into linen. Salem ships most of its canned fruit and other products downstream to a large river port. This shipping center near the mouth of the Willamette River is called Portland.

Portland is the chief trade and transportation center in Oregon. It is the gateway to
the Willamette Valley and to the Pacific Ocean. When this city was founded, it lay a few miles from the place where the Willamette River empties into the Columbia. Now Portland extends all the way into the triangle formed by the joining of the Columbia and Willamette rivers. The Columbia River is deep enough for ocean liners to sail the more than one hundred miles from the Pacific Ocean to Portland. Although it is quite far north, Portland's waterway does not freeze in the winter.

Ocean steamships line the docks of Portland. Many carry away lumber from the Rockies, Cascades, and Coast Range. Some take away cargoes of canned salmon from the Columbia and other rivers. Other ships are loaded with grains and canned fruit from the Willamette Valley. Wheat, flour, and apples from irrigated parts of the Columbia Plateau are also shipped from Portland. Incoming ships bring farm machinery, automobiles, airplanes, clothing, and other manufactured goods from California and the East.

Portland, Oregon, a large port on the Pacific Ocean, ships the products of the Northwest to all parts of the world. Among these, lumber and canned goods of all kinds are the leading products.

Portland C. of C.
Tacoma and Seattle

The cities on Puget Sound have deep, safe harbors. One of these cities is Tacoma. It is an important trade and manufacturing center. It has a huge copper refinery, large flour mills, railroad shops, machine shops, and woodwork factories. Tacoma is the chief lumber, pulp, and paper manufacturer in the Northwest.

Seattle, the leading port of the Northwest, is also on Puget Sound. Seattle started as a sawmill village at the mouth of a river which empties into Puget Sound. This harbor village grew into a trade and shipping center for the lumbermen and fishermen near by. Then it became an important port and trade center in the days of the Alaska gold rush. Today Seattle is the chief city in Washington. It is one of the largest fur markets in the United States.

People living in Seattle get plenty of fresh vegetables, fruit, butter, cheese, milk, eggs, and poultry. The farms in the valley of the Coast Range produce this food for Seattle, Tacoma, and Olympia, the capital of Washington.

Seattle has a busy waterfront. Ships from China, Japan, and the rest of the Orient bring raw silk and other things. Tankers carry petroleum from Los Angeles to Seattle. Farm machinery and other manufactured goods are shipped by water from the Northeast.

Lumber, as you know, is the leading product of Washington. Ships carrying lumber leave Seattle for Los Angeles, South America, and Atlantic Coast cities. Seattle also ships lumber and grain to the Far East.

Railroads connect Seattle with the farm land of the Columbia Plateau. These railroads carry machinery and other manufactured goods from Seattle to this farming area. They also bring to Seattle the wheat, canned fruit, lumber, and mining products of the Columbia Plateau.

Seattle, Washington, another great Pacific port, is sometimes called the gateway to Alaska because an important part of its shipping and passenger travel is with our northern territory.
Rodeos are held in many cities and towns in the Northwest and Far West. One of the most famous is the rodeo held each year at Cheyenne, Wyoming. In this picture the horse is trying to throw his rider. The rider will be rated by the length of time he can stay on the horse’s back.

**Spokane, on the Columbia Plateau**

The chief trade and railroad center of the Columbia Plateau is Spokane. It ships to Seattle and other Puget Sound cities wheat and canned fruit from farms on this plateau. All the important transcontinental railroads have a station at Spokane. This is because Spokane is near the only low passes in the northern Rockies. Through the "Spokane Gateway" railroads run from the East to the cities on Puget Sound. Spokane is also the trade and shipping center for the lumber and mining products of northern Idaho.

**Lewiston, Pocatello, and Boise**

Spokane receives the lumber and minerals of northern Idaho from Lewiston. Named for the famous explorer, Meriwether Lewis, Lewiston is the trade center for this mountainous part of Idaho. In southwestern Idaho, Boise (bois’i), the capital of the state, is the chief city. In southeastern Idaho, Pocatello is the leading city. Both Boise and Pocatello are trade centers for farming areas irrigated by water from the Snake River.

**Cheyenne and Casper**

The main cities of Wyoming are Cheyenne and Casper. Cheyenne, located in south-eastern Wyoming, is the capital and largest city of this state. You will remember that Cheyenne is the trade center for a grazing area. From Cheyenne cattle are sent east to large meat-packing centers. The second largest city in Wyoming is Casper. It is located on the Platte River near the center of this state. Casper is the trade center for coal- and oil-mining areas and irrigated farm land in central Wyoming.

**Butte and Helena**

The largest city in Montana is Butte. As you know, Butte is the largest copper mining center in the world. The capital of Montana is Helena. It is the chief trade center for the mines, lumber camps, and irrigated farms of the Montana Rockies.

**NATIONAL PARKS OF THE NORTHWEST**

Like the Far West, the Northwest has large national parks that are famous for their beautiful scenery. In southwestern Oregon is Crater Lake National Park. The lake, which is round, fills the crater, or opening in the top, of a once-active volcano. In Crater Lake is a small island supposed to be the top of the volcano which fell in when the volcano erupted.
Yellowstone National Park has many geysers which send up clouds of steam from time to time. This geyser is the Lone Star Geyser.

Yellowstone National Park

The Rocky Mountains are famous for their beautiful scenery. Every summer thousands of tourists come to the Rockies to visit the national parks. (See the map on page 339.) The oldest and perhaps the most famous is Yellowstone National Park. This park is chiefly in northwestern Wyoming, but it also reaches into Idaho and Montana. The Rocky Mountain tourist business brings much money to Wyoming. Visitors gaze in wonder at the wild beauty of the Yellowstone region. Park rangers patrol the park all the year to protect the forests and the wildlife.

Let us join a group of visitors to Yellowstone National Park. We enter the park at Cody, Wyoming, a town founded by Buffalo Bill. It is named for him, since his name was William Cody. We drive through the mountains until we reach beautiful Yellowstone Lake. This lake is a stretch of water about twenty miles long and fifteen miles wide. We continue on our way until we reach Yellowstone Canyon. The walls of the canyon, which is more than one thousand feet deep in some places, are many colored. Into the canyon pour the gigantic waterfalls of the Yellowstone River. We spend the night in one of the tourist cabins near this beautiful spot.

Then we drive on to see another very famous sight in the park. This is Mammoth Hot Springs. These springs flow over large terraces which are beautifully formed and many colored. The next day we are thrilled by Old Faithful, the geyser which sends its water shooting upward regularly every sixty to seventy minutes. A geyser is a spring which throws shafts of hot water and steam high into the air. Yellowstone is one of the greatest geyser regions in the world. As we leave the park, we realize why Yellowstone is perhaps the favorite spot of tourists in the whole Northwest.

Glacier International Peace Park

Another famous park in the northern Rockies is Glacier National Park. At the entrance to this park stands a monument to peace. North of Glacier National Park Canada has set aside part of the Canadian Rockies as a public park. The two parks, Canadian and American, together form a great international park. International means belonging to, or having to do with, two or more nations. Americans are welcome in the Canadian part of this park. And Canadians in turn are free to use the American part. This beautiful international park proves that neighboring countries can stay at peace without armies to protect their borders.

In Washington are two beautiful national parks, Olympic and Mount Rainier. Olympic National Park has rugged mountains and thick forests of Douglas fir, spruce, hemlock, and cedar. The lofty, snow-covered dome of Mount Rainier is the most beautiful sight in Mount Rainier National Park.
TO HELP YOU LEARN

Persons and Places to Remember

Glacier National Park
Marcus and Narcissa Whitman
Yellowstone National Park
Mount Rainier National Park
Olympic National Park
John Jacob Astor
Oregon Trail
Grand Coulee Dam
Captain James Cook
Captain Robert Gray

Words and Terms You Should Know

territory  geyser  conveyor
spawning place  rodeo  fisheries
international  crater

A Matching Test

The phrases below describe or define the words and terms listed above. Number a paper from 1 through 8. After the number write the word or term which matches the definition.

1. A settled area governed by Congress which has not yet become a state
2. A fresh-water nesting place where salmon lay their eggs
3. A moving belt which carries loads from one place to another
4. Belonging to, or having to do with, two or more nations
5. The opening in the top of a volcano
6. A contest in which cowboys show their skill in riding horses and steers
7. A spring which throws shafts of hot water and steam high in the air
8. Places where fish are hatched and grow

Can You Answer These?

1. What states are included in the Northwest? Which state is the largest? Which is the smallest? Name the capital of each state.
2. What natural features does the Northwest have that are the same as the Far West? Which are different?
3. Where is the Columbia Plateau? The Snake River Plateau? Why do the wheat farmers on these plateaus use dry farming? Before answering this, read the text on page 292 to be sure you know what “dry farming” is.
4. Why does the Willamette Valley get more rain than the Central Valley of California?
5. Name three resources of the Northwest. Which is the most important? Which is protected by the Federal government? Why?
6. Name the national parks of the Northwest. Which of these would you like to visit first? Why?
7. Who were the first Englishmen to see the Oregon coast? What were they looking for?
8. Who discovered the Columbia River? How did this help the United States?
9. Who were the first Americans to explore the land west of the Mississippi? From what place did they start? What route did they travel? What did they do on the way? How did their explorations help others who came later?
10. Who built the first settlement in the Oregon Country? For what purpose was it established? What was life like in this early settlement?
11. Why did Marcus and Narcissa Whitman go to the Oregon Country? How did they help the United States strengthen its claim to the area?
12. What was the main route by which the early settlers traveled overland to the Oregon Country? How did they reach Oregon by water?
13. Where did the first large group of settlers to the Oregon Country make their homes? Why was this a good choice?
14. How did the United States and Great Britain settle the dispute over the Oregon Country without a war?
15. Describe the farming lands of the Northwest. How is water brought to the dry areas? Name and locate the most important dams.
16. What minerals are found in the Rockies? Which state leads in silver? Which in copper?
17. Where are the forests of the Northwest found? Which state is the leading lumber state in the United States?
18. What is the most valuable fish in the Northwest? Tell the story of this fish from the time it is hatched until it is packed into a can.

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19. Name the chief cities of the Northwest. Locate the most important cities in each state.
20. Why do many tourists visit the Northwest?

Can You Choose the Right Answer?
1. Most of Montana and Wyoming lie on the: (a) Columbia Plateau (b) Appalachian Highland (c) Great Plains (d) Willamette Valley
2. The largest of the Northwestern states is: (a) Washington (b) Oregon (c) Montana (d) Idaho
3. Before the Northwest became a part of the United States a large part of it was included in: (a) The Northwest Territory (b) Oregon Country (c) Louisiana Purchase (d) Mexican territory
4. The American sea captain who gave the United States a claim to the Oregon Country was: (a) Francis Drake (b) Captain Cook (c) Robert Gray (d) Robert Fulton
5. The first American settlement in the Oregon Country was: (a) Portland (b) Pocatello (c) Seattle (d) Astoria
6. Until 1846 the United States shared the Oregon Country with: (a) France (b) Great Britain (c) Spain (d) Mexico
7. One of the chief fruit-growing areas in Washington is: (a) Willamette Valley (b) Yakima Valley (c) Cascades (d) Imperial Valley
8. One of the most important potato-producing states in the country is: (a) Montana (b) Washington (c) Idaho (d) Wyoming
9. The largest copper mine in the world is located in: (a) Salt Lake City (b) Helena (c) Butte (d) Cheyenne
10. The leading lumber-producing state in the country is: (a) Idaho (b) Oregon (c) Washington (d) Montana

Can You Complete These Sentences?
1. Fur trappers made the first American settlement in the Oregon Country at ______.
2. Two missionaries, ______ and ______, helped to bring settlers to the Oregon Country.
3. The route traveled by pioneers to the Oregon Country was called the ______ ______ ______.
4. Some pioneers came to the Oregon Country in a new kind of ship called ______.
5. The first part of the Oregon Country to become a state was ______.
6. A contest in which cowboys show their skill in riding horses is called a ______.
7. A great new government program to provide dams and irrigation in the Northwest is the ______ ______ ______.
8. The chief apple-growing state in the country is ______.
9. Most of the flax used to make linen in this country is grown in ______.
10. Most of the salmon fishing in the United States is done on the ______ River.
11. Places where baby fish are hatched and cared for are called ______.
12. The largest city and chief transportation center in Oregon is ______.
13. The largest city in Washington which is a great fur market is ______.
14. Old Faithful, a famous geyser, is found in ______ ______ ______.
15. A national park which is shared by Canada and the United States is ______.

Using Maps
1. On the map of the United States, on pages 250–251, locate and name the Northwestern states. Between what parallels of latitude do the Northwestern states lie? What kind of climate would you expect to find there? How can you explain the fact that Portland and Seattle have a mild climate even in winter? The lines showing the Japan Current on the map on page 9 will help you answer this.
2. On the map on page 14 locate and name the main rivers of the Northwest. Where do they rise? In what direction do they flow?
3. Look at the map on page 238, and trace the route of Lewis and Clark from St. Louis to the Pacific Coast. What river did they follow most of the way? By what route did they return?
4. Trace the route of the Oregon Trail on the map on page 320. Through what different kinds of land would the settlers have to travel in going from Independence, Missouri, to Portland, Oregon?
5. Study the diagram on page 35 and the rainfall map on page 36 and tell why much of Montana and Wyoming is too dry for farming without irrigation.
6. Study the map on page 346 and answer these questions: What fruits are grown in the
Northwest? For what product is Idaho chiefly famous? Where are the wheat lands of the Northwest? Where are the lumber regions? What minerals are found in these states?

7. On the map on page 339 locate the national parks of the Northwest. How do these compare in number and size with the parks of the Far West? How do the forest areas compare with those of the Far West?

Interesting Things to Do

1. Your library will probably have books which tell how the Indians of the Northwest made their living and what kind of food and clothing they had. The museum in your city may have exhibits of totem poles, canoes, and models of the wooden houses of these Indians. Read some of the books and visit a museum if possible. Tell the class what you have learned.

2. Pretend you are one of the explorers with Lewis and Clark on their expedition to the Far West. Keep a diary describing the trip. Tell about the Indians you meet, the animals and vegetation along the way, and the climate. Draw a map of the route and put on it pictures of the interesting sights you see.

3. The Northwest has beautiful scenery. Get travel folders from travel bureaus, airlines, railroads, and bus companies showing views of Mount Hood, Mount Rainier, and scenes in the national parks of the area. These pictures will make an attractive display for your bulletin board.

4. Divide your class into groups. Let each group choose a scene from life in the early days in the Northwest. Act out this scene without using words. This is called pantomime. Let the rest of the class guess what scene is being played.

5. Collect pictures of Grand Coulee Dam and Fort Peck Dam for your scrapbook. Be able to locate these dams, tell what areas each irrigates, and what crops are raised on these lands.

6. Ask your librarian to show you pictures of the famous clipper ships. Can you tell why they could travel so fast? You might like to read some stories of these ships which sailed around Cape Horn to bring settlers to the Northwest.

Things to Think About

1. Many times in history important discoveries have been made accidentally. Shortly after the discovery of the New World, many explorers hoped to find a waterway through the North American continent which would give them a shorter route to Asia. Some of these explorers, John Cabot, Jacques Cartier, Henry Hudson, and Captain Cook, made important discoveries while searching for the Northwest Passage. What were these discoveries? Do you think they were perhaps as important as finding a passageway would have been? Has anyone ever found a Northwest Passage?

2. Early settlers in the Oregon Country had to make their own laws because they were so far away from the national government. How was their experience like that of the Pilgrims who drew up the Mayflower Compact? What ideas of self-government did the pioneers bring with them from the East?

Using a Time-line

Your time-line for this unit will extend from 1579 to 1890. Reread the text to find the important events and their dates. Now place them on your time-line. The pictures at the opening of this unit will help you.
At the close of the Revolutionary War the United States reached from the Atlantic Ocean to the Mississippi River. Only seventy years later it stretched from the Atlantic to the Pacific, a distance of more than three thousand miles. From north to south it reached more than fifteen hundred miles. Lands once claimed by Great Britain, the Netherlands, France, and Spain were now part of it. The United States had become one of the great nations of the world.

Most people in the United States thought their country was large enough. But our nation was going to grow even larger. It was to add Alaska, the Hawaiian (hə-wiˈyən) Islands, and other lands far outside its borders. The map on page 368 shows where these possessions, or distant parts, of the United States are. Notice how scattered they are.

In these lands people of many different races live together under the American flag. Some of the people who live in these lands
Distant Parts of the United States

today are descendants of Chinese, Japanese, Filipinos, and Polynesians. Other peoples who settled in these lands came from Africa, Spain, and other European lands. There are also Eskimos, Indians, and Samoans.

In addition to increasing a nation's size, possessions bring other benefits, such as crops and natural resources. Sometimes the location of the possessions is of greater value than their products.

Notice how many of our country's possessions are islands. Their chief value to the United States is in their location. Many of them are stopping places valuable as supply and service stations for United States ships and airplanes. Others are like soldiers guarding an important post. They help protect our mainland, the part of the United States which lies on the North American Continent.

The United States has not forgotten that it was once a colony of a powerful nation. Because it knows how important independence is, it has given freedom to some lands it once owned. For almost fifty years the Philippine Islands were a part of our lands in the Pacific. On July 4, 1946, the Philippines were given their independence by the United States. Our government kept the promise it had made to the Filipinos in 1898.

The United States has made some of its possessions into territories. A territory may become a state when it has enough people and meets certain other conditions.

As you read this unit you will find the answers to these questions:

1. Why was the purchase of Alaska by the United States a wise choice?
2. Why are the Hawaiian Islands called the crossroads of the Pacific?
3. What are our other Pacific lands like?
4. What are our Atlantic lands like?
5. What is the importance of the Panama Canal to the United States?
This map shows the United States and its possessions. They are mostly above the equator and mostly in the tropical regions. Which is farthest from the United States? Which is nearest?

THE PURCHASE OF ALASKA

You have already read how Spain, France, Great Britain, and the Netherlands explored and settled North America. Still another nation of the Old World became interested in the New World. This nation was Russia.

EARLY HISTORY OF ALASKA

In the days when America was being explored and settled, Russia was already a large country. It stretched across both Europe and Asia. Peter the Great was its ruler. He wondered about lands beyond his vast country. "What kind of land lies east of the Pacific?" he asked. "Where is the waterway that map makers say separates Asia from North America?" Peter the Great sent the Danish navigator, Vitus Bering, to find out.

On one voyage Bering discovered the narrow waterway which separates North America and Asia. It has been named Bering Strait. A strait, as you may know, is a narrow channel which connects two larger bodies of water. Your classroom globe shows how narrow Bering Strait is and what a short distance separates the two continents there. On a later voyage Bering saw the mainland of North America. This discovery in 1741 gave Russia its claim to Alaska. Bering died before he could return to Russia. But some of his party returned and brought fine furs from the New World. Russian fur traders came to Alaska to seek their fortunes.

Russia in the New World

The Russians explored and made settlements on the North American continent. They explored as far north as the Arctic Ocean. They made settlements or built trading posts as far south as northern California. Their chief interest in their New
World possession was furs. For almost one hundred and fifty years a valuable fur trade was carried on between Russia and Alaska.

Meanwhile people from the United States had become interested in this far northern region. Ships went to the Arctic Ocean to catch whales. Other United States vessels traded with the Russian settlements. There was talk of buying Alaska. Our Secretary of State Seward was eager to add this land to the United States. He thought that it would be a valuable possession.

Russia did not feel safe about its lands in America. They were far away and hard to protect. There was also danger that Great Britain might take them. "Perhaps we'd better sell our American lands," the Russians said. "If we sell them to a friendly nation like the United States, we won't lose them through war to Great Britain."

**Our first distant possession**

Secretary Seward and the Russian representative had many talks about the sale of Russian America. For a long time they tried to come to some agreement. Then one night the Russian representative called at Secretary Seward's home to say that Russia agreed to the terms. This news pleased the Secretary of State. Although it was night, the two men went to Mr. Seward's office to work out the treaty. On and on they worked. The clock struck one, then two, then three. Still the men worked on. At four o'clock in the morning the treaty providing for the sale of Alaska to the United States was finally written. We bought Alaska in 1867. We paid Russia $7,200,000 for this great piece of land. Thus two years after the War Between the States ended, we added the first piece of land outside our country.

Alaska is the largest of all our possessions. It is almost one fifth as large as the United States. It is more than twice the size of Texas. It reaches from the western boundary of Canada to the tip of the Aleutian (ă-lū′shən) Islands. Notice on the map, page 368, how far these islands stretch out into the Pacific. From north to south Alaska stretches for almost fourteen hundred miles.

Did our people rush to settle this newly bought land? They did not! Because Alaska

Alaska is a peninsula. Into what ocean does it extend? Use the scale of miles to find how far it is from Point Barrow to Seward. How long are the Aleutian Islands? Why are they shown on a small separate map? The map on page 368 will help you answer this.
In Alaska today gold mining is an important business. Powerful streams of water wash off the top layers of rock and earth. Then machines, called dredges, dig up the gold-bearing gravel.

was so far north most people thought it was a land of ice and snow. Many believed that only wild animals and people like the Eskimos, who were used to the cold, could live there. Even our government paid little attention to its new possession at first.

**The magic of gold**

It was not many years before the world heard exciting news about this northland. Gold was discovered in the Klondike region of Canada near the boundary of Alaska. You can imagine what happened then. Thousands of people rushed northward as fast as boats could carry them. There were few roads or even trails to the gold fields. There was no sure supply of food. But that did not stop the gold seekers. They hastened to the fields by every possible route. Most of them went by way of Alaska. They went by dog team, on foot, or by boat on the Yukon (yō'kōn) River. Find the Yukon River on the map on page 369. They thought only of the riches that would soon be theirs. They did not know the hardships and suffering that lay ahead of them. One of the most famous of the gold seekers was Jack London, who found no gold but who wrote many stories of life in the Yukon. The best of these stories is *The Call of the Wild*, in which a dog is the hero.

Within a few years another gold field was discovered on the beach near where the city of Nome, Alaska, now stands. The rush of fortune hunters with their picks, shovels, and gold pans was on again. They soon crowded the beach at Nome. Eagerly they scooped up the sand and gravel into their pans. Patiently they washed the sand and gravel searching for the bright metal. Later, gold was discovered in other parts of Alaska.

**MAKING A LIVING IN ALASKA**

People in Alaska earn a living in many ways. Some of these ways are mining, fishing, trapping and raising fur-bearing animals, caring for tourists, farming, and lumbering.

**Mining**

Mining is now Alaska’s second largest industry. More gold is mined than any other
mineral. Costly machinery is used to mine the gold in the Yukon River Valley and on the Seward Peninsula. Only the surface of the ground thaws here. Underneath, the soil is frozen many feet deep. Mining companies put pipes into the ground where the gold is found. Water is run through the pipes to thaw the frozen ground. Huge dredges scoop up the gravel. Inside the dredge the gold is separated from the gravel. The gravel comes out of a spout at one end of the dredge. Huge piles of gravel, or tailings, cover the gold fields. The gold is shipped to refineries.

Alaska is rich in other minerals besides gold. Much copper has been mined. Other minerals found in Alaska are silver, lead, tin, iron, coal, and petroleum. Many people believe that deposits of these and other minerals are still to be discovered in this northern land.

Fishing, a valuable industry

Alaska has many kinds of fish. Halibut, herring, and cod are abundant. But fishing for salmon is by far the most important kind of fishing in Alaska. Each summer millions of salmon leave the ocean and crowd into the rivers and streams of Alaska. The salmon are on their way upstream to lay their eggs.

As summer approaches, everyone connected with the fishing industry gets busy. In the short fishing season enough salmon must be caught and canned to last a year. Boats are checked, motors tested, and needed repairs are made. Fish traps, nets, and fishing lines are carefully looked over. Canneries all along the coast are made ready for the busy season ahead. In Seattle boats are loaded with cans, machinery, fishing supplies, and other equipment. Workmen are hired in Seattle and other cities on Puget Sound for summer work in Alaska. Thousands of men are needed to catch the salmon and put them into cans. Alaska does not have enough people to supply them all.

Government agents get ready to patrol the fishing grounds by boat and by plane. They watch to see that Alaska’s fishing laws are carried out. They want to be sure that enough salmon reach the spawning grounds so that there will always be a good supply of these valuable fish.

Very soon the fishing season is over. Fishermen tie up their boats until the next year. Millions of cases of salmon are packed into ships. Workmen go on board for their return journey to the United States. Smoke no longer comes from the cannery chimney. Inside the cannery, the modern machinery stands quiet and still. The only sound is the lapping of the water against the pier.

Alaska’s fur industry

Ever since the days of the Russians valuable furs have been shipped from Alaska. In early days the only way to get furs was to trap fur-bearing animals. During the winter many natives still catch furs in this way. Men who

During the summer months huge catches of fish are taken from Alaskan waters. Here fish are being washed from the boat into a trough on the dock. From there they will be taken to a near-by cannery.
List Alaska's many products and industries. make their living mining, fishing, or lumbering in the summer often earn extra money trapping animals in winter.

Alaska's fur industry no longer gets furs only from trappers. Some people raise fur-bearing animals on farms called fur farms. On these farms foxes and mink are raised.

Find the Pribilof (prēˈbē-lōf′) Islands in the Bering Sea. These islands are the home of the seal whose fur is used to make women’s fur coats. Every summer thousands of fur seals come to these foggy and rocky islands. Here they are caught, killed, and stripped of their skins.

Years ago hunters caught so many fur seals on their way to the Pribilofs that our government became worried. “If this continues, the seals will soon die out,” the government said. So men from the United States met with men from other countries to talk over this problem. They agreed to protect the seals. Now the government allows only a certain number of seals to be killed each year. Because of this protection the number of seals has increased.

ALASKA, OUR LAST FRONTIER

Forest-covered slopes, snowy mountain peaks, rushing streams, waterfalls, and glaciers are part of Alaska’s beauty. This scenery attracts thousands of visitors to the territory every year. Other visitors hunt wild game in the woods, fish in the many rivers and lakes, or camp in the mountains. Many visit Mount McKinley National Park to see Mount McKinley, highest peak in North America. Let us join a group of tourists who are about to visit Alaska.

The dock at Seattle is a busy place as we board our ship for Alaska. Taxis and automobiles are bringing passengers to the dock. Cargo is being loaded. The ship we are on carries freight as well as passengers. Soon we hear the call, “All visitors ashore, please.” In the midst of farewells, floating streamers

These seals with their young, called pups, live on one of the Pribilof Islands near Alaska. Find these islands on the map. In early times hunters killed the seals in great numbers. If the United States and Great Britain had not protected these valuable animals there might be no seals on these islands today.
of paper, and music by the ship’s band we glide from the dock. We stay on deck to watch until the skyline of Seattle is out of sight.

On board are people on summer vacation, people going to live in Alaska, and those who are returning home.

Southern Alaska

We visit southern Alaska first. We need not fear a rough voyage. Much of our journey is through the calm waters of the Inside Passage. Islands off the coast protect this channel from the open waters of the Pacific. It is a beautiful trip. We pass by towering mountain peaks, rocky cliffs, green valleys, icy streams, tumbling waterfalls, thick forests, and wooded, rocky islands. In some places the channel is so narrow that we can almost touch the shore. Now and again we see a small settlement or a cannery.

The salty air is cool and refreshing. Sometimes it is rainy and foggy. Southern Alaska has a mild, rainy climate. Its summers are warm but not hot. Its winters are cool, but not cold. The harbors of Ketchikan (ˈketchɪkən), Juneau (ˈjʊnəʊ), and Seward are open all year. They do not freeze over.

Winds help make the climate pleasant. They blow over the ocean a long distance before they reach this part of Alaska. On their way they blow over a warm current of water called the Japan Current. They become warm as they pass over the Japan Current. As they blow over the land, they bring this warmth with them. Thanks to this current the temperature of the southwest coast averages eighty degrees in summer and almost never falls below zero in winter. How does this compare with your home state? These winds also bring much rain and snow to the mountains that border the coast.

The lower slopes of the mountains are green with thick forests of spruce and hemlock. The mild, rainy climate brought by the winds gives this region dense forests. Some lumbering is carried on. As yet, it is not an important industry. As more people

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Airplanes follow routes that save many miles by flying over the top of the world. Trace the route of an airplane traveling from Seattle to Tokyo; from New York to Santiago.
come to Alaska, lumbering and the making of wood pulp and paper may become more important.

Two days out of Seattle we dock at Ketchikan, the first port of call in Alaska. Because the land is steep, most of the city stretches out along the shore. Some of its buildings and streets are built over the water. Others climb the steep slope. Fishing boats are coming and going at its busy docks and canneries. Ketchikan is an important salmon canning center. Most of the salmon brought into Ketchikan are canned, but some are frozen, smoked, or salted.

Boxes of oranges, bags of onions, crates of lettuce, and other foods are unloaded from our ship. A shining new truck is swung from the hold to the dock. People in Alaska depend on the United States for much of their food, most of their clothing, and other manufactured goods.

Juneau and Seward

The next day we reach Juneau. We wonder how a town happened to be built here at all. Steep, forest-covered mountains rise so close to the coast that there is very little level land for a town. Gold is the reason Juneau was built here. That precious metal was discovered near this city. Fishing, mining, and lumbering are the chief industries of the Juneau area. Juneau is the capital of Alaska. Government business gives work to many people. Both ships and planes connect this modern city with other parts of Alaska and the United States.

Next we cross the Gulf of Alaska to Seward. Find it on the map on page 369. We are no longer in the calm, protected waters of the Inside Passage. Sometimes our ship tosses and rolls. Deep, winding bays extend into the land. Rugged snow-capped mountains lift their peaks into the sky. Dense forests cover their lower slopes. Clear, ice-blue glaciers wind down deep valleys to the sea. At Seward, an important port in Alaska, we end our long voyage from Seattle.

**Anchorage and the Matanuska Valley**

From Seward we take a train to Anchorage (āng’kəræj). Anchorage is Alaska’s most modern and fastest-growing city. The Alaska railroad has its headquarters in Anchorage. Near by are the United States army headquarters for all Alaska. Airlines connect Anchorage with Minneapolis, Seattle, the Far East, Juneau, Fairbanks, and many other parts of Alaska. Highways connect it with Fairbanks and the Alaska Highway.

Near Anchorage lies the fertile Matanuska Valley. This valley is one of the most important farming regions in Alaska. Cabbage, beets, lettuce, carrots, peas, and potatoes grow well in the long days of the short summers. Hay is also raised in the Matanuska Valley. There are many dairy farms. Farmers of this valley have a good market for their farm products. They send fresh

*Alaska Railroad*

Alaska has many glaciers. These large bodies of ice move slowly down the mountains to the ocean. This glacier is near the town of Anchorage. Into what ocean is it moving?
milk and vegetables to Anchorage. Our tour ends in Anchorage. But we learn about the rest of Alaska from a trapper whom we have met in Anchorage.

**Interior Alaska and the Yukon Valley**

The trapper says that the part of Alaska through which the Yukon River flows is often called the Interior, or Central Alaska. *Interior* means an area which lies inland, or away from the border and the coast. Find the Yukon River on the map on page 369. In the Interior the winters are long and very cold with long nights and short days. The summers are just the opposite. They are short and warm with many hours of sunlight.

People here work hard during their short summer to get their farming, mining, road building or other outdoor work done. There is such a brief time in which to do it.

In the Interior the land along the Tanana River is good for farming. Farmers here grow oats, barley, and spring wheat. Cabbage, peas, carrots, potatoes, and other hardy vegetables are also raised. Even though the growing season is short, there are many hours of sunlight. In the middle of summer the sun shines more than twenty hours a day. Many hours of sunlight make the crops grow fast.

The trapper tells us that mining is the most important industry of the Interior. Near Fairbanks and Nome are rich gold deposits. Giant dredges scoop up the sand and gravel and take out the gold.

**Fairbanks** is the leading city of the Interior. There is no other big town for hundreds of miles. Near-by farmers sell their products and do their shopping here. Trappers, miners, and people for miles around depend upon Fairbanks for their supplies. On its streets you may often see Indians, Eskimos, and soldiers from the army base close by. In the summer many tourists visit this busy northern town.

Fairbanks is reached by airplane, train, and automobile. Both a highway and a railroad connect it with towns on the Pacific Coast. Fairbanks is at the northern end of the Alaska Highway, which is over fifteen hundred miles long. This highway connects Alaska with Canada and the United States. Daily airplane flights connect Fairbanks with Seattle and other parts of Alaska. It has also become a stopping place for planes flying between the United States and Asia.

**Arctic Alaska**

Northern Alaska is different from either southern or interior Alaska. Its winters are very long and cold. Its summers are short, but the summer days have many hours of sunlight. Only a foot or two of its frozen ground softens during the brief summer. Moss, grass, flowers, and small bushes seem to grow everywhere then. We say this is a *tundra* region. The tundras are treeless plains found in the Arctic regions of the Western and Eastern hemispheres.

Few white people live in this part of Alaska. The Eskimos here earn a living mainly by
hunting and fishing. The walrus, seal, whale, Arctic fox, and other wild animals found here are important to the Eskimos. These animals furnish the natives with much of their food, clothing, and shelter.

Some years ago the United States government brought reindeer to Alaska to help the Eskimos. Since then a number of Eskimos have learned to make their living by herding reindeer. These animals furnish both meat and milk. Their skins are used to make warm winter clothing.

**ALASKA’S PROBLEMS**

Its lack of people is one of Alaska’s problems. Alaska is one fifth the size of the United States. About one hundred and thirty thousand people live in this huge, rich land. Six times more people live in Rhode Island, our smallest state, than in all Alaska. Nearly a third of Alaska’s people are native Indians and Eskimos. The rest are people who have migrated from the United States and Canada and their descendants.

If Alaska wants to make the things it now gets from the United States, it needs more people. It needs people to carry on farming, mining, lumbering, and fishing. It also needs people to use the products of its farms and its mines, its forests and rivers.

Alaska also needs good, cheap transportation. Distances between settlements are great. In all of Alaska there are only about five hundred miles of railroad. The railroads and roads touch only a small part of this huge land.

People in Alaska still use dog teams in winter and boats in summer. But travel by train, automobile, and airplane is becoming more important. The airplane is the fastest way to carry freight, mail, and people in Alaska. Miners use planes to locate new deposits of minerals and to move machinery, tools, and supplies. Planes are often used to take miners to their camps in the spring and return for them in the fall. Fishermen, fur trappers, businessmen, and many others who can afford to travel by plane in Alaska do so. Airplanes can fly when the ground is frozen or flooded, and other forms of travel are difficult. Places in Alaska that once were weeks away by dog sled are now only a few hours away by plane. Airplanes are helping Alaska with its transportation problem. But more roads and railroads are needed.

**IMPORTANT OF ALASKA**

When Secretary of State Seward bought Alaska, many Americans thought it a foolish purchase. They were sure that Alaska had little value. For years the purchase of Alaska was called “Seward’s Folly.” Most Americans now realize what a bargain Alaska was. At a cost of less than two cents an acre it turned out to be one of the best bargains the United States ever made. The salmon canned in one year is often worth more than six to eight times the price we paid Russia.

Alaska’s treasures have hardly been touched. Gold, copper, silver, lead, tin, coal, and oil are in the ground. There are fish in its streams and in the waters off its coast. It has large forests that can be cut down and made into lumber, wood pulp, and paper. Its waterfalls and swift streams can supply power for making electricity. Alaska’s great need is for more people to develop its natural resources.

Americans are also finding that the location of Alaska is important. At Bering Strait, Alaska is only about fifty miles away from Russia’s eastern border. Alaska is just across the Arctic Ocean from the continent of Asia. The Aleutian Islands, a chain of islands belonging to Alaska, extend far out into the Pacific. At their western end they are only about seven hundred miles from Japan. The United States has several naval bases in the Aleutians. During World War II the Japanese seized part of the Aleutians but were soon driven out by United States forces. Juneau in southeastern Alaska, which is the part closest to the United States, is about a thousand miles from Seattle.
Alaska is becoming an important center for air travel. Planes for Alaska and the Far East take off from airports in many American cities. Both Fairbanks and Anchorage are on the northern air routes to Japan, China, and the Philippines. It takes only about twelve hours to travel by airplane from Minneapolis to Anchorage. It is an even shorter trip from Seattle. The United States and Alaska are closer to each other than are our Atlantic and Pacific coasts.

The shortest and most direct air routes from the United States to Europe or Asia are over the northern lands of North America. To prove this, you will need a piece of string and a globe of the world. On the globe find New York City and Chungking, China. Put one end of the string at New York. Now lay the string on the globe so that New York and Chungking are connected. Be sure you have placed the string so that it goes around the curve of the globe at the shortest point between these two cities. Pull the string tight. This is the route an airplane usually follows in flying between these two cities. Did the route pass over Alaska?

The route you laid out on the globe is the great circle route. It is the most direct and the shortest route between these two places. Compare it with the airplane routes on page 373.

We now leave Alaska and make the return trip to the United States by airplane.

THE HAWAIIAN ISLANDS, CROSSROADS OF THE PACIFIC

In less than a day you can travel by air from San Francisco to the Hawaiian Islands, over twenty-four hundred miles away. These beautiful islands are our nearest lands in the Pacific. They take their name from Hawaii, the largest island in the group. Honolulu, the capital of the Territory of Hawaii, is on the island of Oahu (ō-ā’hōō). Oahu has the most people. Places where ways of travel meet and cross are often spoken of as crossroads. The Hawaiian Islands are sometimes called the crossroads of the Pacific.

Islands in the tropics

You may be surprised to learn that the Hawaiian Islands are the tops of old volcanoes rising above the ocean. Two volcanoes, Mauna Loa (mou’nā lō’ā) and Kilauea (kē’lōö-ā’ā), on the island of Hawaii are still active. Hot liquid rock, called lava, from these volcanoes sometimes boils up and overflows down the mountainsides. We say then that the volcanoes are erupting.

These islands have many mountains. But there are lowlands along the ocean and in the river valleys (see the map on page 378). The soil has been made rich from the lava which once flowed from the many erupting volcanoes. Crops grow well in the deep soil of the islands.

Notice on the map on page 368 that the Hawaiian Islands are south of the Tropic of Cancer. They are in the low latitudes and have a tropical climate. The weather is warm and crops can be grown all year round. Heavy rains are brought by steady winds which blow from the northeast the year round. These steady winds are called the northeast trade winds. They blow over many miles of sea before they reach the islands. They gather much water from the ocean. As the winds blow over the mountains, they become cool. Most of their water is dropped on the north and east slopes of the mountains. When the winds reach the other side of the mountains, they are not carrying as much moisture. So the southwestern slopes have much less rain.

SETTLEMENT OF HAWAII

For a long time, a longer time than you could ever imagine, no one lived on the Hawaiian Islands. One day large canoes filled with men, women, and children came from the south. As far as we know, these people had come from islands in the Pacific which
we call the Polynesian Islands. They had traveled thousands of miles in their strong, open canoes. They had been guided only by their knowledge of the sun, the stars, the winds, and the ocean currents. They became the first Hawaiians.

Many years passed. The Hawaiians were happy in their lovely islands where flowers bloom all year. They farmed the land which they had cleared in the forests, and they fished in near-by waters. They lived in their little villages of thatched huts along the shore. They boxed, swam, and sang. Chiefs and priests ruled over them. They worshiped many gods. Fathers told their sons an old, old story which had been told them by their fathers. Some day, so the story said, a certain god would return to the islands on a floating temple. They looked forward to the time when the god would come again.

Return of a “god”

One day the Hawaiians saw two strange ships sailing toward their islands. “Surely,” they said, “the story our fathers told is coming true.” The ships drew closer. The Hawaiians had never seen ships like these. They had never seen masts and rigging. “Ships as strange as these must certainly belong to a god,” they thought. These were ships of the British Navy commanded by Captain James Cook, a famous English explorer. But the Hawaiians did not know this.

Captain Cook was on his way to the Far North. There he hoped to find a northeast waterway between the Pacific and the Atlantic. Captain Cook stopped at the Hawaiian Islands because his men needed fresh food and water.

At first the Hawaiians thought Captain Cook and his sailors were really gods. Soon they learned that the white men were people like themselves. Doubts filled their minds. “These are not gods,” they said. “Why should we take care of them?” Quarrels arose. Fights took place between the natives and the Englishmen. In one of these fights Captain Cook was killed.

Coming of other people

Years passed. Other white men came to the islands. Ships on their way to China often stopped at Hawaii. There they made repairs, got fresh food, wood for fuel, and water. They also picked up cargoes of sweet-smelling woods. These sold at high prices in China. Sometimes the sailors did not go to China but stayed in Hawaii. Missionaries from faraway New England came to the islands to teach the natives the Christian religion. They opened schools, put the Hawaiian language into writing, and helped the native rulers. Ships on their way to catch whales in the North Pacific stopped to take on food or make repairs. Many of the captains and crews made these islands their home.

Sugar cane was found to grow well in the soil and climate of Hawaii. Men interested in growing this sweet crop came and laid out plantations. Workers from lands thousands of
In the Hawaiian Islands sugar cane is the largest crop. Some of the land is so dry that water has to be brought to the fields by irrigation ditches like the one shown here.

In the Hawaiian Islands are many volcanoes. In the center of this volcano the lava is liquid because it is boiling hot. Around the edge of the crater the lava, which has cooled, has hardened into rock.

miles away were brought to work in the cane fields. Many of these men stayed to make their homes in Hawaii. Today people from the United States, Europe, Japan, the Philippines, China, Korea, and many other places live in the Hawaiian Islands.

HAWAII, AN AMERICAN TERRITORY

When Captain Cook discovered Hawaii there were many kingdoms on the islands. Each was ruled by its own chief. Later a strong king came into power. From then on the islands were united under one ruler.

Some Hawaiian rulers were wise and ruled the islands well. Some, not so wise, ruled poorly. After a while the natives and the people from the United States in Hawaii began to think they did not want this kind of government. The queen, who was on the throne at that time, took away some of their rights and refused to give them back. The people were sure then that they did not want to be ruled by a king or queen. The Hawaiians rebelled and set up a new government. The people from the United States who were living there wanted the islands to become part of the United States. The leaders of the Hawaiian government asked that Hawaii be made a part of our country. But the people of Hawaii had not been consulted and our government said, "No."

Five years later Hawaii again asked to be joined to the United States. By this time the United States had changed its mind. In August, 1898, the United States flag was raised over the Hawaiian Islands. Two years later Hawaii became a territory of the United States. For more than fifty years Hawaii has been a part of our country.

MAKING A LIVING IN HAWAII

Farming is the most important industry in the Hawaiian Islands. Most of it is done on plantations owned by big business companies.
On these large farms sugar cane or pineapples are grown. Because these crops are raised to be sold, they are often called money crops. Rice, coffee, tobacco, and other tropical crops are also grown on the Hawaiian Islands.

Sugar cane
Sugar cane is the chief money crop. Because it is so valuable it is even grown in the less rainy parts of the Hawaiian Islands. Water is brought to the cane fields when it is needed. Most of the work on the plantations is done by modern machinery. Machines are used to get the fields ready for planting, to plant the cane, and to harvest it.

Thousands upon thousands of tons of raw sugar go to Honolulu, Hawaii's chief seaport. Steamships carry it from there to the west coast of the United States to be refined.

Hawaiian pineapples
Pineapples are Hawaii's second most important money crop. Like sugar cane, they grow best where it is warm all year.

The plantation we shall visit is owned by a big pineapple company. Mr. White, the manager, helps explain everything to us. As we ride through the plantation, we smell the sweetness of the ripening pineapples. On either side of us the fields stretch for miles over hilly and gently sloping land. They look like a beautiful green carpet.

We notice that the rows of pineapples are planted across the slopes instead of up and down them. “Why are pineapples planted that way?” we ask.

“In the last few years,” explains Mr. White, “we have done much to try to save the soil. When heavy rains come, we sometimes plow across the slope to keep the water from washing the soil away. On steeper places we build terraces or small flat hills of earth. The terraces are like little dams holding back the water.”

“Why, Mr. White,” exclaims one of our group, “my uncle in Nebraska plows that way on his farm. I never thought I’d find things the same so far from home!”

Pineapples are the second largest crop in Hawaii. What is Hawaii’s most important crop? What other money crops are grown in the islands? Do these islands have any mineral resources?
Pineapples are a very important crop in the Hawaiian Islands. Many pineapples are canned and shipped to the United States. The fruit grows close to the ground. The pointed tops of the fruit are cut off and planted to start a new crop.

Mr. White laughs as he answers, “Farmers everywhere have problems that are much alike. All of us want good crops. Building up the soil is one way to get them.”

Mr. White stops the car so that we can see what a pineapple plant is like. We must be very careful not to go too close. The long leaves are like spikes and have very sharp edges. For protection from the hot sun and the sharp spikes, the Japanese, Koreans, and Filipinos who are harvesting the pineapples wear dark eye glasses and heavy gloves. One of the workmen hands us a slice of pineapple to taste. It is juicy and very sweet.

We are puzzled by the white patches about the plants. As we look closer, we see that these white patches are paper! Mr. White tells us that machines laid heavy paper in rows across the fields before the pineapples were planted. The paper keeps the soil moist and keeps weeds from growing. The paper stays on the ground until it rots.

We ask Mr. White about the planting. “Planting is a hard job,” he says. “The young plants are set out by hand through holes punched into the paper. As yet machines are not important in this work.

“Eighteen months or more after the pineapples are planted, the fruit is ripe and ready to be picked,” continues Mr. White. “Most of the pineapples are harvested during June, July, and August. But some are picked every month of the year. Trained pickers test the fruit to see whether it is ripe enough and at its best for canning.

“On our plantations there has been a change in the way pineapples are harvested. The machine that you see on the truck saves both time and money. It is called a conveyor, or carrier. It does away with sacks and boxes for picking.”

As the truck moves along, the long arm of the conveyor reaches out across many rows of pineapple plants. On it is a moving belt. Workmen pick the pineapples and place the ripe fruit on the belt. This belt carries the fruit to a bin on the truck. When the bin is full, the pineapples are rushed to modern canneries. There, within twenty-four hours, the pineapples are canned either as fruit or as juice. Only a small number of pineapples are exported as fresh fruit.

Hawaiian pineapples are shipped all over the world. The United States is the biggest

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buyer of canned Hawaiian pineapples and pineapple juice.

Tourists and Honolulu

Thousands of people visit the Hawaiian Islands every year. Taking care of these tourists helps many Hawaiians earn a living. Like most tourists we visit Honolulu, the gay and busy capital city. From Honolulu we journey to see the high green mountains, the brightly colored tropical flowers, and the bubbling, boiling lava of the active volcanoes. Whether it is March, June, September, or December, visitors leave heavy woolen clothing at home. They bring summer clothes and bathing suits. Tourists enjoy the swimming, water sports, and sun bathing.

Besides being the capital, Honolulu is also the largest city and the chief seaport. Its modern buildings remind us of a city in the United States.

Ships are important to Hawaii. On Honolulu’s docks raw sugar and canned pineapples wait for ships to carry them to the United States. We are Hawaii’s best customer. To Honolulu ships bring manufactured goods like clothing, shoes, building supplies, machinery, and gasoline. Ships also bring rice and other food. Most of these things are imported from the United States.

Travelers who wish to go from Hawaii to other lands can easily do so. Ships on their way to or from many parts of the world dock at Honolulu. Here they take on fuel, cargo, mail, or passengers. Air routes across the central Pacific also meet and cross at these islands. Planes have to refuel, change crews, and take on supplies. The islands are an excellent stopping place. Prove this by using the map on page 373.

Hawaii’s problems

As you already know, most of Hawaii’s farm land is used to grow money crops. Only a small amount is used for food crops. This means that much of the food the people use is brought by ship. Most of the time this is not serious because supplies can be brought in easily. But it is not good for a land to depend upon shipping for almost everything it uses. Perhaps in years to come Hawaii will use more of its land to raise food crops.

ISLAND OUTPOSTS

Long before the Hawaiian Islands became a part of our country, the United States government saw that it needed these islands. The islands could be used to help protect our Pacific Coast. The United States now has great naval and air bases at Pearl Harbor near Honolulu. These with other air bases and forts throughout Hawaii have made the Hawaiian Islands a very valuable part of the United States of America.

OTHER PACIFIC ISLANDS

On the map on page 368 find other islands in the Pacific which belong to the United States. For many years the United States paid little attention to these islands. They seemed small and not very valuable. They were little more than names on maps to most people in our country.

Then travel by air increased. Distant places were brought closer together. But the great Pacific Ocean was too wide for planes to cross without stopping. Places were needed where fuel could be obtained or repairs made. Look at the air route map on page 373. Find San Francisco and the Philippines. Notice how far it is between them. Now trace the air route from San Francisco to Hawaii, then to Wake, to Guam (gwām), and finally to the Philippines. Hawaii, Wake, and Guam are like stepping-stones across the Pacific. Because of their position airplanes flying across the Pacific stop at these islands to get fuel and to change crews. Today we realize how valuable our Pacific islands are. Many of them have submarine, air, or naval bases.
Midway, Wake, and Guam

Midway is the largest of a group of islands about twelve hundred miles northwest of Hawaii. Midway is an important link in the chain of our Pacific islands. At a cable station on this island messages and news are received. They are sent to and from the United States and other places in the Far East. One of the most important naval battles of World War II was fought in the waters around Midway.

Wake has been a United States possession since 1899. In that time this tiny, lonely island has become an important fuel station between Hawaii and Guam. We will long remember how bravely our marines fought on Wake during World War II.

Magellan was one of the first white men to land on Guam. He stopped there on his voyage around the world. Until the Spanish-American War in 1898 this island was under the rule of Spain. Since then, except for a short time during World War II, it has been under the United States flag. Guam is one of our nation's important military bases.

Samoa Islands

Have you read Treasure Island? Most boys and girls know that it is an exciting adventure story by Robert Louis Stevenson. This famous author chose to spend his last years on one of the beautiful Samoa (sä-mō'ä) Islands. The Samoa Islands lie far to the south of Hawaii. A few of these islands belong to the United States, the rest to New Zealand. Ships and planes on their way to Australia and New Zealand find them good stopping places for repairs and refueling. The best harbor in our part of Samoa is Pago Pago (pāng'ō pāng'ō).

The United States Navy Department governs our part of Samoa. Our policy is "Samoa for the Samoans." This means that we believe that Samoa belongs to the people who are born there and to no one else. A naval officer appointed by our President acts as governor. But much of the ruling is left to the native chiefs. Only persons born there can buy or own land in the Samoa Islands.

Islands held in trust

After World War II the United States was given charge of certain islands in the Pacific (see the map on page 368). One of our tasks is to help the people of these islands learn to govern themselves.

Our tour of the Pacific is over. We now board a plane which will take us to the Atlantic Ocean. There we shall visit other islands belonging to the United States.
OUR LANDS IN THE ATLANTIC

So far you have been reading about the lands of the United States in the Pacific. The United States has lands in the Atlantic Ocean as well.

PUERTO RICO

In the Atlantic Ocean southeast of Florida is Puerto Rico, a rapidly developing land. Puerto Rico is one of the West Indies islands. Find it on the map on page 368. This map shows clearly how close Puerto Rico is to the United States. It is much closer than any of our other lands.

Puerto Rico is the only land found by Columbus that has become a United States possession. For four hundred years this island was a Spanish colony. During our short war with Spain in 1898, a United States army landed on this island. When the war ended, Puerto Rico became a part of the United States. The Spaniards left the island.

The people and climate

The United States found its new possession to be a small island about one third as large as Vermont. Even in those days Puerto Rico had a great many people for its size. Today it has more than two million people. Puerto Rico has more people for its size than any other island in the West Indies. The people speak Spanish.

Puerto Rico is a land of hills and mountains with lowlands along the coast. It is in the tropics and is warm all year round. As in Hawaii, warm winds from the northeast blow over it. They bring heavy rains to Puerto Rico’s northern and eastern slopes.

Sugar, tobacco, citrus fruits

Farming was the chief industry in Puerto Rico when it became a United States possession. Farming is still the way most people in Puerto Rico earn their living. As we tour the island, we talk to some of the people.

"I work on a big sugar plantation," one man tells us when we ask him what he does. "It is owned by a North American sugar company. I work there all year round. I help to clear the land, plow it, plant cane, and weed it. I don’t earn much money, but I can always buy corn or salt fish for my family. I’m luckier than my brother José (ho-sa’). He has steady work only during the sugar harvest when extra workers are needed. Sometimes he doesn’t have enough money to buy food.”

Sugar is Puerto Rico’s chief crop and its leading export. Much of it is grown on the

Workers in Puerto Rico cut sugar cane by hand. The cane is then loaded on a cart drawn by oxen. Notice that the sugar cane is twice as tall as a man.
Which of the products of Puerto Rico show that this island lies in the tropics? What states of the United States grow some of the same crops? Compare Puerto Rico's products with those of the Hawaiian Islands. What different kinds of manufacturing do the Puerto Ricans engage in?

rich, level land along the coast. Many Puerto Ricans earn their living on the sugar plantations and in the sugar mills.

Tobacco is grown in the mountain valleys on the northern part of the island. We talk to a farmer there.

"I make most of my living raising and selling tobacco," he says. "It keeps me busy taking care of it from November when it is planted until March when I harvest it. Much of Puerto Rico's tobacco is grown on small farms like mine. But I don't use all my fifteen acres for tobacco. On some acres I raise corn, beans, yams, or rice. Some I use for grazing. After the tobacco is harvested, I plant corn, beans, or other crops in the same fields."

The tobacco planter is luckier than the sugar worker. He grows both money crops and food crops on his farm.

The next person we talk to looks like a person from the United States. When we ask him about it, he smiles as he tells his story.

"My father first came to Puerto Rico from the United States during the Spanish-American War. Later, he came back with my mother and bought land. I was born here. We have always raised grapefruit. Some of our friends grow pineapples. Our farm is near enough to the city of San Juan (sán hwān') to ship out fresh fruit. We also sell some to the canneries there."

Today fresh as well as canned fruits are shipped from Puerto Rico to other countries. Coconuts and coffee are also exported.

Manufacturing

Some Puerto Ricans earn their living working in factories. Manufacturing is increasing. The government is encouraging businessmen to come to Puerto Rico to start factories. As yet manufacturing is not as important as farming on this crowded island.

Raw materials for Puerto Rico's factories come mostly from its farms and plantations. In its mills sugar cane is made into raw sugar. At the canneries pineapples and grapefruit are canned or made into juice. Cigars and cigarettes are made from tobacco grown on farms in the mountain valleys. Fine needlework and fancy embroidery are also done in Puerto Rico's factories.

Exports and imports

Most of Puerto Rico's trade is with the United States. In turn, the United States sells manufactured goods to Puerto Rico.

Most of the island's trade goes through San Juan, the capital city and chief seaport. This old city has been important since Spanish days. Before the Pilgrims arrived in America, it was already over a hundred years old. Today planes connect it with cities in the United States, South America, and other islands of the West Indies.
Puerto Rico’s problems

Puerto Rico’s most serious problem is providing work for its huge population. It is teaching its farmers better ways of farming. It wants them to grow more food crops. Within recent years factories and mills have been built on the island. In the future Puerto Rico hopes to have more manufacturing. Then most of the people will not have to depend on farming for their living as they now do.

Some people in Puerto Rico want the island to be free and independent of the United States. Others do not feel that their country is strong enough to be a free nation. They want it to become one of the states of the United States.

An island on guard

In spite of its problems Puerto Rico continues to be an important part of the United States. Look at the map on page 415. The only way to enter the Caribbean Sea is through passages between the West Indies islands. Find the passage between Puerto Rico and the island of Hispaniola which contains Haiti and the Dominican Republic. This passage is one of the chief entrances to the Caribbean Sea. Long ago the Spanish built a great fortress at San Juan to guard this passageway. Today the United States has air, naval, and army bases on Puerto Rico. They guard an important entrance to the Caribbean Sea. They also protect the entrance to the Panama Canal about which you will read later.

We leave Puerto Rico and pay a visit to the Virgin Islands.

THE VIRGIN ISLANDS

The Virgin Islands are another United States possession in the West Indies. They are east of Puerto Rico. What stories the sheltered bays along their coasts could tell! In early days they made good hiding places for pirate ships. From them bold sea robbers dashed out to seize passing treasure ships.

In 1917 we bought the Virgin Islands, once called the Danish West Indies, from Denmark. Fifty years before, Secretary Seward had urged our Congress to buy these islands. But Congress did not follow his suggestion. Then during World War I, when we were afraid that Germany would seize them, we bought the Virgin Islands. Their location, not their products, makes these islands important to our country.
Earning a living

Sugar was the chief crop when Denmark owned the Virgin Islands. But it is no longer an important crop. Today juice from the cane, used for making rum, is a valuable export.

Like us, many tourists visit the Virgin Islands. Taking care of tourists is another way in which the natives earn their living. The scenery is beautiful and the climate pleasant. We stop at Charlotte Amalie (ā-mäl'yē) on the island of St. Thomas. This interesting city is built on the hillsides overlooking the water. Charlotte Amalie is the largest town and the capital of the islands.

Making a living on the Virgin Islands has never been easy. The soil is poor and rocky. Much of the land is hilly. Even on the flat land farmers cannot be sure of getting a good crop. The rainfall is uncertain. Often crops fail because of dry weather.

The United States has tried to help the people of the Virgin Islands. It has helped them buy their own farms and grow crops other than sugar cane. It is trying to get more tourists to visit these lovely islands. In addition, it has built roads and set up schools and hospitals.

Perhaps it will always be necessary for us to help the people of the Virgin Islands make a living. No matter how much help we give, we know it will be worth what we spend. The Virgin Islands are well located to help guard and defend an important waterway, the Panama Canal.

THE PANAMA CANAL: A VALUABLE WATERWAY

On the map on page 368 find the narrow piece of land which joins North America and South America. This land bridge is known as the Isthmus of Panama.

An important crossroads

Long before white men came to America, Indians wandered from North to South America across the isthmus. When the Spanish came, they made it their chief highway between the Atlantic and the Pacific. During the gold rush to California people from the eastern part of the United States found the route around South America too long. Many shortened their journey by crossing the isthmus. California gold made this land
In Panama City this statue was built in memory of Balboa, who discovered the Pacific.

bridge so important that a railroad was built across the isthmus.

**French attempt to dig canal**

For years people talked about digging a canal through this narrow strip to join the Atlantic and the Pacific oceans. At last a French company tried it. Things went wrong from the beginning. Mosquitoes swarmed in the hot, rainy forests. Fever spread by their bites killed thousands of workmen. Landslides caused delays. Floods ruined much of the work. The French company failed, and for many years the idea of building a canal was forgotten.

**Permission from Panama**

After the war with Spain, the United States had land in both the Atlantic and Pacific oceans. The only way it could get its ships from one ocean to the other was to go around South America. “That takes too long,” said Theodore Roosevelt, who was President of the United States at that time. “We should finish the canal which the French began. If there was a ship canal through the isthmus, it would be much easier for the United States to defend itself in both oceans.”

There were many Americans who agreed with President Roosevelt. Some of them believed that the canal should be built right away. In 1904 the Republic of Panama gave the United States permission to build a canal through the isthmus.

Panama gave the United States a *lease* on a strip of land ten miles wide across the isthmus. This lease gives us the right to rent, for a term of years, the Canal Zone, as this land is called.

**Defeat of disease**

One of the worst problems the French had faced on the isthmus was the sickness of their
This steamship, which is on its way from New York to San Francisco, is entering Gatun Locks in the Panama Canal. (Find these locks on the map on page 388.) The canal unites the two greatest oceans in the world. It is a short easy route for ships. By using the canal this ship will sail less than half as far as if it had to go all the way around South America.

workers. Colonel William Gorgas (gôr'gäs) was brought to the Canal Zone to make it a healthful place. "Unless disease is conquered, no canal can be built across Panama," Gorgas declared. "The cost in lives will be too great." Because of this work, the Canal Zone became one of the most healthful places in the Western Hemisphere.

Building the Panama Canal

Then came the great task of digging the canal. Dams were built, and rivers were made to flow another way. A channel was cut through the low, rocky mountains. Landslides, floods, and an earthquake caused heavy damage. Still the work went on, year after year. After ten years the valuable waterway was completed. At last ships could go from the Atlantic to the Pacific without going all the way around South America.

A valuable waterway

The Panama Canal has shortened distances and brought places closer together. It has saved millions of dollars in time. Ships no longer have to go around South America to get from one ocean to the other. New York and San Francisco are over seven thousand miles closer by water than they were before. Ships sailing between these two ports often save as much as twenty days' time by using the canal. Cities on the Pacific Coast of South America are nearer in time to New York and Europe than they were before.

Because the Panama Canal is so important to the defense of the United States, it is strongly fortified. Air and naval bases protect its entrances. The railroad and road across the Panama Canal Zone add to its protection, for the canal is valuable to us.

TO HELP YOU LEARN

People and Places to Remember

Vitus Bering  William Seward  Alaska Highway  Robert Louis Stevenson  The Klondike
William Gorgas  Panama Canal  Captain James Cook  Mount McKinley  Jack London
Words and Terms You Should Know

lava  tundra  erupting  Interior
lease  current  Interior

crossroads  great circle route  possessions  mainland

A Matching Test

Number a paper from 1 through 10. After each number write the word or term from the list above which matches the definition.

1. Distant lands belonging to a country
2. Most direct and shortest route between two places on earth
3. The right to use property for a certain time by paying rent for it
4. Level, treeless plain in the arctic regions
5. A country or a continent without the islands near by
6. Sending forth hot liquid rock
7. A body of water moving in a certain direction
8. Places where ways of travel meet and cross
9. Hot, liquid rock flowing out of a volcano
10. An area which lies inland, or far from the coast

Can You Answer These?

1. What lands does the United States possess in the Pacific Ocean or bordering the Pacific Ocean? How did each of them become a United States possession?
2. What first caused people from the United States to go to Alaska in large numbers?
3. Name the principal ways in which people make a living in Alaska.
4. Why does Alaska have laws about fishing?
5. Why can good crops be grown in Central Alaska even though the growing season is short?
6. Why do many Alaskans travel by airplane?
7. Why is Alaska valuable to the United States?
8. Name some of the money crops of Hawaii.
9. How are the pineapple growers practicing conservation?
10. Why do tourists like to visit Hawaii?
11. What lands does the United States possess in the Atlantic Ocean? How did each of them become a possession of the United States?
12. Why does much rain fall on the northern and eastern slopes of the mountains in Hawaii and Puerto Rico?
13. How are Puerto Rico and Hawaii alike in (a) surface, (b) climate, (c) crops? You might begin by saying: Both Puerto Rico and the Hawaiian Islands are mountainous.
14. How did the opening of the Panama Canal help both North America and South America?
15. How have the Virgin Islands benefited by belonging to the United States?

Who’s Who

Match the names of the following men to the phrases which describe them.

William Seward  William Gorgas
Vitus Bering  Captain James Cook
Jack London  Robert Louis Stevenson

He wrote stories about the North country.
He wiped out yellow fever in Panama.
He was thought to be a god by the natives on the island he discovered.
He was the Danish navigator who discovered Alaska.
He wrote exciting adventure stories.
He bought Alaska for the United States.

Can You Complete These Sentences?

Only one of the endings which follows each sentence is correct. Choose the correct endings.

1. The population of Alaska is about:  (a) 75,000  (b) 100,000  (c) 125,000  (d) 150,000
   (e) 175,000
2. The Hawaiian Islands became part of the United States in:  (a) 1867  (b) 1898
   (c) 1900  (d) 1917
3. The most important industry in Alaska today is:  (a) farming  (b) mining  (c) manufacturing
   (d) fishing
4. The chief money crop of Hawaii is:  (a) rice  (b) tobacco  (c) pineapples  (d) sugar
5. The Virgin Islands are important to the United States because of their:  (a) climate
   (b) location  (c) size  (d) scenery  (e) population

Using Maps

1. On the map on page 368 locate the island possessions of the United States. Which United States possessions are not islands? Find them on the map.
2. Study the map on page 368 and answer these questions: Which lands of the United States are in the tropics, or low latitudes? Which possession of the United States is closest to it? Which possession is farthest away?
3. On the map of Alaska, page 369, find and name (a) the largest river and the body of water into which it flows, (b) an important fish canning center in southeastern Alaska, (c) the capital, (d) an important city of the Interior, (e) islands valuable for fur seals, (f) Alaska’s two largest peninsulas.
4. On the map on page 9 find the Japan current. In what directions does it flow? Near what lands does it flow? How does it affect these lands?

**Interesting Things to Do**
1. Divide your class into committees. Each committee may choose one of the United States possessions and make a diorama showing the work of the people. Make a sketch of each scene before you begin to make the people and objects for your diorama.
2. Pretend you are spending your vacation in one of the United States possessions. Write a letter to a friend at home telling what you have seen on your visit.
3. Ask your teacher to play some records of Hawaiian music. “Aloha Oe” is one of the Hawaiian songs you can learn and enjoy. *Aloha* (a-lo’ha) means “greetings” or “good-by.”
4. Choose a committee to write to one of the airlines to find the time required to fly from (a) Chicago to Anchorage, Alaska; (b) your home town to Seattle, Washington; (c) Seattle to Juneau, Alaska.

5. Bring in samples or pictures of the products from our island possessions. Make name cards for each of the possessions. Then arrange your collection so that the products from each possession are with the right name card.
6. Make scenes on paper to show why people like to go to Alaska, Hawaii, Puerto Rico, the Virgin Islands, and the Panama Canal Zone for their vacation. The class may choose the best ones to be placed on the bulletin board. Large posters may also be made with the small scenes as a guide.
7. Bring books of stories about the United States possessions from the library or from your home. Read or tell some of these stories to your classmates. Make your stories interesting so that the rest of the class will want to read more about the land you talk about.
8. Plan a program for another class or for your parents. Begin your program with Hawaiian music. Give talks using the posters, dioramas, products, and other things which you have made or brought in. Souvenirs from these possessions will add to your program. In your talks you might discuss:
   (a) Why Alaska has been a wise purchase
   (b) Why possessions in the tropics are valuable to the United States
   (c) Why many tourists like to go to Hawaii
   (d) How the United States has helped its possessions

**Making a Chart**
Complete this chart on the possessions of the United States. From the reference tables on page 485 find the area and population and the date when each possession became a part of the United States. Reread your text to find the important products.

<table>
<thead>
<tr>
<th>Possession</th>
<th>Date Acquired</th>
<th>Area</th>
<th>Population</th>
<th>Important Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>1867</td>
<td>586,400</td>
<td>128,643</td>
<td>Fish, furs, lumber, minerals, farm products</td>
</tr>
</tbody>
</table>
The huge and friendly country of Canada is our northern neighbor. It stretches from the Atlantic to the Pacific and from the United States almost to the North Pole. Except for Alaska, it occupies the entire northern part of North America. It is the largest country in the Western Hemisphere and the third largest country in the world.

For over a hundred years Canadians and Americans have lived in peace and friendship. Their trust in each other is so great that nowhere along the five-thousand-mile border is there a gun or a fort.

Most Canadians speak English. They read many of the same books and magazines and enjoy the same kinds of movies. Many of them have relatives or friends in the United States. Canadians along the United States border do about the same kinds of work as their American neighbors do.

Many of the natural regions of North America are partly in the United States and
Cananda and Its Island Neighbors

partly in Canada. The Cascade Range, the Rocky Mountains, and the Appalachian Highland extend into Canada. See the map on page 9. The central plain of North America also extends northward through Canada. In eastern Canada are other lowlands. Find the plain along Lake Huron, Lake Erie, Lake Ontario, and the St. Lawrence River. Also find the lowland south of Hudson Bay.

The largest natural region of Canada is the Laurentian Upland. Only a small part of this upland extends into the United States. Notice on the map that the Laurentian Upland is east of the central plain. This upland covers more than half of Canada. It has thousands of lakes, rivers, and swamps. Valuable forests of pine, spruce, balsam, and fir cover its low, rounded hills. Beneath the rocky surface are great stores of minerals.

Because Canada is farther north than our country, it has longer, colder winters and shorter, cooler summers. The rainfall of Canada is much like that of the United States. See the map on page 36. Southern Canada has a climate like that of the northern United States.

Fewer people live in the whole of Canada than in New York State. Many parts of this large country have almost no people. Look at the map on page 36. You will see that most Canadians live in the southern regions.

East of Canada are Greenland and Iceland. These two islands have become very important in recent years.

As you read this unit, you will find the answers to the following questions:

1. How did Britain gain control of Canada?
2. How did Canada gain its independence?
3. In what ways do the people of modern Canada make a living?
4. Why have Greenland and Iceland become important in recent years?
HOW THE BRITISH GAINED CONTROL OF CANADA

After Columbus discovered the New World, explorers of other nations followed his example. They too hoped to find the lands of Asia by sailing west. Like Columbus, they reached the New World.

Early French explorers

French claims to Canada were established by Jacques Cartier. On his first voyage to the New World this brave sailor explored the Gulf of St. Lawrence. The next year he discovered and explored the St. Lawrence River. He claimed all the land drained by this river for France. He called it New France. As the map on page 9 shows, much of it is now part of Canada.

Although Frenchmen continued to come to the New World, they came chiefly for fish and furs. Many years passed before the French made a permanent settlement.

Then in 1608 Samuel de Champlain founded Quebec on the St. Lawrence. This settlement became the first permanent French colony in America. From it Champlain pushed westward into the region of the Great Lakes. Everywhere he went he claimed the land for France. Champlain’s work was so important that he has become known as the “Father of New France.”

Other French explorers, soldiers, fur traders, and missionaries continued to explore the new continent. They set up forts and built trading posts. By the year 1700 the French had a firm hold in North America.

Early British explorers

Meanwhile the British had been busy. Because of the voyages of John Cabot they claimed all the eastern coast of North America. They also set up forts and trading posts. Some, in the country around Hudson Bay, were built by the Hudson’s Bay Company. This company was started in England in 1670. It was granted all the land drained by the rivers flowing into Hudson Bay. This company was given the right to trade in this region as well as the right to govern it.

The French and Indian War

You will recall that Great Britain and France had been enemies for many years. Both wanted the rich fur trade of North America. As you know, the last struggle between these two nations for the continent of North America was called the French and Indian War.

You have already read about this war and how the British defeated the French at Quebec. When peace was made in 1763, France gave up its claim to Canada and the lands east of the Mississippi River. Great Britain now controlled half of North America.

HOW CANADA BECAME INDEPENDENT

Great Britain now faced the problem of ruling the Canadian colonies, where there were many more French than British.

The Quebec Act

Eleven years after the treaty of 1763 the British government passed the Quebec Act. By this act, or law, French Canadians were allowed to speak their own language and keep their own religion and customs. This was wise. It kept the French loyal to the British. Today more than three out of every ten Canadians are descended from these early French colonists. Their customs and their language and ways of living are much like those of the early colonists. Both French and English are used as languages in the government and the courts of Canada.

Coming of the loyalists

While the British were solving some of their problems in Canada, trouble arose in their
other American colonies. A year after the Quebec Act the thirteen British colonies along the Atlantic Coast rebelled. After the American Revolution started, the colonists had to choose sides. As you will remember, those who remained loyal to the king were called Tories. Many of these people left the colonies. About forty thousand of them fled to Canada. The British in Canada welcomed them. They were glad to have people who had their customs and spoke their language come to Canada. Many settlers also came to Canada from Great Britain.

BECOMING AN INDEPENDENT NATION

In 1837 there was a small rebellion for more self-government in the Canadian colonies. The revolt was soon put down, but the British government was worried. It feared it would lose its Canadian colonies. It sent Lord Durham to Canada to look into the problem. Lord Durham’s report urged self-government for the Canadian colonies. Before very long this was granted.

Uniting the Canadian provinces

Within the next twenty years Great Britain’s Canadian colonies grew. Along the Atlantic Coast were Nova Scotia, New Brunswick, and Prince Edward Island. West of them was the Province of Canada, later divided into the provinces of Quebec and Ontario. In Canada a province is a region much like a state in our country. Hundreds of miles farther west was the Red River colony, the first settlement in what is now the Province of Manitoba. Along the Pacific Coast was the colony of British Columbia.

The colonists in some provinces began to talk of uniting. Men from Nova Scotia, New Brunswick, Prince Edward Island, and the Province of Canada met at Charlottetown on Prince Edward Island. They decided that all the colonies in Canada should unite under one central government. Later they met at Quebec to work out the details of their plan. Important leaders of the day were there. They thought their plan a good one and took it back to their colonies to be discussed. Later they sent representatives to London to discuss their plan with the British government. The plan of union was approved and made a law in July, 1867. This law, called the British North America Act, became Canada’s constitution.

Only four provinces, Nova Scotia, New Brunswick, Quebec, and Ontario, were included in the new union at first. Manitoba,

The British North America Act, or law, which united the four eastern provinces of Canada was drawn up by these men. For this reason they have been called the “Fathers of Confederation.”

National Film Board of Canada
a prairie province, soon joined the union. Meanwhile the people of the province of British Columbia became interested in becoming a part of Canada. “We can have self-government,” they said, “if we join the union.” Canada was glad to have the western colony join it. It promised to build a railway connecting this far-off settlement with eastern Canada. Today this railroad is known as the Canadian Pacific Railway. Two years later Prince Edward Island joined the union.

With the building of the Canadian Pacific and other railways, settlers began moving into western Canada. After 1900 many settlers poured into this region. They came from the United States, eastern Canada, the British Isles, and other parts of Europe. The provinces of Saskatchewan (sás-kách’ë-wôn) and Alberta became part of Canada. In 1949 Newfoundland, the oldest British colony, voted to join Canada. It became Canada’s tenth province.

**Canada’s government today**

As the years passed, Canada was allowed to handle more and more of its own affairs. In 1931 the British government passed a law saying that Canada was an independent nation. Since that time Canada has fully governed itself. It makes its own laws, decides its own policies, and coins its own money. It makes treaties with foreign countries and decides on questions of peace or war. But it has chosen to be a part of the British group of nations. Today all of these nations recognize the British queen as their leader.

**THE MARITIME PROVINCES**

If you were to look up *maritime* in your dictionary, you would find that it means “bordering or near the ocean.” Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland are called Canada’s Maritime Provinces. The map on page 397 shows that these provinces border the Atlantic Ocean.

They are Canada’s smallest provinces. Together they are less than half the size of Quebec, the largest province. They have fewer people than Detroit, Michigan.

**Fishing**

Many people in Nova Scotia and Newfoundland earn their living from the sea. The bays and inlets along the rocky coasts provide sheltered harbors for fishing boats. The near-by ocean has fish people can eat. Not too far away are the Grand Banks. Find these banks on the map, page 397. On these fine fishing grounds cod, haddock, halibut, herring, and mackerel are caught. Closer to shore, lobsters are caught.

Codfish is an important export of the Maritime Provinces. Here the fish are spread out for drying just as the first settlers dried cod in early times.
Catching fish is only part of the work connected with fishing. Some people work in fish canneries. Some build and repair boats or make nets, ropes, or fishing tackle. The many by-products of fish provide work for others. Bones, heads, and tails are ground up and made into meal for chicken and cattle feed. Valuable oil is obtained from the livers.

**Catching seals**

Some people in Newfoundland make their living catching hair seals. Unlike the seals of the Pribilof Islands, hair seals are not covered with fur. Fine leather is made from the skins of hair seals. The fat is used to make oil and soap. Catching seals is dangerous work, for these seals live on floating cakes of ice.

**Farming**

The Appalachian Highland continues northward from New England into the Maritime Provinces. Here it is mostly hilly with low ridges and fertile valleys. Only Prince Edward Island has much level land. Where the land is suitable, hay, oats, turnips, and potatoes are grown. They grow well in the cool, damp summers and the short growing season of the Maritimes. Many farmers also raise chickens, pigs, and dairy cows. Some potatoes are grown for seed. They are of such good quality that farmers in the United States, South America, and many parts of Canada buy them.

Strawberries, blueberries, and other fruits are grown on some Maritime farms. Western Nova Scotia is an important apple region, as you can see from the map on this page.

**Fur farming**

Fur farming is now carried on in all parts of Canada. But the very first fur farm was started on Prince Edward Island.

Canada is rich in natural resources. List those which are shown on the map. Which province has the greatest number of manufactures? Can you tell why? List all the manufactures shown.
This silver fox was raised on Prince Edward Island. Canada has many fine fur farms.

The fur farm we visit raises foxes. A high wire fence surrounds the part where the animals are kept. Inside are pens made of strong, closely woven wire. They are over eight feet high to keep the foxes from climbing out. The wire also goes several feet underground so the animals cannot dig under it and get away.

"Spring is an exciting time here," the owner tells us. "At that time the pups, or baby foxes, are born. We do not allow any visitors near them then."

We learn that the foxes are given good care. They are fed meat, fish, grass, and berries. They get fresh meat every day. Good food helps make a fine quality of fur. The long, cold winters make the fur grow thick.

The fur is usually at its best in December. It is at that time that the foxes are killed and skinned. The skins are sent to Montreal, the largest fur market in Canada. Minks, raccoons, and skunks are also raised for fur.

Lumbering

The forests of New Brunswick, Nova Scotia, and Newfoundland provide work for people in the Maritimes. Some of the trees are made into boards. Others are made into wood pulp, the ground-up wood from which paper is made. Rayon, cellophane, plastics, and film are also wood products. Newsprint, the paper used in newspapers, is an important wood product. It is one of the chief exports from Newfoundland. Canada supplies more than half the world's newsprint. Most newsprint used in the United States comes from Canada's mills. Wood pulp and newsprint are the most important products of these mills. Most of these products are exported.

After chemicals are added to the chips, the wood turns into pulp, which is then washed.
The story of newsprint

Newsprint is rather coarse paper. It is made from wood pulp. High grade paper is usually made from cotton rags. Finer paper goes through more careful and expensive processes than does newsprint.

Wood pulp is usually made from poplar, spruce, fir, hemlock, and other kinds of pine trees. After the logs are brought to the mill, they are cut into short lengths and stored in huge piles. Inside the mill the bark is removed and the logs are cut into chips. The chips are thoroughly soaked in water. Then they are cooked in a chemical mixture. This makes the chips soft so that they fall apart and form a pulp.

The pulp is washed free of chemicals. Then it is bleached, or made white. It is put into a tub of water and beaten until smooth. The water drains out as the pulp passes over a metal screen. Any remaining water in the pulp is squeezed out by heated rollers. These rollers make the pulp into dry paper. This paper is wound into large rolls and shipped out as newsprint.

Mining and manufacturing

Nova Scotia and New Brunswick have much coal. Nova Scotia furnishes about a third of all the coal mined in Canada. Iron ore is mined on Bell Island near St. John’s, Newfoundland. The rivers of New Brunswick, Nova Scotia, and Newfoundland furnish water power.

The sea, forests, and farms of the Maritimes furnish raw materials for their factories. Their products include wood pulp, paper, steel, butter, cheese, canned fruits, canned fish, and fertilizer.

The tourist trade

Many summer vacationists come to these lands bordering the sea. They enjoy the beautiful scenery, fine beaches, cool air, and good hunting and fishing. Many people in the Maritimes earn their livings from this large vacation trade.

 Halifax and St. John

Halifax, the capital of Nova Scotia, and St. John, in New Brunswick, are the largest cities of the Maritimes. Both are important seaports from which wheat, lumber, fish, and other products are exported. In winter the St. Lawrence River freezes over. Then Halifax and St. John become the most important ports of eastern Canada. Freight and cargo which usually go to ports farther inland are

When dry, the paper is wound on these great rolls. It is now ready for use in industry.

American Forest Products Industries
then brought to these cities and shipped inland by railroad.

**Newfoundland and Labrador**

Newfoundland is an important link on the air routes between America and Europe. Planes flying between these two continents stop in Newfoundland for fuel.

Newfoundland has a colony, Labrador, on the mainland of North America. It is almost three times larger than Newfoundland. Most of it is wilderness. It has rich deposits of iron ore which have hardly been touched. At present the chief work of the few people who live here is fishing in summer. In winter they trap mink, foxes, and other animals.

**QUEBEC AND ONTARIO**

Quebec is Canada's largest province but Ontario has the most people. Together they have more than three fifths of all the people in Canada. In Quebec the chief language is French. In Ontario the language is English.

**THE ST. LAWRENCE PLAIN**

Find the St. Lawrence Valley on the map on page 9. You will see that the St. Lawrence Plain lies on both sides of the St. Lawrence River. In early days it was the center of New France. Today it is the most important part of Quebec. More people live on this plain than in any other part of the province. Prove this by the population map, page 36.

The St. Lawrence Plain has rich soil and plenty of rain. Grass, hay, and potatoes grow well in its cool, moist summers and its short growing season. Dairy farming and the making of butter and cheese are carried on.

Near by is the Laurentian Upland. Its mines and forests furnish valuable raw materials. Its swift rivers furnish power for electricity and help Quebec produce more water power than any other province. The St. Lawrence River is an important water highway for almost eight months of the year.

With these advantages the St. Lawrence Plain has become Canada's chief manufacturing area. On it are most of Canada's cities.

**Quebec, famous French city**

The city of Quebec is near the eastern end of the St. Lawrence lowland. Let us take a tour of this famous old French city. Part of Quebec is crowded along the banks of the St. Lawrence. The rest of the city is on high cliffs above the river. In Lower Town we see warehouses, grain elevators, pulp mills, shoe and leather factories, stores, and docks. In Upper Town we see homes, churches, hotels, churches, hotels,
Ice skating is a popular sport throughout Canada. The most exciting form of ice skating is ice hockey. Many cities in Canada and some in the United States have teams that play each other in hockey meets.

stores, offices, and government buildings. Quebec is the capital of the province.

We understand why tourists like to visit this old walled city. They enjoy its historic spots, beautiful churches, and French ways. In winter, skating, skiing, tobogganng, and other winter sports attract them.

Caring for tourists, handling government business, manufacturing, and shipping are some of the ways people in Quebec make a living.

Farther up the St. Lawrence from the city of Quebec is Montreal.

Montreal, an important port

Montreal is the most important city on the St. Lawrence Plain. It is also Canada’s largest city and one of its great seaports.

Long ago Cartier found an Indian village on the island in the St. Lawrence where Montreal now stands. He named the high hill back of the village, Mount Royal. Montreal gets its name from this hill.

Large ocean ships cannot go beyond Montreal at present because of rapids in the river. Only small boats can use the canals and locks built around these rapids. Thus Montreal has become Canada’s farthest inland ocean port. We say it is at the head of ocean navigation (see page 75).

Raw materials from other parts of Canada reach Montreal by airplane, train, truck, and boat. Montreal’s mills and factories produce flour, sugar, meat, clothing, iron and steel goods, wood pulp, and paper. The St. Lawrence and the rivers of the Laurentian Upland furnish cheap water power. Montreal gets coal from Nova Scotia and the United States.

Ottawa, capital city of Canada

In the western part of the St. Lawrence lowland is Ottawa (ō’tá-wá), Canada’s capital. It is on the Ottawa River, which forms the boundary between the provinces of Ontario and Quebec. In its government buildings laws are made for all Canada.

Ottawa began as a lumber town. It is still an important center for lumber, paper, and other products made of wood. But its most important work is government business.

THE LAKE PLAIN

Most of the people of Ontario live on the plain along Lake Ontario, Lake Erie, and Lake Huron. (See population map, page 36.)

Farming

Notice that this plain is farther south than the St. Lawrence lowland. It has the advantage of a longer growing season. Because it is
near the lakes there is not so much danger from frosts in the late spring and early fall. The northern shore of Lake Ontario has become one of Canada’s important fruit farming regions. Peaches, grapes, cherries, plums, and pears are grown here. Mixed farming is carried on, and many vegetables are raised. Dairy farms supply milk and other dairy products to near-by cities.

Manufacturing

More manufacturing is done in Ontario than in any other province of Canada. Some workers earn their living in slaughter houses and meat packing plants. Some work in vegetable and fruit canneries. Others work in flour mills, in plants making breakfast foods, or in factories making butter, cheese, and condensed milk. Many others work in textile and clothing factories. Thousands of workers make a living manufacturing iron and steel and the products made from them. Ontario’s waterfalls and rapids and United States coal furnish power to run these manufacturing plants.

Toronto and other large cities

Windsor, Hamilton, and Toronto are important manufacturing cities on the Lake Plain. Toronto is the chief city on the Lake Plain. It is the second largest city in Canada and the capital of Ontario. It has a good location on the Great Lakes. Roads, railways, and air routes connect Toronto with other parts of Ontario and Canada. It receives cheap electric power from the power plants at Niagara Falls.

LAURENTIAN UPLAND

On the map on page 9 find the Laurentian Upland in Quebec and Ontario. Notice how much of both these provinces it covers. Only a small part of this upland has soil that can be used for farming. The growing season is short. But hay, oats, and other hardy crops grow well in the long, summer days.

Tourist land

Forests of wild game as well as many lakes and rivers bring visitors to the Laurentian Upland. In summer they enjoy fishing, hunting, canoeing, hiking, and camping. Skiing, tobogganing, and skating provide chances for winter fun.

Lumber, pulp, paper, and furs

Fall and winter are busy times in the forests of the Laurentian Upland. They are the best time for cutting and hauling logs. Logs are easily hauled over the snowy ground. They are taken by sled, truck, or tractor to near-by rivers. When the ice breaks up in spring, they are floated downstream to the mills.

General Motors Diesel

Many locomotives are built in the Canadian city of London, in Ontario. Here the body of an engine is being slowly lowered onto the two sets of wheels of the trucks. In what other manufacturing process did we see an operation like this one used?
In the mills logs are sawed into lumber or made into wood pulp. At some mills the wood pulp is made into newsprint. At others it is made into wrapping and writing paper and paper for books and magazines.

Fox, mink, beaver, and other fur-bearing animals live in the forests of the Laurentian Upland. As in early days trappers catch them during the winter. Fur-bearing animals are also raised on fur farms.

**Valuable minerals**

For years people considered the Laurentian Upland a wilderness important only for furs and trees. Now mining towns are found where once forests grew. Gold, silver, nickel, copper, and other minerals are the reason. Most of the world’s supply of nickel comes from Ontario. Great deposits of iron ore have been found on the border between Labrador and Quebec.

*Asbestos (ās-bē’S-tōs)* is mined in the hilly region southeast of the St. Lawrence plain. Since asbestos will not burn, it is said to be fireproof. Canada mines more asbestos than any other country in the world.

**THE PRAIRIE PROVINCES**

The prairies of Canada cover the greater part of the provinces of Manitoba, Saskatchewan, and Alberta. The grassy plains give these three provinces their name, Prairie Provinces. The prairies stretch from the Laurentian Upland westward to the Rocky Mountains (see the map, page 9).

**Important wheat lands**

The prairies are one of Canada’s well-settled regions (see the population map, page 36). They are also Canada’s most important farming lands. Their soil is thick and fertile. Their level or rolling surface rises gently from the east to the west. Most of their light rainfall comes during the short growing season. Millions of bushels of wheat are grown on these prairies every year. Because the prairie winters are long and cold, the wheat is planted in the spring. But the long, sunny days of summer make it grow rapidly.

Most prairie farmers use machines to do their work. Tractors pull the plows, harrows, and seed drills across the fields. On larger farms, combines save time and labor at harvest time.

Prairie farmers raise their wheat to sell. Canadian wheat is of such high quality that it is sent all over the world. Canada is one of the world’s leading wheat exporters. At harvest time trucks haul the golden grain to the nearest railway station. It is weighed and stored in grain elevators there until it is shipped out.

Most prairie wheat goes eastward by train to Winnipeg in Manitoba. There it is...
sampled and graded. It then goes by rail to Fort William or Port Arthur on Lake Superior. Lake freighters carry it down the lakes from huge grain elevators at these twin ports.

Some of the grain goes to mills in the United States, but most of it goes to Montreal. It is made into flour there or shipped to Europe. Some prairie wheat goes by rail to the Pacific port of Vancouver (vân-kō’vər) and then to Europe by way of the Panama Canal.

Mixed farming

Many prairie farmers have learned that it does not pay to grow only wheat. Like their neighbors in the United States, they are turning to mixed farming. They raise barley, oats, rye, hay, and flax as well as wheat. Beef cattle, dairy cows, and hogs are raised on many farms. Dairying is becoming an important industry in the Prairie Provinces.

Grazing lands and irrigated lands

Western Saskatchewan and Alberta have large sheep and cattle ranches. Although there is too little rain for crops, there is enough for grass. Animals raised here supply meat. In some of these drier lands are fields green with alfalfa and sweet clover. Streams flowing down from the Rocky Mountains provide water for these thirsty fields. Fruits, sugar beets, and vegetables are other crops grown by irrigation on the western prairies.

Mining and manufacturing

The Prairie Provinces are rich in fuels. About half of Canada’s coal is mined in Alberta. Oil fields near Calgary (kál’gə-rī) in southern Alberta supply most of the petroleum produced in Canada. Copper, zinc, and gold are also mined in the Prairie Provinces (see map, page 397).

These provinces are more important for farming than for manufacturing. But flour milling, meat packing, and the making of leather goods are carried on here.

Lumbering and trapping

Forests cover much of the Laurentian Upland in the Prairie Provinces. Wood from these forests is used in making lumber and wood pulp for paper. Lumbering, however, is not so important as growing wheat in the Prairie Provinces. Fur-bearing animals are caught by trappers in the forests and are also raised in larger numbers on fur farms.

Vacation lands

Canada, like the United States, has set aside large areas as national parks. Banff (bāmf) and Jasper national parks are on the western slopes of the Rockies in Alberta.

Between early August and mid-October Churchill is a busy port on Hudson Bay. For the rest of the year the port is frozen, and ships cannot sail in or out. Grain elevators and special loading docks can be seen at the back. In the front are two white whales. This kind of small whale is found in the cold waters of the north.
Every year thousands of tourists visit these two famous parks. They enjoy the high, snow-capped mountains, clear blue lakes, and evergreen forests. They stay at comfortable hotels and cabins in the valleys.

Chief cities

A number of cities are scattered throughout the Prairie Provinces. Winnipeg is the largest. It is Canada’s fourth largest city and the capital of Manitoba. This city is a great market for the grain and livestock of the prairies. Many people work at processing food in the Winnipeg district. Winnipeg is also Canada’s second largest fur market. It is an important railway center. Its rail yards are the largest in Canada. It is important in the manufacture and repair of railroad equipment. Airways also center in Winnipeg.

Edmonton, the capital of Alberta, is an important airways center. Calgary, in the southern part of this province, has oil refineries. Calgary also has many factories.

British Columbia is Canada’s most western as well as its most mountainous province (see map, page 9). The rugged, snow-capped Rocky Mountains shut it off from the provinces farther east. The forest-covered Coast Range borders its Pacific Coast. In between are other mountain ranges and important valleys and plateaus. Off the coast is a chain of islands. These are the tops of mountains which rise from the ocean floor.

British Columbia is a land of contrasts like Washington and Oregon. Its coastal lands have mild winters and cool summers. Farther inland there are hot summers and cold winters. This province also has the heaviest rainfall in Canada (see map, page 36). Yet some parts of it have very light rainfall.

Fish and forests

British Columbia leads all the provinces in fishing. Its most important catch is salmon. Halibut, cod, herring, and other fish are also found here in large numbers.

So much timber is obtained from its great forests that British Columbia produces more lumber than any other province. Fine, thick forests of cedar, fir, spruce, and hemlock grow on the western slopes of British Columbia’s mountains. The rainfall map, page 36, will help you explain these dense forests. In busy mills along the coast, lumber, lumber products, wood pulp, and paper are made.

Farming

Because British Columbia has so many mountains its farm land is in its fertile river and lake valleys. Mixed farming, dairying, truck farming, and market gardening are carried on. In the drier lands of central British Columbia grazing is important. In the southern valleys apples, pears, peaches, and other fruits are grown by irrigation.
Mineral wealth

British Columbia’s mines produce gold, coal, copper, lead, zinc, and silver. Many people in this province earn their living by mining, smelting, and refining these minerals.

Tourist trade

Tourists come from far and near to British Columbia. Many visit the interesting cities of Victoria and Vancouver with their mild climate. Some hunt game in the forests or fish in the lakes, streams, and inlets. Snow-covered mountain peaks, peaceful lakes, sparkling waterfalls, and rushing streams attract others.

Extending northward along the mountainous coast is the Inside Passage to Alaska. In the quiet waters between the mainland and the islands off the shore ships are protected from storms. Forest-covered mountains rise steeply from the ocean. There are many beautiful bays and inlets. Sometimes there is a fish cannery, a logging camp, or a lumber mill along the shore.

Vancouver and Victoria

Vancouver is Canada’s third largest city and its most important Pacific port. It is at the western end of two railroad lines which connect eastern and western Canada. Highway and airplane routes also center on it. Vancouver’s large, deep harbor is open all year round. From Vancouver ships carry lumber, grain, newsprint, minerals, canned fish, and fruit. Some ships go to Asia or Australia. Others go to Europe or to eastern Canada by way of the Panama Canal. Steamers also connect Vancouver with the United States and Alaska.

Victoria, on Vancouver Island, is the capital of British Columbia. This beautiful city with its mild climate, fine homes, and lovely gardens attracts many tourists.

Canada’s Northland

Canada’s huge and valuable northland covers more than a third of the country. This important part of Canada is divided into two territories, Yukon and Northwest territories. Find them on the map.
In nearly every province of Canada trapping is an important occupation. This trader is sorting skins brought in by trappers. The skins will be shipped either to Winnipeg or to Montreal to be sold.

Canadian National Railways

Sometimes there is a trading post, for this northland has long been important for fine, thick furs. Sometimes there is a mining town. Petroleum, gold, silver, and copper are mined in Canada’s northland. Pitchblende has also been found here. Pitchblende is a mineral which is used in making the atomic bomb. Men seeking these valuable ores are settling in the northland where they are building towns and air fields.

A trading post in the Far North

Jim Finley has recently arrived at a Hudson’s Bay Company trading post. In a letter to his mother at Winnipeg he tells about his new job.

Dear Mother,

For the next three years this trading post north of the Arctic Circle will be my home. Its neat painted buildings are about the only signs of civilization here. I’m living in the manager’s house. It has a living room, kitchen, two bedrooms, and an office. Near by are the store, the warehouse, and the fuel shed. There’s also a shed where we keep walrus meat for the Eskimos’ dog teams. We feed the dogs while the men trade at the post.

Eskimos are skillful hunters. They prize seals highly. They get much of their food.

From October to July the Northland is frozen under a heavy blanket of snow. Here a modern tractor pulls heavy freight through the snow. But dog sleds like this are still used in Canada.

National Film Board of Canada
clothing, fuel, and shelter from them. The Eskimos also hunt hare, fox, birds, walrus, polar bear, whale, and caribou (kär'ī-bô). Caribou are wild reindeer. Like the seal, the caribou is very useful to the Eskimos. They use the caribou's meat for food, and they make clothing and tents from its hide. They make needles and knives from the caribou’s bones. They also make fishhooks, spears, and spoons from its horns. They use the caribou’s tendons for thread. What we are after, of course, is the white, or Arctic, fox. The skins of this animal bring a high price in the market.

I can’t think of a thing the natives could ask for that we do not have. We have rifles, ammunition, steel traps, tea, tobacco, blubber lamps, packages of steel needles, and sewing machines. Blubber, as you may know, is whale fat. When melted, blubber can be used as oil to give light.

There are four other white men besides the manager and me. They are in charge of the government weather reporting station. Information gathered at this station adds to the knowledge of weather and the safety of flying in the Arctic.

We can see for miles in every direction. There are no houses or trees to block the view. Since it is summer now, the snow has melted. In many places the ground is swampy. Only the top of the ground has thawed. The water from the melting snow cannot sink into the frozen soil underneath.

There are many mosquitoes to bother us. Small bushes, moss, grass, and wild flowers cover the ground.

Summers here are a little over two months long. There is no darkness at all, for the sun does not set.

By the time November comes, it will be dark all of the time. The sun will be below the horizon from about the last of November to early in February. I understand, however, that it isn’t very dark then. The stars and the moon shining on the snow and ice give light.

In winter we get water by melting blocks of lake ice. I hope to go trapping then. So long as one dresses to suit the weather, there’s no danger from the cold. Traveling will be easier then for the ground will be frozen.

The sun is shining and it’s light enough for reading. But the clock says it’s time to go to bed. So good night, Mother.

Love,
Jim

**Boat, dog sled, and airplane**

Rivers and lakes are important highways in the Yukon and Northwest territories. As soon as the ice is out of the Yukon River, steamers begin their journey up and down it. Steamers also travel the Slave River, the Great Slave Lake, and the Mackenzie River for almost a thousand miles to the Arctic.

During the summer months of July through October rivers and lakes in Yukon and Northwest territories are used in transportation. This paddle steamer, or “stern-wheeler,” goes from Whitehorse to Dawson.
Ocean. About four months each year steamers and their barges carry thousands of tons of freight. Steamer bring machinery, ammunition, groceries, radios, and other supplies to towns, trading posts, and settlements along the river’s banks. Dog sleds bring bundles of furs and valuable products from the mines and oil fields to the steamers.

More and more, people are using airplanes to get about in the Northland today. Travel by air is expensive, but where speed is important the airplane is used. It has brought the Northland closer to other parts of Canada. Some parts of the Yukon and Northwest territories have airplane service all year.

Canada is a large northern country with a small population. In years to come many settlers will probably flock to rich, valuable Canada. It has fine forests, fertile farm land, and large deposits of important minerals. Canada also has big cities that are trade and manufacturing centers. We in the United States are glad that friendly Canada is our northern neighbor.

**CANADA’S ISLAND NEIGHBORS**

East of Canada are two important islands. They do not belong to the Dominion of Canada. They are Greenland and Iceland.

**GREENLAND**

The island of Greenland is Canada’s close neighbor. Greenland now belongs to Denmark, a country in Europe. But long before Columbus discovered America, Norsemen lived on this island. At one time there were about nine thousand colonists here. Today Greenland has about twice that many people. Most of the people are Eskimos. Find Greenland on the globe in your room. Notice how far north it is. Most of it is north of the Arctic Circle.

In these days of fast airplanes, Greenland has an important location. It is on a short, or great circle, route between North America and Europe. It is also very close to the mainland of North America. Greenland’s location is valuable for predicting weather for northern Europe. Stormy weather in Greenland usually means that northern Europe will have the same kind of weather soon. Weather in this area moves mostly from west to east.

Look at the map of Greenland on page 9. Most of it is a high plateau. Almost two thirds of it is covered with a great ice sheet. This ice sheet is like the sheet of ice that covered much of North America thousands of years ago. Huge glaciers extend out from it.

During the summer there is some land along the coast that is free of ice and snow. On it and the rocky hillsides grass, small bushes, moss, and wild flowers grow.

Most people in Greenland make their living by hunting and fishing. They keep some flocks of sheep. The short growing season and the cool summers make farming hard.

Some trade is carried on. This trade is entirely with Denmark. Fox, walrus, sealskins, and salted fish are sent to Denmark. A mineral used in making aluminum is also exported. What is this mineral?

**ICELAND**

Iceland lies east of Greenland about half way between North America and Europe. Years ago people took little interest in this lonely island. But today Iceland, like Greenland, is important. Planes flying between America and northern Europe often stop at its modern airport. Look at the globe and explain why.

Iceland’s first settlers were Norse chiefs or noblemen. As the population grew, the chiefs on the island felt the need for some kind of government. They got together and held a law-making council. Through this council the settlers in Iceland developed a system of self-government more than a thousand years ago. This council is still the law-making body. In 1944 Iceland became a republic.
Iceland is a land of great differences. Snow-covered peaks and icy glaciers stand side by side with fiery volcanoes, steaming hot springs, and spouting geysers.

The people in Iceland use the natural resources of their land and the near-by sea to good advantage. Pipes carry boiling water from the hot springs to heat homes, offices, hospitals, and schools. Swift mountain streams and waterfalls produce electricity. Most towns and villages and many farm-houses have electric lights.

Potatoes, turnips, and hay grow well in the long, sunny days of Iceland’s short summers. Large flocks of sheep and swift, sturdy ponies feed on the grass and hay. Herring, halibut, and cod are caught in the waters around the island. Iceland exports dried, canned, salted, and frozen fish. Iceland imports coal, petroleum, food, lumber, textiles, and many other manufactured goods.

Greenland and Iceland are both countries with very small populations. Most of their people fish and hunt for a living. These lands are important chiefly because of their location. Airplanes traveling the great circle route between America and northern Europe stop at these islands for fuel and repairs.

### TO HELP YOU LEARN

#### Words and Terms You Should Know

- maritime
- pitchblende
- caribou
- asbestos
- newsprint
- province

#### A Matching Game

Number a sheet of paper from 1 through 6. After each number write the word, from the list above, which matches the definition.

1. An ore, the elements of which are used in manufacturing atomic bombs
2. Bordering on the ocean
3. A division of Canada, like a state in our country
4. A fireproof mineral
5. A kind of reindeer found in northern North America
6. The paper used in newspapers

#### Can You Answer These?

1. What are the people of Canada like? Compare them with the people of the United States.
2. How large is Canada? How does it compare in population with New York State?
3. Who first explored Canada? Where was the first settlement in Canada made? When?
4. How did the British gain control of Canada?
5. How did the provinces of Canada unite?

6. What is Canada’s government like today?
7. What different kinds of work do the people of the Maritime Provinces do?
8. Why is manufacturing so important on the St. Lawrence Lowland and the Lake Plain?
9. What kind of farming is done on the St. Lawrence Plain?
10. Why is the St. Lawrence River important in transportation?
11. Why is so much fruit grown on the Lake Plain?
12. What is Canada’s oldest city? Why do tourists like to visit this city?
13. What is the capital of Canada? Where is it located?
14. What are Canada’s two largest cities? Where are they located? How do they compare in population with New York and Chicago?
15. How is the Laurentian Upland valuable to Canada?
16. Why is Canada able to export so much wheat?
17. What is the work of the people of British Columbia?
18. How has the airplane been useful in opening up northern Canada?
19. Why is most of Greenland’s trade carried on with Denmark?
20. Why is fishing so important to the people of Iceland?
Another Matching Game

Each of the sentences below describes a province or a territory of Canada. Match the description with the name.

Alberta  Manitoba  Prince Edward Island  
Ontario  New Brunswick  British Columbia  
Quebec  Newfoundland  Saskatchewan  
Yukon  Nova Scotia  Northwest Territory

1. Part of this province lies on the mainland of  
North America. The rest is on an island  
near by. It is Canada's newest province.
2. This is Canada's largest province. Most of  
its people speak French.
3. This province borders on the state of Maine.  
It is especially important for newsprint.
4. This province has the most people and the  
most manufacturing of all the provinces.
5. About half of the coal mined in Canada is  
mined here. It also has valuable oil fields.
6. This mountainous region produces more  
lumber than any other province.
7. Wheat is of great importance to this province.  
Its capital is a great grain market.
8. Few people live in this part of Canada, which  
has long been important for fine furs.
9. This province is famous for cod fisheries.
10. Sheep grazing is important in this province  
just as it is in our state of Montana, which it  
borders.
11. This cold, mountainous territory, bordering  
Alaska, was the scene of a famous gold rush.
12. Fur farming in Canada is said to have started  
here.

Using a Time-line

Put these events in Canada's history in the right  
order. (Hint: reread Unit 2.) Then place them  
on your time-line.

1. Samuel de Champlain founds Quebec.
2. The Quebec Act allows French Canadians to  
keep their own language and religion.
3. The Hudson's Bay Company is founded.
4. General Wolfe captures Quebec.
5. Canada becomes an independent country.
7. John Cabot claims the eastern coast of North  
America for England.
8. The British North America Act is passed.

Using Maps

1. On the map of North America, on page 9,  
find Canada. Between what oceans does  
Canada lie? Between what parallels of latitude?  
What natural regions does Canada have?
2. The map on page 397 will help you answer  
these questions: Which province has the most  
highland? Which province has the most  
lowland? Which natural regions are shared  
by both the United States and Canada?
3. Trace a cargo of wheat from Port Arthur to  
Montreal by water. Name the lakes, rivers,  
canals through which this cargo would travel.  
The map on page 272 will help you.
4. Look at the map of North America on page 9  
and report on Canada's latitude, natural  
regions, and cities. Now look at the map  
on page 36 and report on Canada's population,  
rainfall, and vegetation.

Interesting Things to Do

1. Plan a bulletin board about Canada. Bring  
in interesting and important news items and  
pictures from newspapers and magazines,  
travel folders, and postcards. Choose a  
committee to take charge of the board.
2. Divide your class into committees to plan a  
vacation in Canada. Each committee may  
choose a province to visit. Then write the  
Canadian Government Travel Bureau at  
Ottawa for material.
3. Make up questions about Canada. Give  
them to your teacher. Your questions should  
be based on facts, maps, and pictures in your  
text. Now divide your class into two teams  
for a quiz program.
4. Bring in samples of different kinds of paper.  
Choose a committee to arrange the paper in  
groups according to its use: writing paper,  
wrapping paper, wallpaper, roofing paper,  
newspaper, and the like.
5. Draw pictures to show ways of spending a  
vacation and having fun in Canada.
Long before a permanent English settlement was made in our country, lands to the south of us had been settled. The Europeans who first settled these lands came mostly from Spain and Portugal, two countries in southwestern Europe. They spoke Portuguese and Spanish. Because these languages came from a very old European language, Latin, we call these people Latin Americans. We call their lands Latin America. Latin America includes the West Indies, Mexico, Central America, and South America.

You remember that Indians were living in the Western Hemisphere long before Europeans came. Some of the Indian tribes whose ways of living were very highly developed were found in Latin America. The Mayas lived in parts of Mexico and Central America. The Aztecs lived on the highlands of central Mexico. The Incas lived in the Andes Mountains of western South America.

The Europeans who came to live in what is now Latin America usually made their settlements where there were many Indians.
The Caribbean Lands

They could then use the Indians as laborers on their farms or in their mines. Where there were few Indians, the settlers had to do the work themselves or get laborers from other lands. Many settlers brought in Negro slaves from Africa.

Today Indians make up most of the population in some countries of Latin America. In other parts the people are mostly white. These white people are descendants of the Europeans who settled there. In still other parts most of the people are of mixed white and Indian blood. Such people are called mestizos (mës-të’zôz). A few parts have been settled mainly by Negroes.

Spain ruled much of Latin America for many hundreds of years. As time passed, many colonists were not satisfied with Spain’s strict rule. Men in many parts of Latin America began to work for freedom and independence. One of these men was Father Hidalgo (ë-däl’gô) of Mexico. Another was Simón Bolívar (së-môn’ bô-lë’vär) of Venezuela. Many others followed in the footsteps of these brave leaders in their efforts to win independence.

The early 1800’s were important years for most of Latin America. Under leaders like Bolívar many Latin-American colonies broke away from their mother countries. They set up independent governments. Today most of Latin America is independent. Twenty countries govern themselves. Only a few small areas in these lands to the south of us are still governed by other countries.

A new road, called the Pan-American Highway, is being built to connect North America with Central America and South America. When the whole highway is finished, it will be more than a road to carry goods from one country to another. It will be a way for Americans to meet each other.

Our nearest Latin-American neighbors are the West Indies, Mexico, Central America, Colombia, Venezuela, and the Guianas. Because these islands or countries either lie in or border the Caribbean Sea these lands are often called the Caribbean lands.
As you read this unit, you will learn the answers to the following questions:

1. What are the islands of the West Indies like? Why are they important to the United States?
2. What changes have taken place in Mexico since the days of the Spanish?
3. What reasons are there for trade and friendship between the countries of Central America and the United States?
4. How did Colombia and Venezuela gain independence? What are these countries like today?
5. Which product of the Guianas is the most valuable to our country?

THE WEST INDIES ISLANDS

When Columbus discovered the islands of the West Indies in 1492, he thought that he had reached India. So he called the islands the Indies, and the natives, Indians. He never knew that the islands he had found led to a new world.

From these islands Spanish explorers set out for the near-by mainland of North America. In their bays French, Dutch, and English pirates hid their small, swift ships. These daring seamen attacked vessels carrying treasure to Spain. They attacked Spain's cities in the New World and carried off their riches. When Spain objected, Great Britain and France paid little attention to the protests. Spain continued to hold the big islands. But one by one many of the small islands were claimed or seized by France, Britain, and the Netherlands. Later, Denmark claimed some.

Flags of many nations fly over the West Indies today. But nowhere is there a flag of Spain. Spain has lost all its lands in the New World. Cuba, Haiti (hā'ti), and the Dominican (dō-mi'nō-kān) Republic have their own flags. They are independent. The other islands belong to different countries. They fly the flag of the country which governs them. Puerto Rico and some of the Virgin Islands, you remember, fly the flag of the United States. Others fly the flag of Great Britain, France, and the Netherlands. Find some of these islands on the map on page 415.

THE GEOGRAPHY OF THE WEST INDIES

As the map on page 415 shows, the West Indies stretch in a curve from Florida to the northern coast of South America. The thousands of islands in this chain are of many shapes and sizes. Most of them are the tops of mountain ranges which rise above the sea. Some are so tiny that no one lives on them.

Find the four largest islands on the map. They form the Greater Antilles (ān-ti'läz). Which one of the four belongs to the United States? What is the name of the largest island? Notice that two countries, Haiti and the Dominican Republic, are on Hispaniola. Jamaica (jā-mā'kā) is the third largest island. To what country does it belong? The small islands that stretch toward South America are called the Lesser Antilles. What are the islands called that are north of Cuba?

Climate and products

The West Indies lie in the tropics, or low latitudes. They are warm the year round. Even their highest lands are not cool enough for frost.

Steady winds from the northeast, called northeast trade winds, blow over these islands day and night. They help make the climate mild. The trade winds blow over the ocean and pick up much moisture before they reach the land. As they rise to go over the higher lands, they are cooled. Clouds form, and there is heavy rain on the northeastern sides of the islands. The southwestern sides have little rainfall. Most of the people on these islands make their living by farming. Tropical crops such as sugar cane, cacao (from which chocolate is made), bananas, coffee, and pineapples are grown. Most of these
Many countries are located in the Caribbean Sea area. Which of them are islands? Which of them belong to countries in Europe? On which island did Columbus land on his first voyage?

crops are raised for export. Since colonial days more land has been used to grow export, or money, crops than food crops. Because of this there is often not enough land left for food crops to be used by the people of the islands. Food has to be imported.

Every year thousands of travelers and winter visitors journey to these islands. They enjoy the beautiful scenery, the ocean breezes, and the warm, sunny days.

**Hurricanes and earthquakes**

There are times when it is not pleasant in the West Indies. Sometimes earthquakes shake the land and cause much damage. Sometimes a quiet volcano becomes active. Lava flows from it and destroys people and crops. Tropical storms, called hurricanes, are even more damaging. During August, September, and October these fierce storms often sweep across the northern West Indies. Their strong winds and heavy rainfall usually damage or destroy everything in their path. How dark and quiet it is before the hurricane breaks! Suddenly, with the speed of an airplane, the strong winds and heavy rains come. Trees are torn up by the roots. Crops are ruined. Houses are turned over. Streets are flooded. Ships at sea are tossed about and wrecked. Lives are lost, and thousands of dollars of damage is caused.

**Importance of the West Indies**

The West Indies are important because of their position. They separate the Atlantic Ocean from the Caribbean Sea. Here these islands stand guard. Ships coming from the Atlantic to the Caribbean or to the Gulf of
Mexico must pass among the islands. The United States has built air, military, and naval bases on some of these islands. Can you think why?

The location of the West Indies in the tropics makes them important in trade also. The tropical crops they grow are sent to countries where such crops as these are scarce or entirely lacking.

CUBA, AMERICA’S SUGAR BOWL

Cuba, the largest of the West Indies islands, is about the size of our state of Pennsylvania. Havana is Cuba’s capital. Let us make it our first stop on our visit to the Caribbean. We walk along the wide palm-shaded streets and tiny parks, called plazas (plá’zás). We see old Spanish buildings side by side with fine modern ones. We realize that Havana is indeed an interesting city. We understand why so many North Americans spend their winter vacations there. Havana is also Cuba’s chief seaport. From Havana ships leave loaded with sugar, tobacco, cigars, molasses, fruits, and vegetables. To it they bring manufactured goods, machinery, and food. Busy and beautiful Havana is more than Cuba’s capital and chief seaport. It is also the largest city in the West Indies.

After the cane is cut, it is tied in bundles, loaded on carts, and hauled to the railroad.

American Sugar Refining Co.

Making a living in Cuba

Cuba produces so much sugar that it is sometimes called America’s sugar bowl. We have already learned that some sugar cane is grown in the United States. Do you remember where? But we do not produce enough sugar for our needs. We are Cuba’s best sugar customer. As you have already learned, to grow sugar cane deep furrows are made in the fields. Workmen then lay pieces of cane in the furrows. As soon as the cane has a good start, the fields are cultivated. In Cuba’s long rainy summer — from April to early December — the cane grows rapidly. In winter the rainfall is lighter. By then the cane is full of sweet juice and ready for cutting.

Because Cuba has a tropical climate with no frost, the Cubans do not plant sugar cane every year. New plants grow from the old stalks. Thus five or even more crops can be grown from a single planting. This lowers the cost of raising the sugar cane. At harvest time workmen swarm over the fields. Many of these laborers have come from near-by islands. Their long, sharp knives flash in the sun as they cut the stalks close to the ground. They strip off the leaves and load the cane into heavy carts. Ox teams haul the heavily

At the sugar mill the cane is emptied out of the cars. A conveyor carries it to the rollers.

Hamilton Wright
loaded carts to the plantation railway. Puffing trains carry the juicy cane to the big red-roofed mill. Most of these sugar plantations are owned by people from the United States.

At the mill a moving belt dumps the cane upon giant rollers. These rollers cut the cane, crush it, and press out the juice. The crushed stalks are used as fuel at the mill. The juice is made into coarse, dark-brown sugar, called raw sugar. Most of it is exported to the United States.

Tobacco is another of Cuba’s important products. The brick-red soil and the green tobacco plants make a pretty picture on western Cuba’s tobacco farms. Almost everywhere we see sheds in which the tobacco is dried, or cured, after it is cut.

“The Indians of Cuba grew tobacco and smoked cigars long before Columbus came to the New World,” the manager of a tobacco plantation tells us. “They taught the Spaniards how to grow tobacco and make cigars. Some of the world’s finest tobacco still comes from Cuba.”

Tobacco is a plant that needs much care. The work of planting, cultivating, harvesting, and getting the leaves ready for market must be done mostly by hand. Everyone on the plantation is busy during the growing season.

Heavy rollers crush the juice from the cane. Then the juice is boiled in these big kettles.

American Sugar Refining Co.

Tobacco used for cigar wrappers is grown under cheesecloth. This protects the delicate leaves from the hot sun and insects. The making of cigars and cigarettes is an important industry in many Cuban cities. The United States is Cuba’s best tobacco customer.

Since early days most Cubans have made their living from sugar. It is neither wise nor safe to depend on one crop. If the crop is destroyed or the price is low, people have hard times. For years it has been suggested that Cubans grow different kinds of crops. Many Cubans now grow pineapples, grapefruit, or winter vegetables.

Cuba’s history

Cuba remained a Spanish possession years after most of Spain’s other colonies had won their independence. Cubans had long been tired of Spain’s harsh rule and heavy taxes. But every time they revolted, Spain punished them. Yet revolts continued. The Cubans were determined to gain their independence. The struggle was bitter. People of the United States wanted to help their island neighbor. Our newspapers took up the cause of the Cubans too. Then a serious thing happened.

In 1898 the United States battleship Maine was on a friendly visit to Havana. One night,

The juice becomes molasses. Then sugar is formed. After it is refined, it is packaged.

American Sugar Refining Co.
without warning, the ship blew up. Several hundred officers and men lost their lives. Was it an accident? Was it done on purpose? No one knew. Many people in the United States blamed the Spanish. Our people became very angry. Congress declared war on Spain.

Many men from the United States rushed to join in the Spanish-American War. The war did not last long. In a few months it was over.

The United States had said it was not fighting to take Cuba but to free it. When Spain and the United States signed the peace treaty, we received some possessions of Spain. These were the Philippines, Puerto Rico, and Guam. True to its word, the United States did not make Cuba its possession. Within a short time Cuba was given its independence.

Gaining another freedom

A disease called yellow fever killed many soldiers in Cuba during the war. Our government sent Dr. Walter Reed to the island to stamp out this dreadful disease. No one seemed to know what caused this sickness or how one person caught it from another.

For years a Cuban doctor had studied yellow fever. He felt that this disease was carried by mosquitoes. Few people paid attention to his idea.

But when Dr. Reed heard of the plan, he thought that it was worth testing. In order to make such a test, or experiment, healthy persons would have to be bitten by mosquitoes believed to carry yellow fever. It was a big risk to take. Dr. Reed and members of his staff decided to try it on themselves first. One of them let himself be bitten by mosquitoes. He caught the fever and died. The doctors needed more proof and asked for more volunteers. Several United States soldiers in Cuba offered to risk their lives.

These brave young men were placed in screened houses. In one house mosquitoes carrying the fever were allowed to bite the volunteers. These men soon became ill with the awful sickness. In the other house the men used the clothing and the bedding that had been used by the patients. But there were no mosquitoes in this house. The men did not catch the fever. At last there was proof that the Cuban doctor’s idea was right. Mosquitoes carried the disease!

The next step was to prevent the mosquito which carried the fever from breeding, or hatching. Dr. William C. Gorgas came from the United States to Havana to take charge of this work. You remember how Dr. Gorgas’ work also freed the Panama Canal Zone from disease. He had Cuba's houses screened and
the breeding places of mosquitoes destroyed. To do this he worked with Cuban officials. They drained the swamps in the jungles and covered the rain barrels where the mosquitoes hatched. He provided that sick persons be kept away from well persons. Soon not a case of yellow fever was reported in Havana.

**HISPANIOLA, CRADLE OF AMERICA**

Hispaniola is an island lying east of Cuba. Much of Hispaniola is covered with mountains. It was at Santo Domingo, on the island of Hispaniola, that Columbus made his first settlement. For this reason Hispaniola is sometimes called the cradle of America. Today it is shared by two nations, Haiti and the Dominican Republic.

**Settlement of the island**

The early Spanish settlements were made in the eastern part of the island. Later French pirates settled in western Hispaniola. Much later, France gained control of this part of the island from Spain.

Under French rule the colony in western Hispaniola became one of the richest in the West Indies. Sugar, coffee, and cotton brought such good prices that more and more land was planted to these valuable export crops. Many Negro slaves were brought to work on the plantations. Soon there were almost ten times as many slaves as free men.

**The Republic of Haiti**

Then one day the slaves turned against their French masters. After a long struggle, the Negroes declared their independence in 1804. They named their country Haiti. Haiti was the first European colony in all Latin America to become independent. Today it is the only Negro republic in all the Americas. Most of its people speak French. Many of their customs are French.

As the population map on page 36 shows, Haiti is more densely populated than Cuba or the Dominican Republic. Millions of its people make a living by farming. On their small farms they raise crops for food as well as for export. Coffee is the most important export. Sugar, bananas, and hemp, which is used for making rope, are also export crops.

Port-au-Prince is the capital and chief seaport. It is a mixture of the old and the new. Port-au-Prince has old churches, old French homes, and modern buildings. It is about the size of Richmond, Virginia.

**The Dominican Republic**

The Dominican Republic is in the eastern two thirds of Hispaniola. It is not a densely crowded land. Most of its people are of Spanish or of mixed Spanish and Negro descent. They speak Spanish. They depend mostly on farming for their living. Cacao and tobacco are the chief commercial crops. Sugar, grown mostly by a few big landowners, is also an important export.

The capital city of the Dominican Republic was founded by Columbus. Santo Domingo, as this city was then called, is the oldest Spanish city in the Americas. In recent years the name of this city has been changed to Ciudad Trujillo (syōō-ťā′thō trōō-he′yo′). In its ancient church is the tomb where Columbus is said to be buried. Near by is the palace where his son, Diego, once lived. Ciudad Trujillo is the center of government as well as of industry and trade.

**OTHER WEST INDIAN ISLANDS**

West of Hispaniola is the British island, Jamaica. This island is the largest British possession in the West Indies. Its people speak English. Once the British thought it their most valuable colony in the New World. Sugar was then selling for a good price in Europe. Jamaica produced more sugar than any other place in the world. No wonder the British prized it so highly.

Wisely, people in Jamaica today do not depend on one crop for their living. They raise different kinds of fruits and vegetables both for food and for export. Bananas, raw
sugar, oranges, grapefruit, coconuts, and coffee are exported. Tourists and winter visitors from the United States like to go to Jamaica. Fine roads make it easy for them to enjoy the beautiful scenery.

Find the Bahamas (bā-hā’māz), Barbados (bār-bā’dōz), and Trinidad on the map, page 415. These are some of the many other British islands in the West Indies. Only a few of the West Indies belong to France. Find them on the map. Locate some islands which belong to the Netherlands. Two of them, Aruba and Curaçao (kōo’rā-sā’ō), have large oil refineries on them.

**MEXICO, OUR NEIGHBOR**

When the Spanish came to Mexico, you remember, they found the Aztec Indians living there. After the Spaniards conquered the Aztecs, Mexico became a colony of Spain. The Spaniards took over most of the Indians’ land. They forced the natives to work in their mines or on their large farms. The Indians were allowed to work only the poorer lands for themselves.

**MEXICO’S HISTORY**

As the years passed, many colonists were not satisfied with Spanish rule. Some did not like the Spanish governors. The governors often treated the colonists unjustly. Other colonists objected to the taxes and high prices paid to Spain. Still others thought the Indians were treated unfairly. Miguel Hidalgo, (mĭ-gĭl’ ĕ-dāl’gō), the priest of a small Indian village, felt this way.

**Fighting for independence**

For most of his life Father Hidalgo had worked with the Indians. He believed that the natives would benefit if Mexico were independent of Spain. Hidalgo planned to overthrow the government and free Mexico. Then his plans were discovered. Hidalgo did not hesitate but started his revolt.

Thousands joined Father Hidalgo’s army. Towns and villages were captured. The battle for freedom swept on. For a time it seemed that Mexico would be freed. Then Hidalgo was captured and put to death. Although his revolt failed, Mexicans still remember him. Hidalgo is sometimes called the “Father of Mexican Independence.”

Others took up the work of Father Hidalgo. Time and again they failed. Finally, in 1821, eleven years after Hidalgo started the revolt for freedom, Mexico became independent. Spain’s long rule was ended.

Each year on September 16 Mexicans celebrate their independence by holding a *fiesta* (fyē’sṭā). Gaily decorated booths are set up to sell candy and souvenirs. There are fireworks and speeches. People dance and sing. Fiestas are also held on religious holidays throughout Latin America.

**After independence**

Independence made few changes in Mexico. The descendants of the wealthy Spanish settlers continued to rule the country. The life of the Indians remained the same even though there were many more Indians than white people. They still labored for the rich landowners or worked a small patch of poor ground. Some people were very rich, but most were poor throughout Mexico.

The wealthy landowners could see no reason why they should give up their large estates. Yet some Mexicans thought Mexico would be a better country if these huge farms were broken up. They wanted this land returned to the Indians. One of these men was Benito Juárez (bā-nē’tō hwā’rās), a full-blooded Indian. Juárez is one of the most honored and respected leaders of Mexico.

As a boy, Benito Juárez had to face many hardships. At an early age he became an orphan. When he was twelve years old, Benito ran away to the city. In the city a new world opened up for the orphan. He
The building with a dome is the Fine Arts Palace, in Mexico City. In this building are a museum and a theater. There are wall paintings and statues by Mexicans and by artists of other countries also.

went to work for a bookbinder and learned to read and write Spanish. It was not easy, but Benito was determined to learn. He kept at it after most boys would have given up. In three years Benito had done so well that friends of the bookbinder sent him to school. Juárez studied to be a lawyer. After a time he began to practice law. His honesty, fair dealing, and skill made the rich, the poor, the Indians, and the whites trust him. Juárez soon gained a reputation as a fine lawyer, later as an outstanding judge. While he was governor of his state, he became known throughout Mexico for his wise and fearless leadership. But Juárez worried about his country. “The government should help all the people, not just a few,” he said to himself.

The great governor, Juárez, became president of Mexico. About this same time Abraham Lincoln was President of the United States. Like Lincoln, Juárez wanted to help the common people. He tried to weaken the power of the wealthy landowners. He worked hard to give land back to the Indians. He built roads, bridges, and schools. He improved methods of farming. But he died before many of his ideas could be carried out.

After the death of Juárez, the wealthy landowners continued to hold the land. Many became more powerful than ever. Most of the Indians and mestizos remained poor farm laborers or factory workers.

Changing Mexico

Even today most of the people of Mexico are of mestizo or Indian blood. But many changes are now taking place. The Mexican government is trying to help its people improve their ways of living. Most of the large estates have been broken up. The land has been divided into small and middle-sized farms. Some of these farms are owned by one person just as farms in the United States are owned. Today almost half of all Mexican farms are owned by the people who farm them. But many farmers are poor, for there is not enough good farm land for everyone.

Some farms belong to an entire village, and not to any one person. This land, called an ejido (ě-jḗdō), has been turned over to the farming village by the government. In some ejidos the people farm the land as one large farm. Everyone shares in the work and in the crops. In other ejidos each family is given a part of it. An ejido farmer has the use of the land only so long as he farms it. If he has no further use for it or if he moves away, he cannot sell it. The land is given back to the village. Another family may then use it.
This active volcano is one of a chain of volcanoes that extends through Mexico into South America. The workmen pay no attention to the volcano as they walk homeward, through the sandy fields.

The government also is teaching the people new and better ways of farming. It has taught them better ways of caring for their chickens, hogs, and sheep. It has helped them learn the best crops to grow and how to raise them.

New roads and many new schools have been built by the government. More and more Mexicans are learning to read and write. High-school education is free to all.

Business is growing. New trades and manufacturing have been started in Mexico. Some Mexicans work in their homes making things by hand just as their ancestors did long ago. They take pride in making silver jewelry, fine leather work, interesting textiles, and beautiful pottery.

MEXICO'S GEOGRAPHY

Mexico is a large country about one fourth the size of the United States. Its capital, as you know, is Mexico City.

Mexico's surface

Most of Mexico is highland. Along its eastern and western sides are ranges of high, rugged mountains. As the map on page 254 shows, these mountains run in almost the same direction as the coasts. In between these ranges is a central highland or plateau. This highland continues southward from the United States into Mexico. It is broken up into many valleys which are separated from one another by hills and mountains. South of the plateau is a region of high mountains with many volcanoes. Some of the highest mountains of Mexico are in this region.

A coastal plain borders the Gulf of Mexico. Find it on the map on page 254. Along the Pacific Coast is another lowland. Is this plain wider or narrower than the lowland along the Gulf of Mexico? The peninsula of Lower California stretches south from our state of California. As you find it on the map, notice that it has many mountains.

Mexico's climate

Our guide book tells this about Mexico's climate: "Mexico is much closer to the equator than the United States. But clothes for both warm and cold weather will be needed. On the plateau or in the mountains it is usually hot in the sun. In the shade it is often cool enough for a sweater or a top coat. The nights are usually chilly." Do you know why Mexico's climate has so much variety?
Because Mexico has lowlands, plateaus, and mountains it has many different altitudes. Find Veracruz and Mexico City on the map on page 415. Although both cities are in the low latitudes, Mexico City has a cooler climate than Veracruz. How does the location of Mexico City explain this?

Mexico also has rainy lands and dry lands. On the rainfall map on page 36 find the driest parts of Mexico. What parts of Mexico have the most rain?

**MAKING A LIVING IN MEXICO**

The Indians who lived in Mexico before the white man came were skilled workmen. They made beautiful pottery and art objects of gold, silver, and feathers. When the Spaniards came, the Indians learned to work with iron and glass. Today many Mexicans still make objects by hand to sell to tourists.

**Along the Gulf Coast**

Most Mexicans do some farming. As the rainfall map shows, most of the Gulf Coast from Tampico (ťăm-pē'kō) southward has heavy rainfall. This is a heavily forested region. Mahogany, cedar, and other tropical trees grow along the coast and on the lower slopes of the mountains. Where the forests have been cleared away, farming is carried on. Sugar, rice, bananas, and other tropical fruits are grown. On the lower mountain slopes coffee is raised.

Farther south the land widens out into a large plain on the Yucatan (yōo’kä-tān’) Peninsula (see the map on page 415). Much of the world’s supply of henequen (hē-ne’kān) is grown in the stony soil and hot climate of northern Yucatan. A strong twine is made from the fibers of the leaves of this thornyactus plant. Farmers of our North Central States use the twine made from henequen to tie their bundles of grain.

**Along the Pacific Coast**

The northern part of Mexico’s Pacific coastal lands is desert and mountain country. High, rough mountains and narrow valleys make travel difficult. There are a few scattered settlements. Where there is water, irrigation is carried on. Wheat, corn, and truck-farm crops are grown.

The southern section has more rainfall. Here people live mostly in the narrow valleys. Coffee, cacao, corn, and beans are raised.

**On the central plateau**

When the Spanish came to Mexico, they found most of the people living on the central plateau. Here too was the highest civilization. The plateau is still the most important part of Mexico. Today most of Mexico’s industries and more than half its population are found here.

Mexico is such an interesting country that many people like to visit it. Most tourists go to Mexico City. On their way they pass through the deserts of the northern part of Mexico is rich in mineral resources. List the different minerals shown on this map.
This man is taking his baskets to Mexico City to market. Many Mexicans carry their wares on their backs because they have no donkeys, mules, or other pack animals. Can you tell why?

the central plateau. For mile after mile there is only cactus, sagebrush, and clumps of grass. Herds of cattle and flocks of goats graze on these lands. Where water can be obtained from streams or rivers, irrigation is carried on. On irrigated land cotton, wheat, corn, and alfalfa are grown.

Men with great loads of corn, pottery, baskets, or other articles walk along the road. Little boys, dressed just like their fathers, drive donkeys before them. Women walk along too. Many are barefoot, and the rest wear only sandals on their feet. They are on their way to market in a near-by village.

Donkeys carrying heavy loads of firewood from the mountains pass by. Charcoal made from this wood will be used to fry tortillas (tôr-tê'yâz). Tortillas are thin, flat pancakes made of corn meal. With beans and other foods made of corn, tortillas are the chief food of many Mexicans. Corn has been the most important food of the Mexicans for thousands of years.

Villages of sun-dried mud, or adobe (á-dô'bi), houses stand by the side of the road. These small huts have only a room or two with dirt floors. Often there is little furniture and only straw mats for beds.

Nearer Mexico City are many farming villages. This is the principal farming region of Mexico. Corn is the chief crop here as it was before white men came to America. There is little farm machinery in Mexico. The fields are plowed and the corn planted much as they were hundreds of years ago. Wheat, alfalfa, and maguey (mâg'wâ) are other crops grown on the plateau. From the juice of some kinds of maguey a Mexican drink is made. Other kinds of maguey are used to make cloth and cord.

**Minerals of Mexico**

Mining is the chief industry of Mexico. Silver was mined long before the Spaniards conquered Mexico. It is still one of Mexico’s most important minerals. Mexico produces more than a third of the silver of the world. In addition, gold, copper, lead, zinc, and other minerals are mined. Many of these minerals are exported.

One of Mexico’s important natural resources is petroleum. It is found along the Gulf Coast near the seaport of Tampico. Much of the oil is refined and used in Mexico. Fuel oil and gasoline are produced.

**Cities of Mexico**

Monterrey (môn-têr-râ') is the largest city in northern Mexico. It is the center of Mexico’s iron and steel industry. Near by are deposits of coal. Iron ore is brought in. Mexico, unlike most Latin-American countries, has both coal and iron ore. Both railroads and roads pass through Monterrey. The finished products of its mills and factories can easily be shipped out.

Guadalajara (gwâ'thâ-lâ-hâ'rá) is the second largest city of Mexico. Many of its
This young boy is working in the bright Mexican sunlight as he paints colored designs on these pottery cups and saucers.

people make their living working in its cotton mills, shoe factories, and flour mills.

Mexico City is on the high central plateau. This beautiful city is the center of Mexico’s government. It is also its largest city and chief manufacturing center. Roads and railways connect Mexico City with other parts of the nation. Airlines connect it with the United States and other Latin-American countries. The Pan-American Highway passes through Mexico City. Reached by plane, train, and automobile, it is the chief transportation center of Mexico.

To many visitors the central plaza is the most interesting spot in the capital city. Long before the Spanish came, palaces and temples of the Aztec Indians stood on this huge square. The National Palace, where the president has his offices, stands where an Aztec palace once stood.

Old houses of Spanish design, narrow streets, and ancient churches remind people of Spanish days. Tall office buildings and fine apartments and hotels make Mexico City look modern. Many automobiles of the latest design are seen on the streets.

THE LANDS OF CENTRAL AMERICA

Central America lies between Mexico and South America. In it are six small countries and a British colony. All together, Central America is about twice the size of Nevada.

HISTORY OF CENTRAL AMERICA

For over three hundred years Central America was a Spanish colony. About the time Mexico obtained its freedom from Spain, five of the Central American lands also declared their independence. They united with Mexico, but not for long. When they first separated from Mexico, they joined together. After a few years each of the countries decided to govern itself. By the middle 1800’s Guatemala (guá’te-má’lə), El Salvador, Costa Rica, Honduras (hǒn-dō’rəs), and Nicaragua (nɪk’ə-rə’gwə) became independent
countries. Panama did not become independent until the early 1900's. Then it declared its freedom from Colombia and became the Republic of Panama. Find these six independent countries on the map of the Caribbean area on page 415.

Meanwhile the British became interested in the forested lands along the Caribbean Coast of Central America. These Spanish coastal lands were finally turned over to the British. Today this part of Central America is called British Honduras. It is the only part of Central America that is not independent. Find it on the map.

**The people of Central America**

When Spaniards came to Central America, they found Indians living in small groups throughout the land. Most Spaniards settled near the Indians and used them as workers. Today Indians, white people of Spanish descent, and mestizos make up most of the population of Central America. They live mostly in the high valleys and on the plateaus. On the hot, wet lands along the Caribbean Coast Negroes have settled.

The people of Central America are not spread evenly over the countries but are widely scattered. With poor roads and railroads it has been hard for these people to get together. This has made it difficult for them to talk things over and understand each other's problems.

In recent years a few of these regions have been connected by roads. When the Pan-American Highway is completed, it will be possible to drive through these countries to South America.

**GEOGRAPHY OF CENTRAL AMERICA**

The countries of Central America, like the West Indies, are important for their location.

List the products of this area that are not found in the United States or Canada.

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**PRODUCTS OF THE CARIBBEAN LANDS**

- **GULF OF MEXICO**
- **ATLANTIC OCEAN**
- **GREAT CARIBBEAN SEA**
This town in Guatemala is on the shore of a lake. The women gather at the fountain to fill their jars with water for use in cooking and washing.

Because they lie in the tropics, their people raise crops which cannot be raised in the United States. We get bananas, coffee, cacao, and much of our sugar from them. Wood and other products from the tropical forests are also exported to our country. To them we ship machinery, clothing, and foods which they do not produce.

The Panama Canal, in the Republic of Panama, is an important link between the Pacific and Atlantic oceans. It greatly shortens the distance between these two oceans and saves time and money for the ships which use it.

Most of Central America is highland with lowlands along the Caribbean and Pacific coasts. Find the highland and the lowland regions on the map on page 254. Many of the mountains have active volcanoes which sometimes erupt and cause damage. Earthquakes also shake this region.

The rainfall along the Caribbean Coast of Central America is much heavier than it is along the Pacific Coast. Along the Caribbean Coast there are dense forests. The Pacific Coast is grassland, with scattered trees.

GUATEMALA, LAND OF THE MAYAS

Long before Columbus discovered America, groups of highly civilized Indians lived in Guatemala. These were the Mayas. The ruins of their great cities and their carved stone temples and monuments stand today in the jungle. These ruins tell of the wonderful past of the Mayas.

Guatemala, which is about the size of our state of Louisiana, has the largest population of the Central American countries. Most of its people are descendants of the ancient Mayas. They live mainly in small villages in the cool and pleasant highlands. There they weave cloth, tend sheep, make pottery, and farm much as the Mayas of long ago did. Bananas and coffee are the important crops. Each village has its own customs, beliefs, and ways of living handed down from father to son. Each has its own style of clothing. People who know Guatemala can tell which part of the highland an Indian comes from by his costume.

These Indians love their weekly market. They travel miles from their home village to the village where the market is to be held.
They walk all night, up hill and down, carrying products they hope to sell. Some carry jars and other pottery. Others have hand-woven blankets, beautiful cloth, or crates of chickens or vegetables. The women trot along carefully carrying tortillas or other food for the day in baskets on their heads. Some carry babies on their backs. At the market they meet their friends and hear the latest news as they buy and sell.

Guatemala City, the capital of Guatemala, is the largest city of Central America. It is in a high valley with mountains around it. Because of its altitude its nights are cool but its days are warm and sunny. Tourists enjoy visiting this modern city. Airlines connect it with Mexico, the United States, and other countries of Central America. Railroads connect it with both the Pacific and Atlantic coasts. The Pan-American Highway connects it with Mexico and El Salvador.

HONDURAS, THE BANANA REPUBLIC

East of Guatemala is Honduras. This country is a little smaller than our state of Louisiana. It has rainy coastal plains, dense forests, rough mountains, and high valleys and plateaus. Honduras has few good roads or railroads because of its mountains.

Bananas are the chief export crop of Honduras. They are grown along the warm and rainy Caribbean Coast. Honduras raises so many bananas that it is one of the world’s great banana-growing regions. It is sometimes called the Banana Republic.

Most of the people of Honduras live on the plateaus and in the valleys of the highlands. Corn is the chief food crop although wheat, beans, and other temperate climate crops are grown. In the drier parts of the highlands cattle are raised. Hides often make up part of the exports. On the lower slopes of the mountains coffee is raised.

EL SALVADOR, PACIFIC LAND

El Salvador is the smallest and most densely settled country of Central America. It is the only country which borders entirely on the Pacific Ocean.

The people of El Salvador farm almost every inch of their land even though much is covered with mountains. The chief export crop is coffee. But sugar cane, corn, rice, wheat, vegetables, and tobacco are raised also. Cattle raising supplies most of the meat needed by the people. Another export is balsam. Balsam comes from the sap of a tree, called the Peruvian balsam. This tree is grown only in the mountains of El Salvador. Balsam is used in making perfumes and medicines.

The people of El Salvador are greatly interested in their country. They have built many schools so that their people will have a chance for better education. They have built roads and railroads connecting the capital, San Salvador, with other cities of their country. A railroad also connects San Salvador with the Caribbean Coast of Guatemala. This gives El Salvador an outlet on the Caribbean.

NICARAGUA, LAND OF LAKES

Nicaragua, which is about the size of our state of New York, is the largest of the Central American republics. It has more lowland than any other country of Central America. Large banana and cacao plantations are found on the hot, wet lowlands along the Caribbean Coast. But the eastern part of Nicaragua has a small population. Most of the people and most of the towns are in western Nicaragua. Notice on the map, page 254, that Nicaragua has lowlands along its Pacific Coast also.

Sugar, coffee, corn, and rice are grown on the lake plains of western Nicaragua or in the central highlands. The fine grass on the highlands makes good pasture for cattle. Gold mining is also carried on in the highlands. In recent years gold has been one of the chief exports of Nicaragua. Lumber is also a valuable export.

Nicaragua has two large lakes, Lake Nicaragua and Lake Managua (mä-nä’gwä). Together they are as large as our states of
Nicaragua exports many products. These long cedar logs are being hauled to a mill for trimming. Then they will be shipped to market, some of them to the United States, some to Europe.

Delaware and Rhode Island put together. These two lakes are connected with each other by the Tipitapa River. The San Juan River connects Lake Nicaragua with the Caribbean Sea. As a waterway, these lakes were an important route for the goldseekers on their way from the East to California. This natural passage has also been talked of as a place where a canal could be built to connect the Atlantic and the Pacific oceans. The United States has the right to build such a canal. If this is done, Nicaragua and our country will have many interests in common as time goes on.

FORWARD-LOOKING COSTA RICA

Costa Rica is about the size of our state of West Virginia. It is a country in which many people rather than a few own the land. It is a strong and united nation whose people share in the government. Most of its people are white and are descendants of the early Spanish settlers.

Costa Ricans believe in education. Proudly they say, “More than eight out of every ten of our people can read and write.” They are proud also that they have more schoolteachers than soldiers.

Three fourths of the Costa Ricans live in the highlands. Most of them are farmers who take very good care of their small farms. They grow corn, beans, potatoes, and other vegetables for their own people. But their most valuable export and leading crop is coffee. Bananas are also grown in the lowlands. Many of them are exported, especially to the United States.

Costa Rica’s largest towns are in the highlands. San José, the capital, is the largest. It is a modern city with electric lights, a good water supply, fine shops, and wide streets.

On the banana plantations many of the workers live in cottages with thatched roofs. Notice that the banana plants grow very close to the cottages.
Costa Ricans can well take pride in their peaceful and progressive country.

**PANAMA, LAND OF THE CANAL**

The Panama Canal and the Canal Zone are only a small part of the Republic of Panama. The rest of the country stretches away from the Canal Zone in either direction. Farming is the chief way of making a living outside the Canal Zone. Cattle, corn, sugar cane, and other food crops are raised on small farms. On the large plantations along the coast bananas and cacao are grown. However, most of the people of Panama earn their living from work connected with the canal.

Panama City, the capital, is just outside the Canal Zone. It is near the Pacific entrance to the canal. Its old churches, narrow streets, and Spanish style houses tell of the days when Panama belonged to Spain. Its nearness to the canal makes it a busy city. Much trade passes through its port. From its docks bananas, cacao, and gold are exported.

**BRITISH HONDURAS**

British Honduras is Great Britain's only colony in Central America. It is a little larger than our state of New Jersey. The chief work in this British possession is lumbering. Its chief exports are also the products of its forests. These are cedar and mahogany (mä-hög'ə-nī), a beautiful hardwood used in making furniture. Much food has to be imported because not enough food crops are raised. In recent years bananas have been planted in this British colony. They are becoming an important money crop.

**MAKING A LIVING IN CENTRAL AMERICA**

Rich soil, plenty of rain, and a long growing season aid farming. It is the chief work of the people. Although Central America is in the low latitudes, it has many different altitudes. Crops which grow in temperate climates and those which grow in tropical climates are raised.

**Banana lands**

Almost all the bananas in our stores come from lands around the Caribbean Sea. Bananas are an important money crop of Central America.

The Caribbean Coast of Central America was once a dense tangle of tropical plants and trees. Then a large fruit company from the United States began to plant bananas there. Now banana plantations stretch for miles. Most of these plantations are owned by big business companies from the United States.

"It took money, good planning, and hard work to start plantations in these hot, wet lowlands," a company representative tells us. "First the thick tangle of vines and trees was cleared away. Next ditches were dug to drain the swampy land. Then homes and stores were built for the workmen and their families. Schools and playgrounds were provided for their children. Hospitals were built. Machine shops and power plants were set up to keep machinery in repair and to provide electricity. Railroads and roads were built. Telephone lines were strung to connect the plantations with the coast."

**The story of the banana**

When bananas are planted, pieces of banana roots are used instead of seed. The pieces of root are placed in holes and covered with soil. About nine or ten months after planting, the banana plant has grown large enough to blossom. Four or five months later a single bunch of bananas has formed from the blossom. It weighs between fifty and seventy pounds. Banana plants grow from fifteen to thirty feet tall. A full-grown plant has leaves eight to twelve feet long.

Every operation on the plantation is well planned. Any month of the year you can see bananas in all stages of growth. You can see some being cut, some being planted, some in blossom, and some with fruit only a few inches long. That is why you can buy bananas in your fruit stores all year round.
Bananas are harvested while they are still green. The time of the arrival of a banana ship comes by radio. Then the order is given to start cutting. Once the bananas are cut, they must be kept moving. They cannot be stored or left lying around or they will rot.

At daybreak cutting teams begin work. Quickly and carefully each group of men cuts a single bunch of green bananas from one plant after another. The heavy bunches are carried to stations near by where they are loaded on mules or small cars. Often banana leaves are wrapped around the fruit for protection from the sun or to prevent bruises. When the fruit reaches the railway, it is carefully loaded into railway cars and taken quickly to the docks. At the docks each bunch of bananas is inspected. Only fine, firm fruit is put into the refrigerator ships.

Even on board ship bananas need constant care. They are kept at temperatures which prevent ripening. When the ships reach port, railroad cars and trucks are waiting to haul the bananas to wholesale dealers in cities and towns. These dealers have special rooms where the fruit ripens before it is sold.

**Other money crops**

Coffee is an important crop of Central America. It is grown in every country. Most of it is raised on the lower mountain slopes. In the next unit you will read more about coffee. Cacao, from which chocolate and cocoa are made, is also grown in the rainy tropical lands around the Caribbean. Cacao plantations are found mostly on the lower slopes of valleys near the coast. But some are found on the coastal lowland. Cotton, sugar cane, and tobacco are other money crops of Central America.

Still another money crop comes from the sapota (sá-pō'tā), or “chewing-gum,” tree. The

**Banana plants are tall and have long fringed leaves. The fruit grows in bunches. Notice that the bananas grow upward on the stem.**

_Ewing Galloway_
milky sap from the sapota tree, called chicle (ché’k’l), is used in making chewing gum. The sapota tree grows wild in the hot, wet forests of Central America.

Gathering the sap of the sapota tree is hard and dangerous work. The gatherers often have to chop a path through a tangle of vines and bushes to the scattered trees. Sometimes they have to cross deep swamps. They carry their own tools, supplies, and food. The sap is collected during the rainy season from May to October. Cuts are made in the tree from the top to the bottom. As the milky sap oozes out, it flows down the cuts to the bottom of the tree. There the chicle is collected.

Chicle is boiled until it thickens. Then it is poured into molds. When it has cooled, it looks like a brick. These bricks of chicle are wrapped in heavy cloth and shipped to our country to be made into chewing gum.

THE REPUBLICS OF COLOMBIA AND VENEZUELA

Colombia and Venezuela are the most northern countries of South America. Both are in the tropics, or low latitudes. Both share many of the same natural regions. Venezuela is about as large as Texas and New Mexico. Colombia is as large as Texas and New Mexico, with the addition of Oklahoma.

THE GEOGRAPHY OF NORTHERN SOUTH AMERICA

The Andes Mountains, you remember, border the entire west coast of South America. The northern ranges of these mountains extend into Colombia and Venezuela. In Colombia the four ranges run north and south. The valleys between them also run north and south. Along the Pacific Coast is the Coast Range. The other three ranges are the Western Range, the Central Range, and the Eastern Range. Notice also that the Eastern Range extends into Venezuela. There it divides into two branches.

Between the Eastern Range of the Andes and the Orinoco River is a plains region. These grassy plains, on which thousands of cattle graze, are called llanos (lyä’ños). The llanos stretch for miles in this region.

The Guiana Highland is south of the Orinoco River. What other parts of South America besides Colombia and Venezuela share this highland? Very little is known about this thinly populated region. Chicle, rubber, and hardwoods are obtained from its forests. Diamonds and gold are also found there. Iron ore from the Venezuelan part of the highland is now being shipped to the United States.

South of the Guiana Highland in Colombia is another lowland. It is part of the vast Amazon River lowland. Few people live in its hot and rainy tropical forests.

Latitude and altitude

Plants, crops, and trees which grow in the low latitudes and in the middle latitudes are

Grassy plains like these stretch for miles through Venezuela and Colombia. On these plains, called llanos, many cattle graze.
found in Colombia and Venezuela. On the map on page 254 notice how close these countries are to the equator. What kind of climate does this suggest? Notice also the great differences in the height of the land. Both latitude and altitude help the people of Colombia and Venezuela grow many different crops.

THE HISTORY OF NORTHERN SOUTH AMERICA

Colombia and Venezuela were once part of the Spanish possessions in the New World. While Mexico and Central America were gaining their freedom, these and other South American colonies were also fighting for their independence. Trade controlled by Spain, high taxes, and high prices made these colonists discontented too. Many of the Creoles (krēˈəlz), who were people born in America of Spanish parents, were especially dissatisfied. The Creoles were discontented because Spaniards from Spain held the highest offices and had the best jobs in the New World. They joined the rebels in the revolutions against Spain.

Simón Bolívar, the Liberator

The struggle for freedom in Colombia and Venezuela was waged under the leadership of Simón Bolívar. Bolívar was a Creole, the son of wealthy parents who died when he was very young.

After his parents' death, young Simón spent most of his time on the family estate. Here in the llanos of Venezuela, hardy cowboys taught him how to use a pistol and a sword. He learned to ride the wildest horses and to lasso the strongest bulls. Private teachers gave him much of his education.

Later Bolívar spent some time in Europe. While there, he met one of his old teachers who awakened in him the desire to free his native land. At the age of twenty-two Bolívar made a promise to spend his life in bringing independence to South America.

Bolívar never forgot his idea of making South America free. Sometimes he led the rebels in New Granada (grä-näˈdə), which we now call Colombia. Sometimes he led an army in his own country of Venezuela. Battling for independence, Bolívar was first in one country and then in the other. But he never gave up.

Once when the Spanish were too strong in Venezuela, Bolívar thought of a bold plan. In New Granada the Spanish forces were weak and widely scattered. "Why not give battle to the enemy in New Granada?" he argued. At that time he was camped in the llanos of Venezuela. The Spaniards in New Granada were far across the high, steep Andes. In Bolívar's army were hardy cowboys and Venezuelans who lived in cities. There were also English, Irish, and Scotch soldiers who had come to Venezuela to join the fight for freedom.

Day after day the rains poured down as Bolívar and his army began their march toward New Granada. They crossed raging rivers and struggled over muddy, flooded plains. Rifles rusted. Ammunition became wet. But the men pressed on. Then the lofty, rocky Andes rose before them. Trusting and
In Venezuela many farms are located on the steep slopes of the Andes. Oxen, yoked together, are used for plowing the stony soil.

believing in their leader, the men toiled up the steep and slippery trail. Snow whirled about them. Cold, icy winds struck like knives through their thin uniforms. Hundreds died. Weary and exhausted, the rugged men who were left finally crossed the Andes. They rested only a little while before they gave the Spaniards battle. They and the patriots from New Granada who had joined them defeated the Spaniards again and again. In 1819 New Granada won its freedom.

Within the next two years Venezuela was freed. It joined with New Granada to become the Republic of Great Colombia. Bolívar was chosen its first president. Later you will read how Ecuador, with Bolívar’s help, joined the Republic of Great Colombia. Bolívar did not stop there. He helped the people of Bolivia and Peru also to win their liberty. Bolívar helped so many colonies win independence that Venezuela, his native land, is called the birthplace of South American freedom. Bolívar is called the “Liberator.”

**MAKING A LIVING IN NORTHERN SOUTH AMERICA**

In early times the gold mines of Colombia and Venezuela brought many Spanish adventurers to these lands. Today such products as oil, rubber, coffee, bananas, and cattle are much more important than any gold the explorers might have found.

**The llanos**

Cattle raising is the chief work of the people on the llanos as it was in Bolívar’s time. The llanos, you remember, are found in both Colombia and Venezuela. During the rainy season — from May to October — much of this area is flooded. The cattle then find pasture on the higher lands, which look like islands above the flooded plain. After they feed in one place, the llaneros (lyä-nä´rōs), or herdsmen, drive them slowly to another grassy spot. Often the cattle wade for miles before they reach it. As October comes the rains become less and less. During the dry season the hot sun and the lack of rain turn the grass dry and brown. The llaneros drive the cattle from one spot to another in search of enough to eat. These cattle supply both meat and hides.

**Coastal highlands of Venezuela**

The Andean highlands are an important farming section of Venezuela. Because of the different altitudes a variety of crops can be grown. On the mountain slopes coffee is the chief crop. It is Venezuela’s second most important export. In the low valleys cacao is

*In the region near Lake Maracaibo oil often flows right out of the ground and collects in pools. A well will be drilled near this spot.*
grown. Sugar, beans, corn, wheat, and potatoes are also grown at different altitudes. Near the city of Valencia (va-len’shi-də) cotton is raised. It is used in the textile mills there.

Most of Venezuela’s people and many of its cities are found in the Andean highlands. Caracas (kä-rä’käs), the capital and largest city, is found in a high valley. It is an old city, yet a modern one. Thousands of people yearly visit a house on a narrow street in the old Spanish part of town. At one side of the doorway is a tablet with the words, Casa Natal, which means “the birthplace.” This is the house in which Simón Bolívar was born. Many of the rooms are furnished just as they were when the great Liberator lived there. A few blocks away is the tomb of this famous patriot.

On the Caribbean Coast less than ten miles away from Caracas by air is La Guaira (gwí’rā), its seaport. By auto or train it is more than twice that far over the rough mountainous land.

The Maracaibo lowland of Venezuela

The hot, damp lowland near Lake Maracaibo (mä’rä-ki’bō) is the wealthiest region of Venezuela. On the eastern shore of Lake Maracaibo oil derricks and pipe lines seem to be everywhere. Oil is the most valuable product and export of Venezuela.

Big oil companies from the United States and Great Britain have developed these oil fields. From these companies the Venezuelan government collects a tax on the oil they produce. This tax has made the government wealthy. With it schools, hospitals, and roads have been built.

Most of the oil from these fields is sent to the Dutch islands of Aruba and Curaçao in the Caribbean. In modern refineries there the petroleum is made into gasoline, fuel oil, and other oil products.

Find the city of Maracaibo on the map on page 415. The entrance to Lake Maracaibo is so shallow that only small vessels can use it. Yet because of the oil Maracaibo has become Venezuela’s second largest city and its most important port. Sugar and coffee as well as petroleum are exported.

Coastal lands of Colombia

Along most of the Caribbean Coast of Colombia is a swampy lowland. These lowlands are hot the year round. Sugar cane and cotton are the chief products grown by the Negro farmers. Vegetables, fruits, and cattle are also raised.

Three seaports have grown up on this lowland. Barranquilla, near the mouth of the Magdalena River, has become Colombia’s chief seaport. Ocean freighters unload machinery, food, and clothing. They pick up cargoes of coffee, gold, platinum, hides, and tobacco. Some of this freight has come for hundreds of miles by barge on the Magdalena. Barranquilla is also an important air center. From its airport planes take off for Bogotá (bō’gō-tä’) and other Colombian cities.

West of Barranquilla is Cartagena (kär’tä-jë’na), an important port in Spanish days. Today this city has grown beyond its old protecting walls. Near its ancient cathedral are modern hotels and offices along streets with old Spanish houses. Cartagena’s chief business today is oil. Ocean tankers come to its

Much coffee is grown in the highlands of northern South America. This air view shows a coffee plantation on a hillside in Colombia.

Standard Oil Co. (N.J.)
wharves. Petroleum is piped from oil fields more than four hundred miles away. Petroleum is Cartagena’s chief export. Colombia ranks second to Venezuela in the production of oil in South America.

For many years Colombia has been one of the world’s chief producers of platinum. Platinum is found in the upper part of the Atrato (ä-trä’tô) River. This river is also an important source of gold. Colombia also produces silver, emeralds, copper, and quartz.

Find Buenaventura (bwä’né-vên-tō’rä) on the map. This Pacific port is Colombia’s second most important seaport.

**Andean highlands of Colombia**

As in Venezuela, the Andean highlands are the most important part of the country. Most of Colombia’s more than ten million people live on the plateaus and in the highland valleys and basins there. The people are white, Indian, Negro, and mestizos.

Several of Colombia’s large cities are in this highland section. Find Medellín (mä-thël-yên’) on the map. It is nestled in a fertile valley of the central Andes. In its mills and factories cotton and woolen goods, shoes, soap, sugar, watches, and jewelry are manufactured. Medellín is the center of a rich farming and mining region. Gold is mined near by. It is refined in the government mint at Medellín. Much of Colombia’s coffee is grown on farms on the slopes of the Andes near this city. Coffee is Colombia’s most important money crop. This country is one of the chief coffee producers in the world.

Bogotá is Colombia’s capital, largest city, and the center of its art, music, and education. As the map shows, it is on a high plateau or basin in the eastern Andes. High as it is, high mountains tower above it. On the farms around Bogotá corn, wheat, potatoes, and barley are grown, and cattle and sheep are raised. They supply food for the people of Bogotá and the coastal lowlands.

Long narrow streets, old colonial houses with overhanging balconies, and beautiful churches make Bogotá seem very Spanish. But it is modern too with street cars, electric lights, automobiles, and up-to-date apartments and hotels.

**Transportation, a problem**

One of Colombia’s big problems is transportation. For years the only way to travel in this country was by mule train, oxcart, or river steamer. Even today pack trains of mules are used. Over slippery mountain roads they bring coffee from high mountain groves to a railroad or a river. In other places short railway lines connect the towns with the rivers. Colombia’s steep valleys, high mountains, and heavy rains make road and railroad building difficult and costly.

As you look at the map, the Magdalena River looks like a fine waterway. It extends

*Standard Oil Co. (N.J.)*

In this market in Bogotá, Colombia, many different kinds of fresh vegetables and fruits are sold.
Many river boats like this one carry passengers and freight to and from the port of Barranquilla. In what other country are boats like this one used?

Grace Line

for hundreds of miles into the country. But it is not a satisfactory route. It has waterfalls and rapids in it. During the rainy season the waters of the river are often high, and boats can make good speed. But during the dry season the waters are often so low that boats get stuck on sand bars.

Colombia is trying to solve its transportation problem. More highways and railroads are being built. Highways connect Bogotá with Caracas, the capital of Venezuela, and other parts of the country. Colombia has many airlines. The airplane has helped this country with its transportation problem.

THE GUIANAS

In all South America only the Guianas are not independent nations. When the Spanish and Portuguese explored and settled South America, they never seemed interested in the thickly forested Guianas. However, people from the Netherlands, Great Britain, and France were. When these European peoples established colonies there, neither the Spanish nor the Portuguese disturbed them. Ever since, British Guiana, Dutch Guiana — also called Surinam (sō’rē-nām’) — and French Guiana have been colonies of these nations.

The map on page 254 shows that the Guianas have lowlands along the coast. Inland are the Guiana Highlands. You remember that these highlands are also shared by Colombia and Venezuela. These lands are close to the equator. They are warm the year round. Every day is just as warm as the day before. The Guianas also have heavy rainfall. The heat and the heavy rainfall produce fine trees. Most of the highlands are densely covered with valuable tropical woods.

British and Dutch Guiana are alike in many ways. The people of these colonies are mainly Negroes, natives from the East Indies, Indians, and others of mixed descent. Only a few are Europeans. Farmers in these colonies grow tropical crops for export and for their own use. Sugar cane, cacao, and rice are raised. Valuable woods are obtained from the dense forests.

The most important export from these two colonies is bauxite. Bauxite, as you know, is the ore from which aluminum is made. Because aluminum is so light and strong, it is used in making airplanes, automobiles, and trains. Perhaps you have some aluminum pots and pans in your home. The United States is a good customer for bauxite.

French Guiana is the smallest and the least important of these European colonies. Many kinds of tropical crops could be grown there. However, only a small part of the colony is used for farming. The people import much of their food.
Words and Terms You Should Know

balsam  llanos  llaneros
chicle    plaza  mestizo
ejido  - 2  adobe  hurricane
fiesta    maguey  Creole
henequen  trade wind
sapota tree
hurricane  Latin America
yellow fever  Pan-American Highway

A Matching Game

Number a paper from 1 through 20. After each number write the word or phrase, from the list above, which matches the definition.

1. A tropical storm with strong whirling winds
2. Land belonging to a farm village in Mexico
3. A road which will connect North America with Central and South America
4. Grassy plains in northern South America
5. A thin, flat pancake made of corn meal
6. A park or square in a Spanish town
7. A kind of hard wood used in fine furniture
8. The sap of a tree used in making medicine and perfume
9. Cowboys on the grassy plains of northern South America
10. Milky sap from the sapota tree used in making chewing gum
11. The countries of the West Indies, Mexico, Central America, and South America
12. Juice from this plant is made into a Mexican drink
13. A person with both white and Indian blood
14. A cactus plant from which twine is made
15. Sun-dried clay used in building
16. A wind that blows steadily in the same direction
17. A disease carried by mosquitoes
18. The sap of this tree is used in chewing gum
19. A person born in America of Spanish parents
20. A holiday celebration

Can You Answer These?

The West Indies

1. Why are the lands to the south of us often called Latin America?
2. Name the independent nations in the West Indies.
3. How did Cuba become an independent nation? Haiti?
4. How does the latitude of Cuba help explain why five or more crops can be raised from a single planting of cane in Cuba?
5. What is the chief way of making a living in Haiti? The Dominican Republic? Jamaica?
6. How does the latitude of the West Indies help to explain why people like to spend their winter vacations there?

Mexico

1. How did Mexico gain its independence?
2. Why is Benito Juárez remembered as one of Mexico’s important men?
3. What is the central plateau of Mexico like? What crops are raised there?
4. What mineral resources does Mexico have?
5. In what ways is the Mexican government helping its people today?

Central America

1. What is the surface of Central America like?
2. Why is the United States a good market for products of Central America? What do we get from there?
3. Why do most of the people in Central America live in the highland regions?
4. How will the Pan-American Highway, when it is completed, help Central America?

Colombia, Venezuela, and the Guianas

1. Why is Simón Bolívar called the “Liberator”?
2. What is the most important export of Venezuela? How has this industry helped the government of Venezuela?
3. Name the largest cities of Colombia. How are airplanes helping to solve Colombia’s transportation problem?
4. To what countries do the Guianas belong?

Using a Time-line

List the important historical events of the Caribbean lands. Then place them on your time-line.
Using Maps

1. On the map on page 415 locate and name the Caribbean republics. Find the country of Central America which is farthest north. Which country is farthest south? Which faces only the Pacific?
2. On the same map find the two large peninsulas of Mexico. What are they called? How do they compare in surface? In latitude?
3. Turn to the map of Latin America on page 254. Prove that the Caribbean Sea and its islands are on important trade routes. Be sure to include the Panama Canal in your answer.
4. Find Colombia on the map on page 254. Notice that the equator runs through a part of Colombia. Yet Colombia has both a temperate and a tropical climate. How does the map help to explain this?
5. On the same map find the Magdalena and Orinoco rivers. In what ways are these rivers important?
6. On an outline map of Latin America, show the natural regions of Mexico, Central America, and northern South America. Make each natural region a different color. Make a key using these colors to represent the natural regions. Show the Magdalena River. Label the cities of Barranquilla, Cartagena, Medellín, Bogotá, Buenaventura, and Caracas. Keep this map so that you may complete it after studying the next unit.

Interesting Things to Do

1. Pretend you were in Cuba when Dr. Gorgas was trying to rid the country of yellow fever. Write a letter to friends in your home town telling what he did. Perhaps your library has books which will help you.
2. Choose a committee to make movies showing important events in the life of Bolívar and Juárez. When you show your movie to your classmates, have them tell something about each picture.
3. From books in your library learn some Mexican customs, games, dances, and songs.
4. If you should go to Central America to make your home, in what country would you choose to live? Give your reasons.
5. Draw flags to represent all the countries and foreign possessions in the Caribbean lands. You will find them in a large dictionary.
6. Add to your little dictionary, which you began in Unit 7, all the Spanish words and phrases found in this unit.
7. Get books with Indian or Mexican designs from the library. Use these designs to decorate cloth mats, clay bowls or plates, or other objects.
8. Plan an assembly program or a program for another class. It might include: (a) a display of objects made in class; (b) dramatization of a market scene in Mexico or Central America; (c) singing of Spanish songs; (d) serving of such foods as cocoa, bananas, or other fruits from the Caribbean lands.

Who's Who

Each phrase below describes one of the persons whom you have met in this unit. Match the people with the descriptions.

Simón Bolívar  Walter Reed  Miguel Hidalgo
Benito Juárez  William C. Gorgas

1. The doctor who stamped out yellow fever in Cuba
2. The priest who is called the "Father of Mexican Independence"
3. The Creole who is called the "Liberator"
4. The doctor who discovered that yellow fever is carried by mosquitoes
5. The president of Mexico who believed that government should help all the people

Making a Chart

List the ten independent countries of the Caribbean area. Include the capital city, its population, and its principal products. The information for the first country has been filled in for you.

<table>
<thead>
<tr>
<th>Country</th>
<th>Capital</th>
<th>Population</th>
<th>Area</th>
<th>Principal Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Mexico City</td>
<td></td>
<td></td>
<td>Silver, oil, henequen, corn,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>cotton, pottery, cattle, sheep.</td>
</tr>
</tbody>
</table>
Eight interesting and important countries of South America lie south of the Orinoco River Basin. Because the Andes Mountains form the backbone of Ecuador, Peru, Bolivia, and Chile, we shall call them the Andean lands. The life and growth of Argentina, Uruguay, and Paraguay (pär’á-gwi) center around the Plata River. So we shall call them the Plata Countries. The eighth, Brazil, is different in history and language.

Most of these countries lie in the tropics. Some of the coldest and some of the hottest places on earth are found here. The Andes Mountains stretch all along the Pacific Coast. They are the second highest mountains in the world. Their valleys are among the deepest, their plateaus are among the coldest and bleakest on earth. Near the Atlantic Coast are the older, lower Guiana and Brazilian highlands. Between these mountain systems lie plateaus, wide plains, and the hot, swampy lowlands along the Amazon and Plata rivers.
Eight South American Republics

Soon after Columbus discovered America, Spaniards explored the Plata region and claimed it for Spain. A Portuguese captain touched the shore of what is now Brazil and Portugal claimed land in the New World.

Then the Spaniard, Francisco Pizarro, discovered an immensely wealthy country in the Andes and the eastern lands were almost forgotten. Pizarro had heard of a rich, civilized people while he was in Panama. He heard that their ruler was known as the Inca. The Inca ruled over what is now Peru, part of Ecuador, Chile, and Argentina. Pizarro set out to take the land and wealth of the Inca.

Pizarro and his troops captured the Inca by a trick. Later they took Cusco, the Inca’s capital, and made themselves masters of Peru. They built Lima in a fertile valley about eight miles from the Pacific Ocean.

From Lima Pizarro’s armies marched north, south, and east. They conquered Ecuador and most of Chile. As a result, the Spanish claims grew until they included all of South America but Brazil.

The highest offices in the colonies were held by people who came from Europe. The Creoles, as the Spaniards and Portuguese who had been born in America were called, could hold less important positions. These two classes, or groups, of people lived like lords on their huge estates. The Indians, whom they had conquered, waited on them and did all the hard work.

Not long after we gained our freedom from Great Britain, the people of Latin America began to want their freedom also. First Spain’s colonies, then Portugal’s won their independence. The eight Latin-American republics were then born. In this unit you will find the answers to these questions:

1. Who were the leaders of the Spanish colonies in their struggle for independence? Which countries did each help free?
2. What are the Andean countries like? How has the position of each influenced the life of its people?
3. Why are Argentina, Uruguay, and Paraguay known as the Plata Countries? In what ways are they alike? In what ways are they different?
4. How did the people of Brazil gain their independence? Why has Brazil become a great industrial nation?

THE STRUGGLE FOR INDEPENDENCE

For more than three hundred years Spain and Portugal ruled vast parts of America. Colonists in South America obeyed European kings and the riches of the colonies filled their treasuries. Then things began to change.

Rebellion in the Spanish colonies

The Spanish colonists had not been satisfied for a long time. Wealthy, educated Creoles felt they ought to be allowed to hold high offices. The poor people were tired of working for almost nothing. Everybody hated the high taxes that Spain made them pay and the strict trade laws it made for its colonies.

The rulers in Spain believed that colonies were settled in order to make the mother country rich and powerful. The colonists had to trade with Spain even when they could buy goods cheaper from England or France. They could not trade with each other. Nor could they manufacture any goods that Spain made. Their raw materials had to be sent to Spain to be manufactured. This made goods scarce and prices high in the colonies.

Many colonists smuggled goods to and from foreign ships at night. Others did not openly break the laws, but they were resentful. The educated people were especially angry because they could not help make laws. However, they were not ready to break away from their mother country until the early 1800's.

Soon after 1800 Napoleon Bonaparte (bōˈnä-pärt), the French general, conquered Spain and Portugal. Napoleon made his brother king of Spain. "We will not obey a French king!" declared the colonists. They set up governments to rule themselves.

After a few years Napoleon was defeated. The Spanish king then returned to his throne. He expected all his colonies to return to their mother country. But the colonists had learned that they could rule themselves without help from Spain. One after another, the colonies declared their independence. The king sent armies to force the colonists to obey his laws. There was fighting throughout Latin America.

LEADERS OF THE REVOLUTION
IN SOUTH AMERICA

Many great patriots arose to lead the South Americans in their fight for freedom. The greatest were Simón Bolívar and José de San Martín (mär-tēn'). You have already heard about Bolívar, who freed Venezuela and Colombia. Bolívar also helped free Ecuador, Peru, and Bolivia. San Martín led the fight in the southern part of the continent.

Bolívar in Ecuador

For ten years the people of Ecuador had been trying to drive the Spaniards out of their land. But they could not. Finally they sent messengers north to ask Simón Bolívar for help. Bolívar immediately ordered General Sucre (sōˈkrä), his best general, to lead an army to Ecuador.

Sucre's troops and the soldiers of Ecuador were too few to defeat the large Spanish army. San Martín, who was fighting in Peru, sent more help. Then Sucre's army met the Spaniards on the slope of one of the many volcanoes which surround Quito. Stories say that all the people of the capital gathered at the foot of the volcano to watch the battle. They were filled with joy when Sucre's army surrounded the Spaniards and defeated them.

Soon after this victory General Bolívar arrived in Quito. How the people cheered
and honored him! They called him the Great Liberator because of the part he had played in freeing them from Spanish rule. Bolívar stayed in Ecuador for a while. He helped to set up the government of the new republic. Then he persuaded the leaders that Ecuador should become part of Greater Colombia, to which Venezuela and Colombia belonged. But the union did not last long. Ecuador then became a separate nation.

While the Great Liberator was in the seaport town of Guayaquil (gwiˈæ-kəlˈ) San Martín, the southern leader, came to visit him. San Martín needed more soldiers to help the people of the south win their freedom from Spain.

José de San Martín

José de San Martín was the son of a Spanish governor of a small Indian village on the Paraguay River. José was born in this village and lived there until he was three years old. His next five years were spent in Buenos Aires, the capital of Argentina. Then the San Martín family was sent back to Spain. In Spain the boy attended a private school and received his military training. He joined the army at an early age and fought in Africa and Europe.

San Martín always remembered the land where he was born. From other Creoles he met in Europe he learned about the unfair laws Spain made for its colonies. When news of the revolt in Argentina came, San Martín sailed for South America. He wanted to help his country win independence.

The Plata provinces began their revolt a year later than Ecuador. Argentina was the oldest and largest of the three provinces. It asked Uruguay and Paraguay to join in fighting for freedom from Spain and then to form one country. Uruguay accepted. But Paraguay refused to unite with Argentina.

The Paraguayans wanted independence. So they declared themselves free and asked their Spanish rulers to resign. Strangely enough, the Spaniards agreed. Little Para-

Bernardo O'Higgins was one of the leaders in the fight for independence in South America.

guay became independent without striking one blow or shedding a drop of blood!

Meanwhile Argentina and Uruguay were having a hard fight. It looked as though they were going to lose the struggle. Then General San Martín took command of their troops. Under his leadership they were able to drive the Spanish governor and his army out of Argentina. The United Provinces of La Plata became an independent nation.

“My country is not safe so long as there is a Spanish army left in South America,” thought the great leader. The strongest Spanish army was in Peru. San Martín planned to cross the Andes and drive it out. He was later joined by Bernardo O'Higgins.

Bernardo O'Higgins, hero of Chile

Bernardo O'Higgins was the son of an Irish father and an Indian mother. Bernardo's father had come to South America from Ireland as a poor boy. He became so rich and important that the king made him a high official. Usually only people born in Spain held important government positions.

Young Bernardo attended school in Chile and in Peru. Later his father sent him to

443
What different means of travel are shown here? What country has the most railroads?

Europe to study. In England he met a number of Latin-American patriots from whom he learned about the American and French revolutions. When Chile revolted, O'Higgins was ready to lead the rebel army.

The rebel army was badly defeated. O'Higgins fled across the Andes into Argentina. At Mendoza (měn-dō' sā) he joined General San Martín. Together they planned to free Chile and to drive the Spaniards out of Peru.

**San Martín and O'Higgins in Chile**

The two patriots collected an army of soldiers and Indians from Argentina and Chile. They drilled these men and trained them to climb, to fight, and to live in the highest altitudes. In two years the Army of the Andes was ready. With five thousand men and ten thousand animals San Martín, assisted by O'Higgins, headed west across the Andes. This brave army marched through mountain passes thirteen thousand feet above sea level. Many of the animals died on the way. But the army got through, surprised the Spaniards, and defeated them.

But one victory was not enough. The following year O'Higgins's army was badly beaten and the leader wounded. Luckily San Martín arrived with more troops in time to save the battle. Soon afterward the Spanish army left Chile forever. Chile became a republic and O'Higgins its first president.

**San Martín in Peru**

But Peru was still in Spanish hands. So San Martín sailed to Peru. His army landed without any trouble and marched to Lima.
The Spanish governor and his men fled when they heard of his coming. The citizens welcomed San Martín. They hailed him as the Protector of Peru.

The Spanish army returned to attack Lima. General San Martín did not have enough men or money to carry on the struggle. He went north to ask Bolivar for help.

These two great men of South America held a secret meeting at Guayaquil in Ecuador. Some people believe that Bolivar was not willing to share the honor of freeing Peru with San Martín. We do not know what was said at this meeting. But we do know that San Martín decided to leave Peru. San Martín did not seek glory for himself. All he wanted was to finish the great work. He unselfishly gave the army he had trained to Bolivar and returned to Argentina.

Bolivar started for Peru with Sucre and a well-trained army. When they marched into Lima, they found the people fighting each other as well as the Spaniards. Bolivar stopped this. Then on December 9, 1824, General Sucre met and defeated the armies of Spain. The struggle for Peru’s independence was really won.

**BOLIVIA, A NEW NATION**

The rest of the Spanish troops were in what was known as Upper Peru. General Sucre drove them out the following year. A new country was then formed from parts of Chile, Peru, and Argentina. It was named the Republic of Bolivar in honor of the Great Liberator. Later its name was changed to the Republic of Bolivia.

**THE REPUBLIC OF BRAZIL**

Portugal, like Spain, believed that colonies were founded to benefit the mother country. Strict laws were passed which the colonists in Brazil did not like. That is why the colonists revolted time and again. The king of Portugal sent armies to put down these revolts. Yet, as we shall learn, Brazil actually won independence without a battle.

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**Independence from Portugal**

One morning in 1807 the whole Portuguese court was in a panic. They had heard that Napoleon was coming to capture the royal family. Where could they flee?

“Why not move to Brazil?” suggested their friends, the English. “We have a fleet of warships sailing to South America.” So the royal family and hundreds of courtiers sailed to Brazil.

Prince John was ruling for his mother, who was insane. He set up a court in Rio de Janeiro (rē’ō dā zhâ-nā’rō). When the queen died, he became King John VI, emperor of Brazil and Portugal. King John opened Brazil’s ports to foreign ships. He founded the first library in the country, built schools, museums, and art galleries. Brazil was now becoming the richest and most progressive country in South America.

When the French emperor Napoleon was defeated; Portugal was liberated. The Portuguese people now demanded that King John and his family return to Europe. The king had to go or cut himself off from the mother country forever. So he went back to Portugal. But he left his son, Pedro, to govern Brazil, which once more became a colony.

But the people of Brazil did not like to take orders from Portugal. They did not want to become a colony again. “Why not declare Brazil an independent country and become our ruler?” they asked Pedro. That is just what Pedro did. He was crowned Pedro I, emperor of the United States of Brazil. Brazil was the only country in South America ever to have an emperor.

**Brazil under its own emperor**

At first Pedro I was a good ruler. But soon he began to rule like a dictator. All Brazil turned against him. Things slowly grew worse. Then his father died. After a time Pedro decided to give up his throne in Brazil and return to become king of Portugal. His five-year-old son was crowned Dom Pedro II,
emperor of Brazil. A group of wise counselors ruled the country until the new emperor was fifteen years old. Then Dom Pedro took his place as emperor. The Brazilians were happy. Brazil was an independent nation. It had a ruler who had been born and educated in Brazil.

Dom Pedro lived and dressed simply. He spent most of his money and all his time in helping his people. The poorest person could come to the emperor with his troubles. But his love of freedom brought trouble upon Dom Pedro. First he helped the people of Argentina drive a bad ruler out of their land. Next he joined Argentina and Uruguay in riding Paraguay of a cruel dictator. In this war Brazil lost millions in men and property. The people blamed their emperor. They said he ought not to take part in their neighbors’ quarrels.

The emperor thought his country might some day become a republic. “And I would like to be its first president,” he said. Brazil did become a republic. But Pedro II did not become its president.

The millions of slaves in Brazil made Dom Pedro unhappy. Every year he bought slaves and set them free. He hoped other persons would follow his example so that the slaves would be freed gradually. But there were people in Brazil like those in the United States who wanted to get rid of slavery immediately. While Pedro II was on a trip to Europe, his daughter ruled the country. During his absence she was persuaded to free all the slaves at once.

Suddenly the wealthy landowners found themselves without workers. Conditions were very unsettled. Dom Pedro returned to Rio de Janeiro to find that the nation had turned against him. The army seized control of the government. The country became a republic, but Dom Pedro was forced to leave Brazil.

**New republics’ quarrels**

Independence did not bring peace to the South American republics. The new nations fought with each other over boundaries. The people fought among themselves. About three fourths of them were Indians or mestizos, the children of Spaniards and Indians. They knew little about making laws. Powerful men, usually with the backing of the army, seized the high offices and ruled as they pleased. The people suffered and the countries became poor.

Within recent years the South American nations have settled down. The people are being educated. They are learning to live and work together in a more democratic way.

**THE ANDEAN LANDS**

The map on page 254 will show you why Ecuador, Peru, Bolivia, and Chile are known as Andean lands. The Andes Mountains are the backbone of all these countries. The other natural regions also extend across the boundary lines. In these ways the Andean lands are alike.

Their history too ties the Andean countries together. Most of the area was once part of the Inca’s lands which Pizarro’s armies conquered. All were colonies of Spain until San Martín and Bolívar helped set them free.

We find that in some ways these countries differ from each other. Notice that Ecuador, Peru, and Bolivia lie in the tropics. Their climate changes little during the year. Most of Chile, however, lies south of the Tropic of Capricorn, in the middle latitudes. Chile’s climate is much like that of the United States. Why do Chileans have winter when we have summer?

More than half of the people of Peru, Bolivia, and Ecuador are Indians who want to live just as their people have always done. Most of Chile’s people are mestizos and are more progressive. They have made Chile one of the important countries of South America. Peru and Bolivia are rich in minerals but are
bananas and other tropical fruits, cotton, rice, and tobacco grow on the haciendas (ā-syēnˈdāz), or large plantations. The cacao bean is Ecuador’s chief export. It is shipped to our country and Europe, where it is made into chocolate.

Grazing lands and valuable forests of rubber trees, balsa trees, and the toquilla (tō-kēˈyä) palm are found in the foothills of the Andes. Balsa logs are lighter than cork. Can you tell why balsa wood is used for boats, for airplanes, and for life rafts? Toquilla palm leaves are made into hats. These hats are called Panama hats in our country because we first bought them in Panama.

In Ecuador the Andes are divided into two north-south ranges. Between them are deep valleys and a plateau, parts of which are two miles or more above sea level. Because of its altitude, or distance above sea level, this tropical land has a springlike climate twelve months of the year. Three fourths of the people of Ecuador live in these highlands.

Fine straw hats, called Panama hats, are made from toquilla palm leaves in Ecuador.

ECUADOR, THE LAND OF THE EQUATOR

No one in Ecuador lives more than one hundred miles north of the equator. No one lives more than four hundred miles south of it. That is why the Spaniards named the country Ecuador, the Spanish word for equator. Ecuador is about the size of our state of Colorado.

The land

Ecuador is a wedge-shaped country with three natural regions, the Pacific Coastal Plain, the Andes Highlands, and the Eastern Plain. Ecuador’s Pacific Coastal Plain is about one hundred miles wide in some places. In the fertile valley of the Guayas (gwiˈās) River food for the city people and products for export are raised. Cacao, coffee, sugar,
The Eastern Lowland of Ecuador is part of the Amazon selvas, or tropical rain forests. Thick trees, daily rains, wild animals, insects, and reptiles make this an unpleasant region. Only a few people live here. Rubber trees grow wild in the selvas. Rubber is made from the sap of the rubber tree. The bark of another kind of tree is made into quinine. Quinine is a valuable medicine, especially for use in the tropics. These trees grow wild in the selvas. It is hard to get these products to market because few trails cross the Andes.

The people and their work

Most of the people of Ecuador live in small villages in the highlands. They like to build their crude, one-room huts in the beautiful valleys and on the high plateaus. Their homes look as if they might have been built in the days of the Inca. The way the people dress has changed little in the four hundred and fifty years since the coming of white men.

Most of the people of Ecuador make a living from the soil. Many work on haciendas, in cities, or in mines for a few months a year. They return to their mountain villages for the rest of the time. On their tiny farms they raise just enough food to keep them alive. Their small flocks furnish them with wool for clothing and a little meat. A few fruits and some hides are all they have to sell.

Guayaquil, the largest city, has one of the best natural harbors on the Pacific Coast of South America. Ocean liners bring manufactured goods forty miles up the Guayas River to its docks. They carry away cacao, petroleum, bananas, some gold, Panama hats, rubber, and hides. Guayaquil is the most modern city in Ecuador.

Our country helped Ecuador build a railroad between the coast city of Guayaquil and Quito nine thousand feet above sea level. This ancient city is the capital of the country. Modern apartment houses, factories, and stores are found next to old buildings of colonial times. Automobiles and electric trolleys share the streets with llamas and burros.

People dressed in the latest styles mingle with those wearing costumes of Inca days. Quito is a combination of the old and the new.

Changes in Ecuador

Ecuador is smaller than any country of South America except Uruguay. Much of its land is hot and swampy. It lacks minerals.

The government is trying to make the country modern. It is building schools and training teachers, draining swamps, and teaching farmers to make better use of the land. Wise leaders want to develop the natural resources, build up industry and trade, and improve means of transportation. They want to make the "Land of the Equator" a happy and progressive one.

PERU, LAND OF THE INCAS

Peru has three natural regions like those of Ecuador. Its Pacific Coast Plain is between twenty-five and forty miles wide. It is a strange region. Winds blowing over it from the east are dry because they have lost their moisture while crossing the Andes. Winds from the west are cold as well as dry because they have crossed the cold Peru Current. As the cool air from the Peru Current reaches the land it becomes warm and picks up moisture. This leaves the coastal plain a desert except where about fifty short streams flow across it. These streams are fed by the melting snows from the mountains. Wherever there is a stream there is a lovely green oasis.

The Andean Highlands cover two fifths of the country. Seven mountain peaks rise to more than nineteen thousand feet above sea level. Between the mountain chains lie broad plateaus. The valleys are so deep the sun seldom reaches their floors until noon. Lake Titicaca (tí-tí-kä'kä), on the border between Peru and Bolivia, is the highest lake in the world on which boats can sail. Peru's highlands have rich mineral resources.

The Eastern Lowland includes half of Peru. It is part of the selvas of the Amazon and is almost unexplored. It has a rainy
This church is one of the many beautiful buildings in the old Spanish city of Lima. Lima is the capital of Peru. What was the capital of the Incas?

The people and their work
Peru has almost seven and a half million people. More than half of them are very poor. Most of them can neither read nor write. Nor do they speak Spanish, the language used in business and in which the laws of the country are written. These Indians and mestizos are the descendants of the Incas of four hundred years ago. About seven out of ten live in the highlands. Some make their homes on the rugged mountainsides and windy plateaus. Most of them live in protected valleys and on the lower slopes. They may go to mines, petroleum fields, haciendas, and ranches to work for part of the year. But when it is time to plant their own crops, they walk back to their mountain homes.

Agriculture is the chief occupation in Peru. Sugar cane and cotton are two of the most

These people of Peru are dancing to the music of Indian instruments. One of the instruments looks like a harp. The other is like a flute. The stone wall at the back was built by the Incas many years ago.

season and one which is not quite so rainy. Wild rubber, mahogany, cedar, walnut, and other valuable trees grow in the jungles of northeastern Peru. In the southeast there are grasslands. A number of large cattle and sheep ranches are already located here.
Llamas are found in Peru, Chile, and Bolivia. They are used to carry loads. If the loads are too heavy, the llama sits down and will not move. Llamas also furnish meat and wool.

Pan American-Grace Airways

Important crops on the coastal oases. These products are usually raised on large haciendas, which remind us of Southern plantations in the United States. In this tropical lowland one crop can be planted as soon as another is harvested. Peru exports millions of pounds of raw sugar each year. It exports even more cotton. A Peruvian farmer can raise twice as much cotton on one acre of land as can be raised on one acre of our Southern plantations. Peruvian cotton is noted for its long fibres and fine quality. Peru also exports a fertilizer called guano (gwānö). Guano is formed from the droppings of birds who live on the islands off the coast of Peru. Guano is an excellent fertilizer.

Great landlords own the best farms and grasslands in the highlands. They breed fine cattle and horses. Llamas, alpacas (āl-pāk′āz), a kind of llama with long wool, and sheep grow thick, warm coats on the cold plateaus and high mountains. Stock raising is important on the northern plateau. Look at the products map on page 445 to find what some of the agricultural products of the eastern lowlands are.

Mining is the second most important industry. Peru's most valuable mineral product, petroleum or oil, is found on the northern coastal plain. Most of the large mines and oil fields are run by companies from our country or Europe. The taxes Peru collects from the copper-mining companies alone are almost enough to run its government.

In the mountains northeast of Lima is Cerro de Pasco (sēr'ō dā pās′kō). Cerro de Pasco lies in the center of the richest copper mines in the world. Only natives who are used to living thousands of feet above sea level are able to work in these mines. A railway and the Pan-American Highway connect Cerro de Pasco with Cusco. This ancient Inca capital is in the center of a mining region farther south.

Factories have been built in recent years. In them petroleum is made into fuel oil, gasoline, and other products. Sugar is refined. Some metal, cotton and woolen goods are manufactured, but the factories are small because there is little coal and few workers.

Most manufacturing is still done by hand. Indian women and girls spin all the time. They make warm ponchos, or blankets, skirts, and dresses from the wool of the sheep, the llamas, and alpacas. A poncho (pōn′chō) is a blanket with a slit in the middle for the head.

Peru's cities

Lima is the industrial and commercial center of Peru. It is also the center of art,
Bullfighting is a sport enjoyed in Latin-American countries. This bullfight is taking place in Lima. What sports do we enjoy in the United States?

education, and government. Some of its half million people work for the government. Many work in its mills and factories. Others have jobs in commerce and trade.

A boulevard and highways connect Lima with Callao (käl-yä'o), its port. Callao has the only good natural harbor in the country. It is the only seaport in Peru where ocean liners can dock. At other ports ships must be unloaded some distance from shore. Small boats called lighters carry passengers and freight to land.

On the map, page 254, find Iquitos (é-kē'-tōs). When rubber was discovered in the jungles of northeastern Peru, rubber merchants built Iquitos, a beautiful city, on a branch of the Amazon River. Iquitos became a ghost town when the rubber trade failed. Today large companies are trying to grow rubber on plantations in the near-by jungle. If they succeed, Iquitos will again become a busy city.

The future

Peru's great mineral wealth has hardly been touched. Vast stretches of its fertile lowlands, broad grasslands, and valuable forests have not even been explored. The soil can support a great farming and herding population. The minerals can provide work for millions more.

Today the government is trying to develop the natural resources and to improve the lives of the people. It is building good means of transportation, clearing lands for settlement, and teaching the people modern ways. Wise leaders want to educate the people so that they can take part in the government, hold peaceful elections, and work together for the good of the country.

BOLIVIA, THE COUNTRY IN THE SKY

Originally Bolivia had three physical regions. But in a boundary dispute it lost its coastal plain to Chile. Now Bolivia is a country of two regions, the Andean Highlands and the Eastern Lowlands. It has no seacoast.

Halfway down the coast of South America the Andes Mountains divide into a rugged western chain and an even more rugged eastern chain. Between the mountain chains lies the high plateau called the alliplano (äll'-tī-plă'nō). This plateau, more than two
miles above sea level, is cut up by deep canyons. Lake Titicaca, the highest fresh-water lake in the world, lies in the heart of the altiplano. This lake is about the size of Lake Erie. It is more than twelve thousand feet above sea level, yet boats carry people and goods across it daily. Goods from Bolivia cross the lake by boat, then are transported over land to Pacific ports.

Although Bolivia lies in the tropics, sudden snowstorms and sand storms sweep across the altiplano. The nights are frosty even in the middle of summer. Yet three quarters of Bolivia's people live and work on the altiplano.

Only a few people live in the Eastern Lowlands. The eastern slope of the mountains has the most inhabitants. The southeastern part consists of the Gran Chaco (grán chā'kō), a disagreeable region of scrub forests and grassy plains and the dry foothills of the Andes. Few people live in this region.

The people of Bolivia

About ninety out of a hundred Bolivians are pure Indians and mestizos. They like to live in the way their fathers lived. They

Boats built of balsa, a very light wood, are used on Lake Titicaca. This lake is high in the mountains between Peru and Bolivia.

A Chola Indian woman has brought potatoes and other vegetables to market in La Paz. The first white potatoes grew in the Andes. want to hold on to their old customs. Their hut roofs suit them. At night they sleep on the floor rolled up in their blankets. They eat the corn, potatoes, and beans which grow on their tiny farms on the altiplano. Most of them are so poor that they wear their homespun garments until they almost fall off their backs. Most of them cannot read or write.

How Bolivians make a living

On the altiplano beans, barley, corn, wheat, and potatoes grow wherever there is enough rain or where irrigation is possible. Potatoes are the chief crop. In fact, the first potatoes in the world were grown on the plateau of Bolivia and Peru. The natives make chuño (chūn'yō) from potatoes by first freezing them, then drying them. Chuño is a kind of potato meal which is the main food of thousands of Indians.

In eastern Bolivia in the mountain valleys and on the terraced hills, grains, vegetables, and fruits grow well. Corn, barley, oats, beans, rice, and sugar cane are products of the fertile valleys east of the Andes. There are orchards of fruit and groves of coffee and cacao trees. But the only way to get these
products to the cities of the altiplano is on the backs of llamas and burros.

No picture of Bolivia would be complete without a herder tending a flock of llamas, alpacas, or sheep. To the people of the altiplano these animals mean food, clothing, and means of transportation. Cloth made from the wool of alpacas brings a good price in the markets of the world. And who would refuse to buy a gay poncho made from the wool of the llama? Llamas can also carry burdens of one hundred pounds for their masters.

Minerals are the country’s greatest natural resource. During colonial days Bolivia was famous for its silver. A whole hill of silver was found near Potosí (pō-tō-sē’). Today tin is the most valuable of the country’s minerals. Bolivia’s supply of tin is the greatest in America. Besides tin, Bolivia produces more of the mineral called tungsten than any other country in South America. Tungsten is mixed with steel to harden it. Copper is also mined on the altiplano. Nine tenths of the country’s exports are minerals. But tin is the chief export, and most of it is shipped to the United States.

Bolivia’s mineral deposits lie far inland at twelve to twenty thousand feet above sea level. Bringing heavy machinery to the mines and shipping ore to the coast are difficult and very costly. Mining companies have to lay tracks and build roads between mines and mining towns. Is it any wonder mining is not yet fully developed in Bolivia?

Much hand weaving, jewelry making, and pottery making are carried on, but machine-made articles are scarce. There are a few small factories, but Bolivians buy most of their manufactured goods from the United States. Imported goods are expensive, so only wealthy families can afford them.

**Bolivia, country with two capitals**

One of Bolivia’s capitals is La Paz (lā pās), Bolivia’s largest city. La Paz, high in the Andes, is the world’s highest capital. It is the center of Bolivia’s manufacturing, business, and transportation. Railways connect it with the Pacific Coast and with the Atlantic Coast. More than half the imports and a great share of the exports of Bolivia pass through La Paz.

Many travelers find Sucre, the other capital, more interesting than La Paz. They say it is more beautiful and has more reminders of the past. Sucre is hard to reach, so only the Supreme Court meets there. The rest of the government’s business is carried on in the modern city of La Paz.
Bolivia's problems

Lack of transportation is Bolivia's greatest problem. Bolivia has only a few hundred miles of railroad and no seaport at all. The cost of shipping raises the price of everything. Lack of coal, wood, or other fuel is another problem. For this reason manufacturing is not increasing. The people are another problem. Most of the three and a half million Bolivians are uneducated. The country needs skilled workers to develop its natural resources.

But more railways and highways are being built. The government is loaning money to people to build factories. It will take a long time to solve all the country's problems and to make Bolivia a modern republic.

CHILE, THE SHOESTRING REPUBLIC

Chile is one of the most important and up-to-date countries of South America. It is gradually changing from an agricultural to an industrial nation.

The land

Chile is sometimes called the "shoestring" country because it is almost three thousand miles long and nowhere more than two hundred and fifty miles wide. In most places it is between fifty and one hundred miles in width. Chile's northern border is less than twenty degrees from the equator. Its southern end is near the fifty-sixth parallel. Can you explain why some people say, "The head of Chile burns while its feet are icy"? The cold Peru Current flows along Chile's coast. How does this cold ocean stream change the climate?

Chile has no low coastal plain. Instead, a range of mountains rises right out of the Pacific to form its rocky coast. Farther east are the Andes Mountains. Between the mountain ranges lies a plateau. The whole country slopes southward.

The Chilean Andes are magnificent, but they are terrible too. Many of their peaks are volcanoes which sometimes belch forth flames and ashes. Mt. Aconcagua (ä'kôn-kä'gwä), the highest peak in the Americas, lies between Chile and Argentina. Its summit is almost 24,000 feet above sea level. The mountains sink lower and lower as they extend toward the south. Finally only their tops appear as islands above the surface of the water.

The plateau extends the full length of the country. The northern part, the Atacama Desert, is one of the driest, most barren deserts in the world. Yet it is the source of Chile's greatest wealth, a mineral called nitrate. The Central Valley, in middle Chile, is a high fertile plain. It has a temperate climate. Nine tenths of the people of Chile live in this valley.

The capital of Santiago, Chile, is surrounded by semi-tropical trees and plants. Santiago today is a large modern city.
There are still some huge estates in Chile with thousands of people working on them as laborers and sharecroppers. Most of them also have to work in mines or nitrate fields to keep from starving. However, many estates are being broken up into small farms. The government is helping laborers and sharecroppers to buy them. As Chile changes from an agricultural to an industrial country, its poor people are finding work in factories and in the copper mines and the nitrate fields.

Making a living in Chile

Some of Pizarro’s conquering army went into Chile to find gold. Instead they found a desert which they reported to be covered with salt. This salt was really a mineral called nitrate of soda. Many years later it was found that nitrate makes excellent fertilizer. The Atacama Desert became so valuable that Chile, Bolivia, and Peru fought over it.

Most nitrate is made into fertilizer. Some is also used in chemicals, gunpowder, and other war materials. Iodine, used in medicine, is made from the part that is left. We

The world's largest open-pit copper mine is in Chile. Dynamite is used to reach the ore.

The Spaniards were never able to make slaves of the Indians of Chile. Instead, many adventurers married Indian women. (You remember that Bernardo O’Higgins had an Indian mother.) As a result, about seven out of ten people in Chile are mestizos.

Until recent years about five hundred wealthy families owned most of Chile and ran its government. The rest of the people worked for these great landowners as laborers or sharecroppers. Laborers worked directly for the landowner. As wages each received food, a little money, a one-room hut made of adobe, and an acre of land for his own use. Sharecroppers rented a few acres on an estate. The owner gave them seeds, a plow, oxen, and a hut. In return, the sharecropper worked on the owner’s fields and gave him half of the crops from his own few acres.
say that iodine is a by-product of nitrate of soda. About nine tenths of the iodine used in the world comes from Chile.

Three very important copper mines lie at the eastern edge of the desert. One of them is the largest open-pit copper mine in the world. A large part of the population of northern Chile would have to move or starve if these copper mines were closed. Copper makes up three fourths of Chile’s exports. It is worth more than all the other exports put together.

 Beds of coal lie below the ocean off the coast of central Chile. The tunnels where the miners work, the business offices, and restaurants are under the Pacific Ocean. Coal, which Chile’s growing industries need for power, comes from these undersea mines.

The Central Valley of Chile is about seven hundred miles long and fifty miles wide. The Aconcagua River, the largest in the country, flows across the plateau. The northern half of the valley is much like southern California. In winter it has a rainy season. The water is stored and used for irrigation during the dry summer. The southern half of this valley is like the Willamette Valley in our state of Oregon.

The Central Valley is a region of mixed farming. On its haciendas are acres and acres of wheat, especially the winter variety, corn, rye, and other grains. Great herds of dairy cows graze in the pastures. Horses, cattle, other livestock, and alfalfa to feed them are raised on the ranches. During the autumn month of April juicy grapes hang in the vineyards. There are orchards of apple, peach, and cherry trees. Some of the fruits and vegetables are shipped to the United States during our winter. Can you tell why?

In Chile most farming tools and methods are old fashioned. The land is turned by wooden plows drawn by oxen. Seeds are sown by hand. Ripe grain is cut with sickles. The great land holders do not care to buy expensive farming machinery because labor is cheap and easy to get.

This squash weighs nearly one hundred pounds. It will feed a family of ten for a week.

**Commercial and industrial Chile**

Four fifths of the people live in central Chile. The largest cities, the best roads, and most of the railroads are here. This is the center of commerce, industry, and business as well as agriculture.

Chile is so long and narrow that no place is far from the ocean. Most of the cities are seaports which carry on both coastwise and foreign trade. They export copper, nitrate, iodine, wool, iron ore, hides and skins, meats, and grain. They import manufactured goods.

Antofagasta (án’tô-fä-gä’s’tä) and Arica (ä-rä’kä) are the ports from which the products of northern Chile are shipped. These ports also handle most of Bolivia’s imports and exports. Can you tell why?

Valparaiso (väl’pä-rä’zo), with the best natural harbor in the country, is the busiest seaport. Commerce is an important business in Chile, and Valparaiso is its commercial
center. The harbor is crowded with great steamers from foreign lands and smaller ships used in coastwise trade. Valparaiso is also a manufacturing center.

Manufacturing is more advanced in Chile than in the other Andean lands. Chile has raw materials and more coal than any other country in South America. Modern factories are found in Valparaiso and Santiago. Most of them are run by electric power supplied by Chile’s swift rivers. Flour, leather, shoes, canned goods, wines, and chemicals are manufactured. Heavy machinery and other manufactured products must still be imported.

Santiago is the capital, the largest city, and the most important industrial center of the country. Government is the business of some of its million people. However, most work in its factories, mills, stores, and commercial offices. Their children attend modern public schools. Some people of Santiago live in up-to-date apartment buildings. Others still live in houses built in colonial days.

**Lumbering and sheep raising in south Chile**

In cold, wet southern Chile there are forests so large that they seem to have no end. Lumbering is becoming an important occupation here. Logs are hauled by oxcart over soggy roads to saw mills in the clearings. The lumber is taken to the rivers and loaded on boats which carry it to the nearest seaport. It is made into furniture and other wood products in the factories and mills of Concepción (kön-sěp’syōn’) and Valdivia (vál-dí-v’i-də).

On the map on page 254 find Tierra del Fuego (tyĕr’rā děl ŵā’go), south of the Strait of Magellan. Part of this group of islands, whose name means Land of Fire, belongs to Chile and part to Argentina. Lying east of the Andes, Tierra del Fuego is drier and less disagreeable than the rest of south Chile. Its cool climate is ideal for sheep raising. Ranches spread over thousands of acres. A few ranches are said to have herds of a million sheep. All the work on the ranches is done by the most modern methods.

The wool of sheep raised on Tierra del Fuego is fine and thick. It is washed, graded, and baled at the ranches. Some of the sheep are slaughtered. The meat is chilled and frozen at the refrigeration plants on the grounds. Then wool and meat are hauled by trucks, horse teams, or teams of oxen to Punta Arenas (pōn’tä ā-rā’näš). Punta Arenas, a very modern city, is farther south than any other large city in the world. It is the trading center of the region. From Punta Arenas some of the wool is shipped to Chilean mills. Most of the wool, lamb, and mutton is exported to the British Isles.

**The outlook**

Chile is one of the most wide-awake nations in South America. Its cities are modern, beautiful, and healthful. There are free public schools and universities in them. There are also factories and mills where about one fifth of the people of the country work. The factories are small, but manufacturing is growing. Chileans are learning to make good use of their minerals and other natural resources.

The system of land holding is still hindering progress. Many great land holders do not want to lose their laborers and sharecroppers. Neither are they willing to break up their estates or share the government with the plain people. But the younger Chileans are working toward a more democratic way of life. They want to raise the living standards of their nation.
TO HELP YOU LEARN

Words and Terms You Should Know

- guano
- balsa
- poncho
- selvas
- alpaca
- nitrate
- quinine
- tungsten
- hacienda
- altiplano
- toquilla palm

A Matching Game

Number a sheet of paper from 1 through 11. After each number write the word, from the list above, which matches the definition.

1. The high, bleak plateau of Bolivia
2. Bird droppings used to make fertilizer
3. Rainy, tropical forests of the Amazon
4. A large plantation in Spanish America
5. A kind of light, strong wood used in making airplanes and life rafts
6. From this tree's leaves hats are made
7. A kind of llama with fine woolly hair
8. A white metal used to harden steel
9. A blanket with a slit in the middle for the head, worn in Latin America
10. A medicine made from the bark of the cinchona tree
11. A mineral used in making fertilizer

Who's Who

Match the people and the descriptions.

- Bernardo O'Higgins
- José de San Martín
- Napoleon Bonaparte
- José de Sucre
- Francisco Pizarro
- Simón Bolívar
- Dom Pedro I
- The Inca

1. He freed Ecuador, Peru, and Bolivia
2. The Spaniard who conquered the Incas
3. The hero and first president of Chile
4. Bolívar's greatest general
5. He declared Brazil's independence
6. The French general who conquered Spain
7. The great patriot who helped Argentina and Chile win independence
8. Ruler of an early Andean nation

Can You Answer These?

1. Name the Andean countries. Why are they so called?
2. Name the capitals of these countries.
3. How long did Spain claim most of South America?
4. How did Spain's colonies become independent?
5. How did Brazil win independence?
6. What are these nations like today?

Ecuador

1. Why does Ecuador, on the equator, have a springlike climate all year long?
2. What is the main occupation in Ecuador? Why is the country so poor?
3. What are the chief products of the Pacific Coastal Plain of Ecuador? Of the foothills of the Andes? Of the Amazon selvas?

Peru

1. How is the coastal plain of Peru like the southern part of our country? How is it different? Why is this area a desert?
2. What are the two most valuable minerals of Peru? How do these mineral industries help the country?
3. Name Peru's important cities.

Bolivia

1. How was the new nation of Bolivia formed? How did it get its name?
2. Bolivia possesses about half of the world's tin and much silver and tungsten. Yet Bolivia is very poor. Why?
3. How has being landlocked kept Bolivia a backward nation? How is the government trying to find ways to ship goods into and out of the country?

Chile

1. Why is Chile called the "shoestring" republic? Describe the differences in climate of the northern and southern part of Chile.
2. From what does a great part of Chile's wealth come? How does the Peru Current help Chile?
3. Why is manufacturing more advanced in Chile than in the other Andean lands?
4. Where are fine wool-bearing sheep raised? What industry may become important in Chile because of these sheep?
The Plata River System drains about a million square miles of South America. It is smaller than the Amazon system but more important for transportation. The Paraná (pä’rä-nä’), the Uruguay, and the Paraguay rivers unite to form this system (see map, page 254). They empty into an estuary, or arm of the sea. This estuary is called the Rio de la Plata, or the Plata River. Argentina, Uruguay, and Paraguay share the land and the rivers. Fortunately the three countries are friendly to each other.

Early history

We remember that Magellan stopped at this estuary on his trip around the world. John Cabot’s son, Sebastian, explored the region. He thought he had found a river and named it Rio de La Plata, which means the River of Silver. The Indians had told him there was much silver along its shores.

Pedro de Mendoza (män-dō’thä) tried to make a settlement at the mouth of the Plata River. Indians destroyed it, and the settlers who were not killed fled up the Paraguay River. They built the first town in Paraguay and called it Asunción (ä-sōn’syōn’). Fifty years later men from Asunción built Buenos Aires, the first permanent settlement in Argentina.

Buenos Aires was a growing town, and still there was not one settlement in what is now Uruguay. Many years later, in 1726, seven families from Buenos Aires built Montevideo (mön’tä-vē-thä’o). When other families joined them, a Spanish colony grew up in Uruguay.

During colonial days all three were ruled by one governor. Which became an independent country as soon as it revolted against Spain? Which two were united for a short time? (See page 443.) Today two are very modern nations, but the other has made little progress. Let us see why this is true.

ARGENTINA, BREADBASKET
OF SOUTH AMERICA

Argentina’s first years as a republic were unhappy. There were many civil wars. But for the last fifty years or more the people have had time to improve and prosper. Today Argentina is the richest country and its people the best educated in Latin America.

The land

Argentina is about one third the size of the United States or about as large as the part of our country which lies east of the Mississippi River. Argentina has some of the best harbors south of the equator.

From the map on page 254 you can see that only a small part of northern Argentina lies in the tropics. The rest is in cooler latitudes. Because the country is shaped somewhat like a triangle, most of the land is close to water. That makes the climate, as a whole, milder than that of our country. The great rivers in the north show that this part of Argentina gets much rainfall. The plateaus of the south are dry because they lie in the path of the westerly winds, which lose their moisture in the Andes before reaching them. Argentina is so large and covers so many degrees of latitude that it has many different natural regions and climates.

The broad plains known as the pampas stretch across central Argentina from the Atlantic Ocean to the foothills of the Andes. North of the pampas lies the Chaco, which Argentina shares with Paraguay and Bolivia. West of these two regions is the piedmont and hill area, sometimes called the Garden of the Republic. Northeast of the pampas is the fertile land of the two rivers. South of the pampas lies the bleak Patagonian Plateau. The towering Andes Mountains stretch along the western border from Bolivia to the far south, ending on the Antarctic Ocean.
The pampas of Argentina are the flattest plains in the world. They lie between the thirtieth and fortieth parallels. About forty inches of rain fall in the eastern part each year. But the western pampas get less than twenty inches. That is not enough for most crops. Luckily wells can be sunk, and windmills can pump water from underground springs.

The Garden of the Republic lies just east of the Andes Mountains. In this region the snow melts and trickles down the mountain slopes in streams. The streams are used for irrigation and have turned the valleys and plains into blooming oases. Except on the oases, this region is thinly settled.

Summer downpours and winter droughts make the Chaco a disagreeable region. The few inhabitants try to make a living by raising cattle. Insects attack their stock in the hot, damp summer. There is not enough grass or water in winter. The cattle in this region are raised chiefly for their hides. Can you tell why?

In spite of insects and the disagreeable climate the Chaco supplies Argentina with most of the cotton it needs. The government offers cheap land, seeds, and cotton gins to people who will settle in the Chaco and raise cotton.

Forests are the Chaco's chief source of wealth and quebracho (kā-brā'chō), its most valuable tree. Quebracho wood is so hard that it will not decay. It is used for railroad ties, paving blocks, and fence posts. Quebracho also yields tannic acid, which is used to make leather soft, firm, and strong. About five hundred thousand acres are cut each year. Mills for handling the quebracho are built along the rivers.

The land between the Paraná and Uruguay rivers is a rich agricultural area. Its rolling hills furnish good pasture for cattle and sheep. Fertile soil and swampy forests are found in its valleys. It has long, hot summers and mild winters. Corn is an important product of this region.

These Argentine sheep are raised chiefly for their wool, which is exported to many cities.

South of the Colorado River is Patagonia. This long, narrow plateau rises in the west to meet the Andes Mountains. The climate is cool and dry. This is the chief sheep-raising area of Argentina.

Across the Strait of Magellan from Patagonia lies the group of islands called Tierra del Fuego. Half of these cold islands belong to Argentina. Who owns the rest?

Sheep fatten on the desert shrubs and bunchy grass of Patagonia and Tierra del Fuego. They provide both wool and meat. Oil fields have been found in eastern Patagonia. You can see that these seemingly barren lands help make Argentina prosperous.

The people

Sixteen million people live in Argentina. About half of them are members of old Spanish families. Most of the rest came from Europe or are children of Europeans. Very few are Indians or mestizos.

The people are well educated. Eighty-eight out of a hundred can read and write. Argentina has free elementary schools, high
schools, and schools to train teachers. About one fourth of the nation's income goes for education. (How does this compare with the amount our national government spends? How much does your state spend?)

**Making a living in Argentina**

Great changes are taking place in the country. Agriculture is still the chief occupation in all parts of the land. But industry is gradually overtaking it. A fourth of the world's meat, a third of its hides, a fifth of its wheat, and two thirds of its corn come from the pampas of Argentina.

**Agriculture**

The people of Argentina have raised cattle and sheep on the huge ranches since earliest colonial days. The *gauchos* (gou'chōz), as Argentina's cowboys are called, were famous for their riding and their skill in warfare. At first cattle were raised for their hides and sheep for their wool. Even when railroads were built most ranches were so far from the cities that meat spoiled on its way to market. At last a way of keeping meat cold and fresh while it was shipped was invented. Meat could be sent everywhere by refrigerator cars or ships. Packing houses for freezing and chilling meats were built. Then Argentina could raise cattle for their meat. Some cattle are still raised for their hides. Do you know where? But fine meat cattle and sheep are raised in the land between the rivers, and the pampas are most famous for producing beef and mutton.

The sheep ranches of Patagonia and Tierra del Fuego are the largest in Argentina. Ranchers of these regions count their sheep in the hundreds of thousands. These flocks are raised chiefly for their wool. Every spring the gauchos bring the sheep to the sheds for shearing. The wool is graded and baled and sent to wool ports. Some lamb and mutton is also exported.

Ranchers learned that their cattle produced better beef if they were fed some alfalfa. But there were few farmers in Argentina. The government advertised for them in Europe. Farmers from many countries, and especially from Spain and Italy, arrived. At last the damp, rich soil of Argentina was
being turned. On the large ranches crops are rotated. That is, one year grain is raised, the next alfalfa, and so on.

Argentina has become the breadbasket of South America. Its wheat belt extends in a great curve from Santa Fe on the Paraná River south to Bahía Blanca (bā-ēˈə blängˈkä). It curves westward as far as there is enough moisture for wheat. Oats, rye, barley, and other grains are also raised in this curved belt. But wheat is the money crop. Argentina exports more than half the wheat it raises.

Northeast of the wheat belt is a region of more rainfall which extends into the land between the two rivers. Corn and flax are the money crops of this area. Argentina sells more corn than any other country in the world. Flax is raised for its seeds, which are crushed to make linseed oil. The United States buys most of this oil to use in paints.

Truck farms, orchards, and dairy farms are found near the thickly populated regions, especially behind Buenos Aires. They extend for many miles along the Plata and Paraná rivers. Can you tell why dairying is important along the Plata shore north of Buenos Aires?

Grapes and sugar cane are the chief products of the Garden of the Republic. Mendoza is surrounded by vineyards and orchards which stretch from the mountains eastward to the pampas. Eight hundred different kinds of grapes grow in the oases. Some clusters are ten inches and some are two feet in length. Peaches, plums, pears, cherries, apricots, and apples also grow well in the irrigated soil.

**Cities and industry**

The Plata shore between Buenos Aires and La Plata is the chief industrial region. The largest and busiest cities are found here. These cities are seaports, river ports, railroad, commercial, and manufacturing centers. Meat packing, tanning hides and skins, and milling grains are the most important industries. Why? Most factories turn out goods needed in Argentina. Very little iron and steel goods are produced because Argentina does not have iron ore and coal for heavy industry.

Buenos Aires is the capital and largest city in the country. It is also the greatest seaport and the most important commercial and manufacturing center. It is sometimes called the Chicago of South America because it is the chief railroad center and the leading livestock market on the continent. Some of the largest meat-packing houses in the world are found in Buenos Aires.

Three out of every thirteen people of Argentina live in Buenos Aires. They are proud of its wide streets, many parks, sidewalk restaurants, art galleries, churches, and theaters. It has fine schools and colleges, good hotels and apartment houses, splendid homes, banks, clubs, race tracks, and golf courses. There are also poorer sections.

The water front is the most interesting place in Buenos Aires. Miles of docks and

**Buenos Aires has many parks. It also has fine modern apartment and business buildings.**

*Pan American-Grace Airways*
wharves extend along the Rio de la Plata. Engineers dug deep basins from the rivers into the low, flat land to make the harbor. Along the docks are long, stone wharves where ships from the United States and other countries unload farm machinery, automobiles, barbed wire, electrical goods, and clothing. Tall grain elevators and warehouses line the docks. They hold the corn, wheat, hides, wool and skins which are waiting to be exported. Farther off are great meat-packing plants which have their own docks and loading machinery. Buenos Aires is a busy, modern city. Only its colonial mansions, churches, and language are reminders that it was once part of Spain’s colonial land.

Good-sized freighters can sail two hundred miles up the Paraná River from Buenos Aires to Rosario (ró-sá’rē-ō), the grain port of Argentina. Rosario is also the flour milling center of South America. Its wharves are crowded with grain elevators and warehouses. The first public schools of Argentina were built in Rosario.

Bahía Blanca is the only large city of Argentina directly on the Atlantic Ocean. It handles the wool, mutton, and other products of the pampas and of Patagonia.

**Argentina and the United States**

Of all the countries of South America, Argentina is most like the United States. The climate and products of these two nations are much alike. Argentina’s fields of wheat and corn, its ranches and great stretches of grasslands are like those of our plains and prairies. The Plata River Basin and our Mississippi River Basin are similar. Buenos Aires and other large cities are so much like our cities that if the people spoke English a citizen of the United States could imagine himself at home.

But both countries produce more meat and grain than they need. They have become rivals for world trade. Some businessmen in Argentina object because our citizens have branch businesses in their country. They forget that these plants and factories give work to thousands of their people. People in Argentina can buy manufactured goods more cheaply because they do not have to pay for shipping. This benefits the whole country.

Wise men in both nations want to build friendship between the two countries. A few years ago we signed a trade agreement. The United States agreed to buy more canned beef from Argentina. Argentina in turn agreed to buy more of our fruits and other products. Each lowered the tax on goods imported from the other. We then loaned Argentina money to build up its industries. Argentina buys the machinery it needs from us. Both republics have great influence on the other nations of their continents. If we work together as good neighbors, we can do much to bring about world peace.

**URUGUAY, LAND OF EQUALITY**

Little Uruguay, at the entrance to the Rio de la Plata, is the doorway to the whole continent. That is why Brazil and Argentina in early times tried to capture the region. Finally the British persuaded the two large countries that it would be wise to have a small country between them. Since that time Uruguay has been safe from attack.

For the first seventy years of its history Uruguay was an unhappy land. The people fought against each other and with their neighbors. At last a wise president united them, and they learned to govern themselves. Now Uruguay is one of the most peaceful, democratic, and progressive of all nations.

**The land**

Uruguay is about half the size of our state of California. Broad, rolling, grass-covered plains stretch westward from the Atlantic Ocean. Uruguay’s soil is the most fertile in South America.

Uruguay lies between thirty and thirty-five degrees south of the equator. The climate is healthful and delightful. In January, the
Montevideo, the capital of Uruguay, is an old Spanish city. It is built around several beautiful plazas. In the center of this plaza is the statue of one of Uruguay’s national heroes.

warmest month, the temperature is seldom above seventy-four degrees. Its winters are as mild as those of Florida. The ocean, lakes, and rivers form half of its border. How do these waters temper the climate?

The people

Most Uruguayans came from Europe or are the children and grandchildren of Europeans. Some belong to early Spanish families. A few are Indians or mestizos.

Uruguay is sometimes called the “Land of Equality” because everybody has a chance to study and to work. The government supports public schools for children, evening and open-air schools, vacation camps, and colleges. Any person can become a doctor, a lawyer, a teacher or anything else he wishes at government expense.

Because they are educated, the people of Uruguay are willing to try new things. They were among the first to let women vote and to make laws to give people better working and living conditions. The country is noted for its progress. Its people are the most law-abiding in South America.

How the people earn a living

Agriculture is by far the most important occupation in Uruguay. Can you imagine a ranch as large as all of New England and part of New York? Uruguay is like such a ranch. More than three fourths of the land of the whole country is used for grazing. Of all its fertile land only that near Montevideo is used for farming. Truck farms, orchards, and dairy farms lie close to the city. A little farther off are the wheat, corn, oat, and flax fields. The farms are small, and most are worked by their owners. But the cattle and sheep are counted in millions. Horses, mules, pigs, and other farm animals are raised on huge ranches. Pastures reach to the edge of towns. Special roads have been built for driving cattle and sheep to the cities.

Only the United States and Argentina raise more sheep than tiny Uruguay. Uruguay exports more beef and mutton than any South American country but Argentina. A large part of its two and a half million people work in packing houses preparing meat for export. The first meat-packing plant was built in Montevideo in 1905. After that the industry grew rapidly.

Uruguay has no coal, fuel oil, or iron ore of its own. So its few factories make only small articles for everyday use. Uruguay imports most of its heavy manufactured goods.

A small number of people are employed mining silver and copper. A larger number work at quarrying granite and the beautiful rose, yellow, green, and white marble for which Uruguay is famous. The magnificent Legislative Palace, or capitol building, in Montevideo is built of sixteen different kinds of Uruguayan marble.
Cities and trade

The cities of Uruguay begin where the farms and ranches end. Montevideo, the capital, where about one third of the people live, has only eight hundred thousand people. In the section called “Old City” there are fine, old Spanish mansions and an old and beautiful park known as the Prado. On its narrow streets stand the city hall and great church of colonial days. In “New City” everything is up to date. The Legislative Palace, other government buildings, the university, the theaters, stores, and banks are very modern. The people of Montevideo do not hurry. They take time to enjoy life.

Montevideo is the center of Uruguay’s trade. Its harbor, shaped like a horseshoe, has been deepened, piers to break the force of the waves have been built, and now it is an excellent harbor. Foreign ships bring manufactured goods and fuel. They carry away wool, beef, canned meat, hides and skins, linseed oil, wheat, and other products of the ranches and fields.

Uruguay has no transportation problem. Its rivers are navigable. The gently rolling surface makes building roads and laying railroad tracks easy. Airplane service is good. For its size, Uruguay has more good roads and railroads than any other country in South America. Airplanes link Uruguay to Buenos Aires and thus to the rest of the world.

Good neighbor

The freedom-loving Uruguayans believe in co-operating with their neighbors. They help plan and work for peace and friendship in the American family of nations. Through trade Uruguay and the United States have come to know and understand each other. These two most democratic nations in the world are ready to work together for world friendship.

PARAGUAY, AN INLAND COUNTRY

Of all South American nations, Paraguay has grown most slowly. It has the smallest population, the fewest factories, and the least foreign trade. Its people are the least progressive on the southern continent.

Paraguay’s first president, Dr. José Francia, did not get along with the neighboring countries. So he shut Paraguay off from the rest of the world. He cut off the mails and stopped all trade with other countries. The next president, Carlos Lopez, tried to make friends of his neighbors. He also helped his people by teaching them newer methods of farming, building schools, and freeing the children of slaves. But his son, who wished to make Paraguay a great military power, was the worst ruler the country ever had. He built up the army and began to look for a chance to make war on his neighbors.

In a dispute over boundaries Francisco Lopez sent his armies into Brazil. Argentina stood in his way. So he declared war on Argentina. Then Uruguay declared war on Paraguay. After five years of fighting his three neighbors Lopez was killed and the war ended. But the country was ruined. Paraguay lost fifty thousand square miles of land to Brazil and Argentina. Ninety per cent of Paraguay’s men had been killed during the war. For many years Paraguay was called the “Land of Women.”

In 1932 Paraguay went to war with Bolivia over oil lands in the Gran Chaco. The war lasted three years. When it ended, Bolivia had won the part of the Gran Chaco which contains oil. Paraguay won the rest of the Chaco, which is made up of grazing lands and forests. Today the people of Paraguay have enough to eat because it is easy to raise food in the fertile soil and mild climate. But they are poor in every other way. Since the war with Bolivia their money has gone to pay war debts.

The land

Paraguay, which is about the size of our state of California, lies in the heart of South America. About one third of it is in the tropics. Its rivers are large and navigable for
hundreds of miles from their mouths. In the east are mountain chains, a part of the Brazilian Highland. Asunción, the capital, has weather like that of Tampa, Florida.

The Paraguay River divides the country into two parts. The western part is the disagreeable region known as the Chaco. This section is sparsely settled. But along its streams are forests of valuable trees. About two thirds of Paraguay’s supply of quebracho come from these forests. Some minerals are found in the foothills of the Andes. There may also be deposits of oil in the Chaco.

The region between the Paraguay and Paraná rivers is a rolling, fertile land. The mild climate and regular rainfall make this a region of farms and ranches. Most of its million people live between the rivers.

The people

About three fourths of the people of Paraguay are mestizos and Indians. Pure-blooded Indians wander over the wilder parts of the country. Europeans or children of Europeans carry on much of the business. Most Indians and mestizos are poor and live much as our pioneers lived over one hundred years ago.

A Paraguayan law says that all children between the ages of seven and fourteen must attend school. Yet about one half of the population can neither read nor write. The nation is too poor to build many schools, train teachers, or build roads. Even in Asunción children go to school in shifts. Children who live on ranches or in remote villages have no way of getting to school. The few rich families send their children to private schools which they themselves pay for.

Making a living in Paraguay

Large numbers of Paraguays are descendants of gauchos. They would rather be cattlemen than anything else in the world. There are five times as many cattle as there are people in the country.

About seventy-five million acres along the Paraguay River are just right for cotton. A bank in Asunción is furnishing farmers of the area with free seeds. These farmers have begun to supply the textile mills of Asunción with raw cotton.

Among the forest products are quebracho, castor-oil beans, the leaves of the wild orange tree, and yerba mate (yér’bá mä’tā), which is a kind of holly from whose leaves a hot drink is made. This drink is often called Paraguayan tea, but it is a favorite in all South American countries. The bush from which yerba mate is made grows wild and on great plantations many people make a living gathering the leaves of this tree. Tannin is also an important export of Paraguay. So are castor-oil beans and leaves of the wild orange tree. Perfume is made from the oil of the wild orange leaves.

Asunción, the capital, is a sleepy town a thousand miles from the sea. Today it is the smallest and perhaps the least important of the Latin-American capitals. But it had great churches and splendid houses and was a busy city when New York was a Dutch trading post.

The great colonial churches, the yellow, pink, and blue colonial mansions, and the

*Yerba mate is made by pouring hot water over the powdered leaves of a kind of holly tree.*

*Three Lions*
rough streets, paved with stones, are reminders of the past. Burros still bring products of farms and ranches to the old market place. Barefoot Indian women, wrapped in sheetlike garments, come to buy and sell their wares and talk to their friends.

But Asunción has modern government buildings and new apartment houses. There are also shining automobiles and some well-paved streets. Mills and factories prove that Asunción is beginning to turn industrial. The pleasant old Spanish town is waking up.

**TO HELP YOU LEARN**

**Words and Terms You Should Know**

- estuary
- quebracho
- gaacho
- yerba mate

**Can You Match These?**

Number a sheet of paper from 1 through 6. After each number, write the word from the list above which matches the definition.

1. A cowboy of the pampas
2. A favorite drink in South America
3. An arm of the ocean which extends into the land
4. A kind of wood, the juice of which is used in tanning leather

**Can You Answer These?**

1. What are the Plata countries? Why are they so called? What are their capitals?
2. What is Argentina’s most important money crop? How much of this crop does it export?
3. Why is the pampas a good farming region?
4. How do people make a living in Patagonia?
5. Where are the truck and dairy farms of Argentina found? Why?
6. Where is Argentina’s chief industrial region? Name the most important industries.
7. Why does Argentina have to import machinery and iron and steel goods?
8. What are Argentina’s chief seaports? For what is each noted?
9. In what ways are the United States and Argentina alike?
10. What two countries wanted to conquer Uruguay? Who persuaded them not to?
11. What part of Uruguay is used for grazing? How many sheep does Uruguay raise?
12. Why has Uruguay no transportation problem? Name its most important rivers.
13. How does Paraguay compare with other South American countries in size? In number of factories? In trade? In progress?
14. What is “Paraguayan tea”?

**Who’s Who**

Match the people and the descriptions.

Francisco López  Sebastian Cabot
Pedro de Mendoza  José Francia
Ferdinand Magellan

1. He stopped at the estuary of the Plata on his trip around the world
2. He first explored the Plata region
3. He tried to make the first settlement at the mouth of the Plata
4. Paraguay’s first president who closed the country off from the rest of the world
5. He led Paraguay into a great war which almost ruined it

**A Who’s Who for Cities**

Match the cities with the phrases which describe them.

Asunción  Mendoza  Montevideo
Bahía Blanca  Rosario  Buenos Aires

1. Capital and greatest seaport of Argentina
2. Smallest capital in South America
3. Capital of Uruguay
4. Grain port and flour-milling center of Argentina
5. Argentina’s wool and mutton port located directly on the Atlantic Ocean
6. City in Argentina’s fruit-raising region
BIG, FRIENDLY BRAZIL

In the year 1500 Pedro Alvarex Cabral (ká-avrál') set out from Portugal for India. But strong winds carried his ships far westward. When he landed in a strange country, Cabral claimed it for his king. He sent one ship back to Portugal with news of his discovery. Then he continued his voyage.

Soon other explorers visited the land Cabral had discovered. They returned with shiploads of “brazil wood,” which was used in making a red dye. The country came to be called the “Land of Brazil Wood.” Later the name was changed to Brazil.

Today more than half the people of South America live in Brazil. It is the largest country on the continent and the fourth largest in the world. The United States and another Texas could fit into it. Chile and Ecuador are the only South American countries which do not border on Brazil. In describing Brazil, we must often use “most” and “largest.”

THE LAND AND THE PEOPLE

Brazil can be divided roughly into four natural regions. They are the Amazon Lowlands of the north, the Brazilian Highlands of the east, the area of plateaus and plains lying between these two and called the Interior, and southern Brazil. Each of these parts could be divided into smaller natural regions. The Brazilian Highlands are divided into two parts. These are the northern and the central highland regions. Southern Brazil has hills and low mountains in the north and plateaus and plains farther south.

The Amazon Lowlands

The Amazon Lowlands are drained by the mighty Amazon River and its more than two hundred tributaries. A large part of the Amazon Basin is less than eight hundred feet above sea level. This basin includes almost half of Brazil but has less than one tenth of its people.

The Amazon River lies close to the equator where there are daily tropical rains. From January to June rain falls in torrents all day. The many rivers and streams swell and overflow. During the so-called dry season rain falls every day but not all day. Between seventy and one hundred inches of rain fall in this selva region each year.

Open, grassy plains called campos lie on the higher land south of the Amazon River. Some of the water runs off the higher, firmer ground. Valuable hardwood forests grow here. The campos have a dry season each year when the land can be cleared and worked. Fortunately the winds from the Atlantic Ocean bring cool breezes.

The Brazilian Highlands

The Brazilian Highlands are chains of rounded mountains which stretch from northeastern Brazil almost to Uruguay. They include the “bulge,” the part of South America which extends farthest out into the Atlantic Ocean. Natal (ná-täl'), on the bulge, is closer to Africa than any other city in America.

The northern part of the Brazilian Highlands lies in the tropics. Its coast plain is too hot for comfort. But its plateau is cool and pleasant. One section receives little rainfall. In years of drought crops dry up, and everything dies.

The important central section of the Brazilian Highlands is also in the tropics. But its altitude makes the climate healthful. Summers are hot and rainy. Winters are cool and dry. Half of the inhabitants of Brazil live in the central highlands.

Brazil’s vast Interior

Less than six hundred thousand people live on the six hundred thousand square miles of the interior plateaus and plains. That is less than one person to a square mile.
This is a region where heat and rain follow heat and drought. Only one railroad and a few roads have been built in these backlands in the Interior of Brazil.

**Southern Brazil**

The southern part of Brazil lies south of the Tropic of Capricorn. It has a climate like that of southeastern United States. Its temperate climate attracts people from the temperate countries of Europe. The northern part of this region of Brazil is highland. The southern part consists of low hills and rolling plains (see the map on page 254).

**The Brazilian people**

Among the forty-five million Brazilians are people of every color. Full-blooded Indians, Negroes, Europeans, descendants of Europeans, and mixtures of natives and newcomers — all these call themselves Brazilians. From the earliest days Portuguese and Indians intermarried freely. Negroes, who were brought to Brazil as slaves, married Indian slaves. When other Europeans arrived, they too intermarried. The result is a mixed people. In Brazil it does not matter what color a person is so long as he is a good citizen.

However, there are different classes among the Brazilians. Some families own estates larger than the whole British Isles. Poor people work for the wealthy land holders. They are little better off than slaves. But a middle class is growing up. The middle-class people are neither so poor that they have lost hope, nor so rich that they are satisfied with things as they are. The future of the country lies in their hands.

Many European and several Indian languages are spoken in Brazil. But Portuguese is the official language of the country. Can you tell why?

**MAKING A LIVING IN BRAZIL**

Hard times followed the freeing of the slaves in Brazil just as it did in our South. Thousands of laborers were needed on the fazendas (fà-zên'dàz), or large ranches. Some of the freed slaves stayed to work on the land of their former masters. Landowners whose slaves left had to hire paid workers or find other ways of making a living.

Agriculture is still the most important occupation in Brazil. But the number of factories, stores, mills, and mines is growing.

Natives of the Amazon Valley make a living gathering sap from the rubber tree, brazil and tagua (tā'gwā) nuts, and the roots of the manioc (màn'i-ôk) plant. The meat of Brazil nuts is good to eat and also makes a fine oil for cooking. Tagua nuts are made into artificial ivory. Tapioca, used in pudding, is made from the root of the manioc plant. The sap of the rubber tree is the most important product gathered.

**The story of rubber**

Rubber by itself melts in heat and becomes hard and brittle in cold weather. Because of this, when it was first discovered there were few uses for it. Then about one hundred and twenty-five years ago Charles Goodyear discovered a way of treating rubber with sulphur called vulcanizing. Vulcanizing keeps rubber from melting and hardening. Manufacturers soon began to make rubber raincoats, over-shoes, boots, and other useful things. After the automobile was invented, millions of tons of rubber were needed for tires. Wealthy men rushed to the Amazon jungles. They hired gangs of workers to gather latex, or sap of the rubber tree from which rubber is made. The rubber merchants became millionaires almost over night. They built Manaus (mä-nous'), a magnificent city, where the Rio Negro (rē'ô nâ'grô) joins the Amazon.

Then planters in Asia began to grow rubber. The product of these cultivated trees could be sold cheaper than the wild rubber of the Amazon jungle. Almost over night Manaus became a "ghost" town, and the rubber lands of the Amazon were almost forgotten.
Latex, the sap of the rubber tree, is collected in buckets and then dried by means of smoke.

During World War II we needed rubber desperately but could get none from Asia. Experimental rubber plantations were started on a branch of the Amazon River. But rubber trees do not produce latex until they are seven years old. We could not wait. Again rubber companies hired Indians and mestizos to find and tap wild rubber trees. Let us accompany one of these men as he goes about his work of gathering rubber.

A day with a rubber gatherer

Deep in the heart of the jungle lies a tiny village. Its houses of branches and grass stand in a clearing near a small stream. Those nearest the stream are built on stilts so that the flood waters will not reach them when the heavy rains come. Because this is the season of lighter rains, life is more pleasant in the jungle.

It is early morning, and a fire glows under the “pot that always boils.” An Indian appears in the doorway of a hut. He walks to the pot and helps himself to his breakfast. Others join him, and soon the whole village is stirring. Having eaten, the rubber gatherers take up their baskets of small cups and their sharp knives and start out for the jungle. Their wives are left to do the farming, the cooking, and other work about the village.

Sometimes the gatherers must search for rubber trees. But this region has been tapped for a number of years, so each man goes directly to the first of the trees in his care.

The Indian cuts a gash in the bark and hangs a little cup under it. Tiny drops of milk-like sap begin to trickle into the cup. This is latex. In early times the Indians called the rubber tree the “tree that cries” because the drops of latex look like tears. The Indian goes from tree to tree, cutting a gash and hanging a cup or small pail under it. When the sun is high in the heavens, he returns to the village for his noon meal. He has probably cut two hundred gashes and hung up two hundred little pails during the morning.

In the afternoon he returns to the jungle. This time he carries a large bucket. He travels the same route he took in the morning. Now he empties cup after cup of latex into the bucket. When he has covered his section of the forest, he starts for home.

In the evening the men gather around a slow-burning fire of palm nuts. Their buckets of milky latex stand near the edge of the circle. Each has a long paddle, or pole, which he dips into the bucket. The gatherers sing or talk as they turn the paddles slowly over the smoke of the fire. The latex turns black and
hardens. Again the paddle is dipped into the bucket. Again it is turned over the smoking fire. Layer after layer is added until a ham, or ball, is formed. Then the ham is slit with a sharp knife and pushed off the pole. The smoking goes on until all the latex has been made into hams of crude rubber.

From November to May the rubber gatherers pile up crude rubber along the rivers. The company's boats pick up the hams, and the agents pay the workers in food, clothing, and other supplies. Some gatherers do not work for a company. They sell to traders who stop at their villages. Most natives never leave their jungle villages.

**Industrial cities of the Amazon Valley**

Manaus and Belém (bê-lêm') are the only large cities of the region. Manaus is again an important river port and a market center for crude rubber and other forest products. River boats, steamers, and planes carry these products from Manaus to Belém.

The Amazon River has several mouths. Belém, the chief rubber center of Brazil, is on one of them. Belém is the gateway to the Amazon Basin and its largest city. At its modern wharves great steamers take on cargoes of crude rubber, fruits, hardwoods, oils and nuts, for the United States and other countries. Products from other parts of Brazil and from foreign countries are distributed to people in all parts of the Amazon River from Belém.

**Mining in the Brazilian Highlands**

Gold was Brazil's most important mineral product until diamonds were discovered. The Brazilian Highland has been famous as a region of diamonds for about two hundred years. Today its diamonds are used for industrial purposes more than for jewelry. Industrial diamonds are diamonds used for drill points and cutting tools.

Some of the richest iron-ore fields in the world lie about two hundred miles north of Rio de Janeiro. The ore lies near the surface. How do you think it is mined? Most of Brazil's iron ore is exported. The country has poor coal supplies so it cannot make much of its ore into iron and steel. Manganese, which is so important in making steel, is also mined near the iron-ore fields.

**Agriculture in the northern highlands**

The northern part of the Brazilian Highlands is a great desert. It is sparsely covered with bunches of coarse grass and stunted, twisted trees. Some years rain falls in torrents several times a month from December to May. Then comes a dry spell. No rain falls for a year, or two, or more. Plants, animals, and birds die. Some people move to the seashore and become fishermen. The rest either go to other areas or starve.

Although thousands of animals die for lack of water and grass, cattle and goats are raised in this region. The livestock provides meat, milk, and cheese for the inhabitants and skins and hides for export. Where water from the Rio São (soun) Francisco is used for irrigation, fine cotton, sugar cane, vegetables, citrus, and other tropical fruits are grown.
Carnauba (kār-nouˈbā) wax and babassú (bāˈ-bā-sōˈ) oil are other valuable products of this region. The carnauba palm can live in a drought area because its leaves are coated with wax that helps to hold in the precious water. Natives gather the leaves, dry them, and remove the wax. Carnauba wax is used in making floor and furniture polish, motion-picture film, and phonograph records. A fine oil is made from the nut of the babassú palm tree. Babassú oil is used in soap, margarine, and cooking oil.

South of Natal the northern highland region receives between forty and eighty inches of rain a year. The heavy rains and the long, hot growing season are just right for sugar cane, cotton, cacao, and other tropical crops. There are huge sugar fazendas along the coastal plain. In the last few years the amount of cotton raised in this area has tripled. Brazilians now supply their own mills and are able to export about a million bales a year. Cacao trees grow best on low-lands not more than two thousand feet above sea level, and not more than twenty degrees from the equator. That is why cacao is the leading crop of the coastal plain south of Bahia (bāˈ-e) or Baía (also called Salvador). You may find it as Bahia, or Baía, on some maps and as Salvador on others.

Find Bahia and Recife (rāˈ-sēˈfē) on the map on page 254. The first successful settlements in Brazil were built where they now stand. Today they are the commercial and industrial centers of northeastern Brazil.

Bahia is the cacao port. It is built on two levels like most cities on the Brazilian coast. It is only twelve degrees from the equator, so the heat in the lower city is almost unbearable. Most of the four hundred thousand people live in the upper city, which is two hundred feet higher and cooled by ocean breezes. Large elevators carry them to and from work in the lower city. Bahia’s large business blocks, cotton mills, factories, and wharves are up to date. In its harbor ships are loaded and unloaded by modern methods.

Coffee berries grow in clusters on small trees. When ripe, they look like dark-red cherries.

Bahia and Recife are both railroad centers. But the highland between the cities is so rugged that there is no railroad connecting them. Travel between them is by ship or airplane.

Recife, which means “reef,” is built partly on a peninsula and partly on islands. Many of its streets are canals. It was a sugar market in colonial times. It is still Brazil’s chief sugar port. It also exports much cotton and tobacco. Recife has more than half a million people. They work in cotton mills, tobacco factories, sugar refineries, on docks, and on boats. Fishing is an important occupation here as elsewhere along the coast. Modern Recife is the third largest city in Brazil and the largest in the northeast.

Raising coffee in the central highlands

About three fourths of the world’s coffee is raised in Brazil, and most of it comes from the central Brazilian Highlands. The coffee plant needs a cool climate, a long growing season, plenty of water while it is growing,
and dry weather when it ripens. The plateau behind São Paulo (pou'16̄) has a cool climate. Its growing season is twelve months long. About forty inches of rain fall during the spring and summer months. By the time the berries are ripe the dry season has come. This climate has made the plateau the most important coffee-growing region in the world. Its plantations produce about two thirds of the world's coffee crop.

Coffee fazendas are sometimes so large that it takes thousands of workers to run them. A single family may run a small farm in this region. Cotton, grains, cattle, vegetables, manioc, and sugar cane for home markets are raised on both small and large farms. But coffee is the money crop of the region.

What an interesting place a coffee fazenda is! In the nurseries tiny plants are carefully raised for transplanting. In some groves young plants are growing. Long, straight rows of the young shrubs stretch on and on. Tall trees shade them from the hot sun and protect them from the wind. Trained workers fertilize and weed the rows of young plants. Men are busy trimming the older trees in the groves to keep them from growing so tall the workers will not be able to reach the berries. Unless this is done coffee treesgrow from seven to twelve feet high. They begin to bear fruit when they are five or six years old.

When the thousands of trees burst into bloom, the white, star-shaped flowers have a wonderful fragrance. The shiny, green leaves glisten in the bright sunlight. All spring and until late in summer the fruit grows and ripens. In May the grove looks like a cherry orchard. Shining red berries gradually replace the white flowers. Coffee picking begins in May and continues until August. The berries must be picked before the rains set in. Near the end of the season owners of large fazendas offer prizes to the family which picks the most.

The berries are washed in huge tanks, or vats. The dirt and poor berries are removed. The two beans, or seeds, in each berry are separated from the pulp. They are spread out on concrete platforms or drying floors. Every day men stir the beans with rakes so that the hot sun and cool air can reach each one. Next a machine removes the thin skin, separates, and polishes each seed. Another machine sorts the seeds according to size. They are then put into bags and taken to the warehouse for shipping.

Coffee is prepared for market on the fazendas and farms where it is grown. On large plantations the beans are separated, sorted, polished, and sacked by electric machinery. On small farms the work is done by hand. The coffee is then shipped to the coffee market at São Paulo. From São Paulo it goes by rail to Santos, where millions of sacks are stored in warehouses along the waterfront. Santos ships coffee to all parts of the world. About seventy out of every hundred sacks go to the United States.

**Manufacturing in the central highlands**

The central highlands are rich in raw materials and water power. Yet the Brazilians did little manufacturing until their trade with Europe and the United States was cut off during World War I. Then they began to make their own clothing, shoes, flour, and other necessities. Today they also manufacture textiles, leather and rubber goods, foodstuffs, clothing, furniture, and cooking utensils. Most factory products are for home use. Today Brazil is the most industrialized of the Latin-American countries. Branches of United States automobile, steel, and rubber companies, and meat-packing houses are found in its large cities. Foreigners and their money have helped Brazil build up its industries.

São Paulo is the fastest-growing city in South America. Its location in the heart of the coffee region made it a coffee market and a railroad center very early. Its cool climate made it ideal for manufacturing. Today over a third of São Paulo's people work in cotton, woolen, silk, and rayon mills. Metal factories
This view of the city of Rio de Janeiro and the bay was taken from the top of a mountain near by. The high rock in the center is called Sugar Loaf peak.

Moore-McCormack Lines

turn out parts for small machinery, stoves, and furniture. Its packing houses chill and freeze tons of meat daily. São Paulo is the most important industrial center and the second largest city in Brazil. But coffee trading is still São Paulo’s leading business.

Santos shares some of São Paulo’s industries but is best known for its trade. It is built on islands separated from the mainland by a narrow channel. This channel makes an excellent harbor. Between forty and fifty ocean steamers can dock at its miles of concrete piers. Its warehouses hold millions of sacks of coffee. Conveyors, or moving belts, are constantly loading coffee into the holds of ships. Santos is the busiest coffee port in the world.

Rio de Janeiro is the most beautiful city in Brazil. Many people think it is the most beautiful capital in the world. It is situated on a bay which forms a fine harbor. Wide, sandy beaches stretch along the shore of the bay. Behind them rise high, wooded mountains. Guarding the city, standing on top of one of these mountains, is the magnificent statue of Christ the Redeemer. The statue is one hundred and thirty feet high and can be seen from all parts of the city.

In Rio de Janeiro the temperature never goes below 60° in winter or above 90° in summer. Like our capital city of Washington, D.C., Rio de Janeiro lies in a federal district. Like New York it is the largest city, the greatest commercial, transportation, and cultural center of the country. As a seaport it exports less than Santos, but it imports more. As a railway, highway, and airway center it receives and distributes products from all parts of Brazil. Rio de Janeiro is second only to São Paulo in the manufacture of the cotton goods, furniture, shoes, and other everyday goods used by Brazilians. It has the finest schools, theaters, museums, parks, and beaches in the country.

Brazil’s capital is old. Sebastian Cabot named the place Rio de Janeiro, the “River of the First of January,” because he sailed into its bay, January 1, 1527. Recently the city has grown greatly in size. The people have cut down hills and filled in swamps to build their city. They have kept the splendid churches and palaces of colonial days and built fine modern buildings along wide streets bordered with palms. Many of the sidewalks are made of tiny colored stones laid in patterns. Such work is known as mosaic. The city had to build skyward because of the mountains behind it and the water in front. Its skyscrapers rival those of New York in size and beauty. More than four hundred years old, Brazil’s capital is a combination of modern and colonial beauty.
Making a living in south Brazil

South Brazil is largely a land of pine forests, prairies, and plains. South of São Paulo small mixed farms, cattle and sheep ranches, and rice fields take the place of coffee plantations. Even the people are different. Most of them are descendants of immigrants from Germany, Italy, and Poland.

Paraná pines sometimes grow two hundred feet high and ten feet thick. They furnish fine wood for houses, furniture, and paper. A railroad and the Pan-American Highway cross south Brazil, and this solves the transportation problem. Lumbering and papermaking are important industries.

Most of the mixed farms of southern Brazil are run by Germans and Italians. Grains, vegetables, tobacco, and fruits like those which grow in our country are raised for market. The Germans like to raise corn. Corn is the leading crop of the entire region. They use much of the corn to fatten large numbers of pigs which they raise for pork. The Italians prefer to grow grapes. They raise nine tenths of the grape crop.

A high grade of beef cattle is raised on the rolling grasslands between Argentina and Uruguay. Cattle from farther west are brought to these southern pasture lands to be fattened. They provide millions of pounds of chilled, frozen, and dried meat for both foreign and domestic markets. In this cool region sheep grow a good, thick fleece. These sheep are raised chiefly for their wool.

Porto Alegre (ā-lā’grē) is the leading industrial and commercial center of south Brazil. Flour mills, meat-packing plants, tobacco factories, woollen mills, and tanneries give work to its people. It exports hides, tallow, beef, and wool. Can you tell why?

Trade and transportation

Brazil has always been a commercial, or trading, nation. Today most of Brazil’s foreign trade is with the United States, Europe, and Argentina. Brazil imports automobiles, trucks, iron and steel goods, coal, and gasoline. What does it export?

Goods from foreign lands are distributed mostly by water. Ocean liners sail seven hundred miles up the Amazon to Manaus. Smaller vessels carry goods about two thousand miles up the river to Iquitos in Peru. Still smaller boats find their way along the many rivers into the heart of Brazil.

Brazil has more miles of railroads than any other country in South America but Argentina. But Brazil’s railroads do not connect all the cities of the different regions. Only one railway leads into the Interior. The government is extending railroads and the Pan-American Highway through the jungles. But Brazil is so big that it will be a long time before railways and roads can be built to connect all its parts.

The best way to travel in Brazil is by plane. Airplanes are as common there as they are in our country. Rio de Janeiro is connected by plane with all the world’s large cities.

Progressive Brazil

At present Brazilians are working to make their country up to date and progressive. They are inviting skilled workers from our country to help in this work. A few very rich people still own most of the land. But huge fazendas are being broken up into smaller farms. The government is lending people money to buy small farms, so that a larger number can make a living from the land. The growing number of factories employ many more. Commerce and other kinds of business give work to others.

In the past, millions of poor Brazilians received no education. Today, except in sections too hard to reach, there are free public elementary schools, high schools, and colleges. Well-educated people will work to improve their country. The Brazilians are trying to run the government in a democratic way. The United States of Brazil is working toward a government “of the people, by the people, and for the people.”
TO HELP YOU LEARN

Words and Terms You Should Know

fazenda  latex  vulcanize
tagua  campos  carnauba wax
manioc  mosaic  babassú oil

A Matching Game

Number a sheet of paper from 1 through 9. Match the words in the list above with the phrases which define them.

1. Sap of a tree from which rubber is made
2. A large plantation in Brazil
3. The open, grassy plains of Brazil
4. Nuts from which imitation ivory is made
5. Product of a kind of palm tree used in making furniture polish
6. Product of a palm tree used in making soap, margarine, and cooking oil
7. A plant, the roots of which are used to make tapioca
8. A picture or design formed by fitting small colored stones together
9. A way of treating rubber so that it will not melt in hot weather or become stiff in cold weather

Can You Answer These?

1. What language is spoken in Brazil? Why is this so?
2. What are some of the important products of Brazil’s selvas? For what is each used?
3. What is the most important occupation in Brazil? What is raised in the Amazon Valley? In the northern highlands? In the central highlands?
4. Where is Brazil’s coffee land? Explain why its climate, growing season, and rainfall make it good for coffee growing.
5. How much coffee is raised in Brazil? How much is shipped to the United States?
6. Why has Brazil become the most industrialized country in Latin America? Where do its fuel and raw materials come from? What different kinds of goods do the Brazilians manufacture?
7. What are Brazil’s chief exports? What are its imports? What are its chief ports?

A Who’s Who for Cities

Match the cities listed below with the phrases which describe them.

Bahia  Recife  Porto Alegre
Belém  Santos  São Paulo
Manaus  Rosario  Rio de Janeiro

1. The second largest city and greatest industrial center in Brazil
2. The chief sugar port and third largest city in Brazil
3. Brazil’s cacao port, near the equator
4. The largest city in northern Brazil
5. A river port which is a market center for crude rubber and other products
6. The industrial and commercial center of southern Brazil
7. Brazil’s largest city, and its greatest commercial and cultural center
8. The best-known coffee port in the world

Using a Time-line

The events in the history of the eight South American republics in this unit begin in 1500 and extend to 1932. Find these events in the text or on the illustrated time-line at the beginning of this unit and add them to your time-line.

Using Maps

1. Turn to the map of Latin America on page 254. Locate and name the eight countries of this unit. Which country lies farthest north? What parallel of latitude is close to its northern border? Which country extends farthest south? Which country or countries lie entirely in the tropics? Which is entirely a subtropical country? Which lie partly in the tropics and partly in the temperate region?
2. On the same map find the answers to these questions: What ocean borders South America on the east? On the west? Compare the eastern coast line with the western. Which has more and better harbors? Why? Find the Peru Current. Along the coast of which countries does it flow?
3. Use the key or legend at the bottom of the map on Latin America to learn about the surface of these countries. Locate the Andes Mountains. Through which countries do they extend? How do these mountains affect the climate of the country and the life of the people? What is the highest peak? How high is it? Find the Brazilian Highlands. How are they like the Appalachian Highland?

4. How are lowlands shown on the map of Latin America? Find the large river basins. What are they? Where are the pampas? The selvas? The campos? Compare the plains of South America with those of North America.

5. Name two large river systems of South America. Which is the largest? Which countries does it drain? Which river system is next in size? What rivers unite to form this river? What countries does this river system drain? Into what body of water does this river flow? Why are rivers more important for transportation in the countries of South America than in the United States?

6. On a map of the world or on a globe, find which of the eight countries lies nearest to Europe and Africa. Can you explain why more people from Spain and Portugal settled in South America than in North America?

7. On the large outline map which you made for Unit 13, draw and label the equator, the Tropic of Capricorn, and the Antarctic Circle. Mark the oceans, the Strait of Magellan, and the Peru Current. Put in the largest rivers and a few of their largest tributaries. Then put in the physical features.

8. Study the products map on page 445. What countries have good farming and grazing areas? What countries have important minerals? What tropical products are raised?

9. Have you ever made a salt and flour map? If not, one of your teachers can help you mix the ingredients. Trace or make a large outline map of South America, and paste it on cardboard. Then put your flour and salt on to represent mountains, plateaus, and lowlands. When the map is dry, you can put rivers, cities, and so forth on with pencil or ink.

10. Study the maps on page 444, then answer these questions: Which country has the most railways and highways? Which has the least? Compare these maps with the map on page 254 to see how means of transportation affects the location of cities. Which cities are railroad centers? Which can use trucks and automobiles? Which have good water transportation? Which must depend almost entirely on airplanes?

**Interesting Things to Do**

1. The units on the Latin-American countries have many new words. Continue the little dictionary which you started in Unit 13. Use your dictionary in a game to see how many of your classmates know the new words. For example, if one pupil asks, “What is the word for cowboy in Argentina?” the pupil who answers “Gaucho” may ask the next question.

2. You have read about several great men in this unit. Choose one, and pretend you are he. Tell your story to the class. If your hero traveled in South America, use the map to show the route he took.

3. Many people of the United States either visit or work in South America. Latin Americans also visit the United States. Invite some of these people to your classroom to tell you about their countries. Follow their stories on your map.

4. You have read the stories of rubber and coffee in this unit. One group may make a movie or a strip film telling the story of rubber from the time when the trees are tapped until the crude rubber reaches the factory. Another group may make slides showing where and how coffee is raised. Be sure that you know where the crops are raised and can point them out on a map. Prepare talks to give as you show the movie, strip film, or slides.

5. The South American countries you have studied in this unit have many beautiful statues, buildings, and cities. Collect pictures of these for your scrapbook.

6. Go to the library or to the art museum to look at examples of the arts and crafts of each country. Ask your art teacher to help you make some of the articles.
7. Find pictures showing the different kinds of costumes worn in these countries. Dress dolls in these costumes.
8. Collect flags of the Latin-American nations. You can usually buy flags of different nations through the American Legion.
9. Ask your music teacher to teach you Latin-American songs and your physical education teacher to teach you a few of the dances.
10. Find out what foods the people in these countries eat. Then, with the help of your teacher, or your parents, prepare and serve a Latin-American meal.
11. Many interesting stories are told in, and about, the eight countries in this unit. The librarian in your school will help you find some of these. You will enjoy stories about the Island of the Sun and the Island of the Moon in Lake Titicaca, how Patagonia (which means “Land of the Big Feet”) got its name, why Magellan called Tierra del Fuego “Land of Fire,” how coffee came to Brazil, the story of rubber in South America, and the story of the Christ of the Andes.
12. Hold a Latin-American fiesta. Show your art work, and your scrapbooks. Sing the songs and dance the dances you have learned. Show the slides, movies, and strip films you have made. Give the play, and tell the stories you prepared. Finish your fiesta by serving refreshments which might be served in these Latin-American countries.

**Things to Think About**
1. The wars for independence in the South American colonies were fought for many of the same reasons as the American Revolution. What were some of these reasons?
2. In what ways were George Washington and Simón Bolívar alike as leaders? How were they different?
3. The people of Brazil had a democratic emperor, Dom Pedro II. Why did they force him to leave the country?

**Matching Causes and Results**
Each event in column 1 was the cause of an event listed in column 2. Match the causes and results.

1. In 1500 a Portuguese sea captain touched the shore of what is now Brazil.
2. The Spanish king tried to force the colonists to obey his laws.
3. Most of Paraguay’s men were killed.
4. All raw materials were sent to Spain to be manufactured.
5. San Martín drove the Spanish governor and his army out of Argentina.
6. Planters in Asia began to grow rubber.
7. Bolívar and Sucre defeated the armies of Spain and drove them out of Peru.
8. Nitrates were found in the Atacama Desert.
9. Brazil declared itself a republic.
10. The cold Peru Current flows near the western coast of South America.

**a.** Peru won its independence.
**b.** Dom Pedro, the emperor, was forced to leave Brazil.
**c.** Winds blowing over the coastal plain of Peru are cold and dry.
**d.** South Americans began their fight for freedom.
**e.** Manaus in Brazil became a ghost town.
**f.** Manufactured goods were scarce and prices high in the colonies of South America.
**g.** Paraguay came to be called the “land of women.”
**h.** The Portuguese claimed land in the New World.
**i.** Argentina gained its independence.
**j.** Chile, Bolivia, and Peru fought a war to gain possession of a desert.

**Making a Chart**
Make a chart for the eight South American countries. Include the capital city, the area of the country, the population, mineral resources, and the chief products. The chart has been started for you.

<table>
<thead>
<tr>
<th>Country</th>
<th>Capital</th>
<th>Area</th>
<th>Population</th>
<th>Minerals</th>
<th>Chief Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Buenos Aires</td>
<td></td>
<td></td>
<td>Oil, lead, copper, aluminum</td>
<td>Beef, hides, wool, mutton, grain, sugar</td>
</tr>
</tbody>
</table>
One April day in 1948 a group of delegates from all parts of the Americas drove out of the city of Bogotá toward Caracas. In Bogotá a great American conference had been held and a treaty had been written. Now the delegates were on their way to the home of Simón Bolívar, where the treaty was to be signed.

The meeting in Bolívar’s home

A chilly rain fell as they arrived at the whitewashed colonial house of the Liberator. Inside on the great dining table lay the treaty which put into writing a plan for co-operation and defense among the twenty-one American nations. One by one the men stepped up to sign for their countries. As each delegate signed, a band in the patio struck up his country’s national anthem. Halfway through the signing, the electricity failed. The great room was completely dark. Quietly candles were brought, and the signing went on by their flickering light. Finally each of the twenty-one nations had put its name to the treaty.

What was this conference and why was it so important? This meeting had been called to strengthen the plans for unity among the American nations. The treaty that was signed at Bogotá was an agreement to make our hemisphere a place where people could work together in peace.

Simón Bolívar’s plan for union

The meeting at Bogotá was not the first all-American, or Pan-American, conference. More than one hundred years before, Simón Bolívar had a plan for unity among all the American nations. He had a dream of a “society of brother nations . . . united, strong, powerful to resist the aggressions [attacks] of the foreigner.” Because of this he had called a meeting in Panama to form a league, or union, against enemies from the Old World. But not many nations sent representatives to the meeting. People were not ready for union.
then. Simón Bolívar did not live to see his dream come true.

**Forming of the Pan American Union**

But the idea of a union of American nations did not die. Some years later the United States took the lead in calling a meeting in Washington, D. C. It was in 1889 that our Secretary of State, James G. Blaine, invited all the American nations to send representatives to our nation’s capital. At this meeting the delegates talked together about the problems of the Americas. The conference lasted five months. Before it ended, a new department was set up to increase trade among the American republics. This department came to be called the *Pan American Union*.

At the first Pan-American Conference plans were made for other meetings to be held every four or five years. But the next meeting did not take place until 1901. Then Mexico invited its American neighbors to come there as its guests.

**Arbitration as a way to settle quarrels**

The delegates at the conference in Mexico City talked about many things. But they disagreed when they discussed *arbitration*. Arbitration is a way of settling quarrels between nations by asking an outside person or persons to decide which nation is in the right. That is, instead of going to war the quarreling nations would agree to accept the decision of an impartial person or group of persons. The delegates at Mexico City did not accept arbitration because they did not like to think they had to bring their quarrels to other people to be settled, whether they wanted to or not.

But arbitration has been used to avoid war on a number of occasions. Once when Argentina and Brazil could not agree about boundaries the President of the United States was asked to arbitrate the question. He studied both sides of the problem and decided in favor of Brazil. And Argentina accepted the decision. It was a bloodless victory, for the countries did not go to war.

The most famous example of arbitration had to do with a dispute about part of the boundary line between Chile and Argentina. In 1903 both countries were preparing to go to war. Then they were persuaded to have the boundary question arbitrated by referring it to the king of England. His decision placed the location of the boundary line in the high peaks of the Andes Mountains. Both countries accepted his decision, and it saved them a long and costly war. The people of both Argentina and Chile were grateful that peace had been brought about through arbitration.

To celebrate the peace, the school children of both nations gave their pennies to build a statue. This statue, called the Christ of the Andes, was placed high in the mountains on the border between Argentina and Chile. It was made of melted cannon, some of the very cannon which would have been used in the war which did not happen.

The Christ of the Andes statue was finished in 1904. It stands on the boundary line of

*In the patio of Bolívar’s birthplace, in Caracas, delegates from all parts of the Americas signed a treaty to work together for peace and security. Caracas is on the Pan-American Highway. A view of this highway, which unites the Americas, is shown at the top of the facing page.*
Argentina and Chile to remind them of their promise to keep the peace forever. Many persons visit the statue each year. As they gaze upon it, they remember that arbitration is a better way to settle quarrels than war.

On several other occasions, arbitration has been used to settle quarrels in the Americas. A boundary dispute between Chile and Peru which had lasted for fifty years was finally settled by arbitration. After three years of bloody fighting, the Chaco War between Bolivia and Paraguay was brought to an end in the same way. From this we can see that arbitration has often helped to keep the peace in the Americas. By preventing war it has saved many lives and millions of dollars.

Meetings of the Pan-American nations are now held every four years. At these meetings the delegates talk about the problems of the Americas. They discuss such questions as trade and transportation, education, and health. The Pan American Union has done much to solve these problems and to help the American nations understand each other better. Each Latin-American nation takes its turn at the presidency of the union. In this union all nations — large and small — have the same number of representatives. Here they can work out their problems together.

The Pan American Union building

The Pan American Union now has its own building in Washington, D. C., where representatives meet and carry on its work. When important persons from other American countries come to the United States, they are entertained in this beautiful white marble building. Its lovely patio, filled with tropical trees and plants, reminds many of the foreign visitors of their homelands in Latin America.

Many persons from the United States come to see the Pan American Union building each year. They admire the patio. They visit the big council room, where the representatives meet to discuss the questions that are brought before the union. Then they note that there are twenty-two chairs in the council room. But there are only twenty-one American nations in the union now. The remaining chair, now empty, is being saved for the time when Canada joins the Pan American Union.

The Good-Neighbor policy

As the United States grew in size, the Latin-American nations began to be afraid of the great country to the north. One reason for this was the natural fear that any small nation may feel for a large and powerful neighbor. Another reason was that on several occasions when some Latin-American governments were weak and could not keep order we sent our soldiers or marines into these countries. Sometimes the troops went in to collect debts and at other times to help keep the peace.

The United States knew that some Latin-American nations were not strong enough to protect themselves. But the Latin Americans did not like to have the United States take charge of their affairs. Then two things happened to bring about a change. The Latin-American nations became more settled in their governments. And the United States came to realize that it should be more friendly to its southern neighbors. It sent no more troops into their lands, and it began to show more respect for their governments.
When Franklin D. Roosevelt became President in 1933, he made it clear that the United States was going to be friendly to and work with the countries of Latin America. He stated that we were going to be a "good neighbor" to the other countries in the New World. He said that a good neighbor respects the rights of others because he respects himself. He does neighborly acts for the good of the community. But he does not force his will upon others. He keeps his promises when he makes an agreement with his neighbors. This plan, or policy, which the United States has tried to follow in recent years has come to be known as the Good-Neighbor policy. It has helped to make our Latin-American neighbors our friends.

The real test of the Good-Neighbor policy came when Great Britain and France declared war on Germany in 1939. The representatives of the American republics immediately met in Panama. At this meeting they decided that the American nations would not take sides in the war. They also declared that the countries at war must not do any of their fighting in American waters.

Two years later, on December 7, 1941, the United States was attacked at Pearl Harbor by the Japanese. Japan was an ally of Germany. Again the Good-Neighbor policy was put to the test. One of the American nations, the United States, had been attacked by a foreign nation. What would the other American republics do?

The answer was not long in coming. Within a matter of hours little Costa Rica declared war upon Japan. A meeting of the Pan-American representatives was called. But before they had assembled, eight more Latin-American nations declared war on Germany and Japan. The representatives at this meeting stated that the attack on the United States was a threat to all the Americas. Other declarations of war followed promptly. The war, called World War II, ended in 1945.

As the war went on, all the Latin-American nations finally joined in. The United States and all countries of Latin America stood together against the enemy. World War II showed that the American nations were willing to be good neighbors. They had learned the importance of acting together for the good of all. Soon after the war a meeting was held at Rio de Janeiro to make plans for the defense of the Western Hemisphere. In case of another attack the Americas wanted to be ready.

Our good neighbor Canada

To the north of the United States is another important neighbor, Canada. Perhaps it is because the people of Canada are so much like us that we have found it easy to live near them and work with them. When trouble has come to them, they have found that they have good friends in the United States. In 1950 the Canadian city of Winnipeg was all but swept away by floods. Some people in the United States sent money to help Winnipeg. Other groups sent food, clothing, doctors, nurses, and medicines to help. This was the act of a good neighbor. Examples of this have occurred many times between the two countries.

The people of Canada and the United States have shown their friendship in other
ways. The Peace Bridge on the boundary line near Buffalo, New York, and the Peace Garden between North Dakota and Manitoba, Canada, are monuments to our friendship. When the Peace Garden was opened in 1932, more than fifty thousand people from the United States and Canada were present. These people raised their hands and said, "To God and His glory we two nations dedicate this garden and pledge ourselves that as long as man shall live we will not take up arms against each other."

There is also a Peace Arch and a park on the boundary between Washington and British Columbia. This park is often used for international gatherings where citizens of both countries meet and mingle.

We can be sure that our Canadian neighbors will continue to work with us for the good of the people of both nations.

**Americans All**

Since Simón Bolívar’s time Americans have learned many things which should help us to live together in peace. We will go on learning better ways. If we remember that we are all Americans, it may help us to work together for the good of all. A Latin-American poet has expressed the idea that we are all Americans in these lines:

> We who came to life’s beginnings  
> Here within the western world  
> Born the heirs to freedom’s birthright —  
> We wear one and twenty titles. . . .

By these one and twenty titles  
Each one different from the others  
We may mark our separate stations.

But we have one name that joins us  
One that binds us all together,  
One that sheds a wider glory —  
All are free Americans.

**The United Nations**

After World War II the American republics joined other nations of the world in setting up a new organization called the United Nations. The United Nations was formed to help the nations of the world settle their differences peacefully. All twenty-one American republics and Canada became members of the United Nations when it was first organized in 1945.

This did not mean that they had given up their plans to work together in the Pan American Union. Not at all. They continued to look for ways to strengthen and improve the union. And, as we have seen, in 1948 they drew up the treaty which was signed by twenty-one American republics in the old home of Simón Bolívar.

In the Western Hemisphere today there are many problems still to be solved. But the Americas are learning to live together in a friendly way and to take their place in the larger community of the world. We are a family of nations and good neighbors to all the world.
## REFERENCE TABLES

### UNITED STATES OF AMERICA: Total Area, 3,022,387 Sq. M. Population, 157,269,000 Capital, Washington, D.C.

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<tr>
<th>State</th>
<th>Capital</th>
<th>Largest City</th>
<th>Land Area</th>
<th>Population in 1950</th>
<th>Admitted to Union</th>
<th>State Flower</th>
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## Territories and Dependencies of the United States

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<th>Seat of Government</th>
<th>Name</th>
<th>Date Acquired</th>
<th>Seat of Government</th>
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<td>Juneau</td>
<td>Howland, Jarvis, Baker Is.</td>
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<td>1900</td>
<td>Pago Pago</td>
<td>Midway, Wake Is.</td>
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<td>1939</td>
<td>Agana</td>
<td>Panama Canal Zone</td>
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<td>Honolulu</td>
<td>Puerto Rico</td>
<td>1898</td>
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<td>Hawaiian Islands</td>
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<td>Virgin Islands</td>
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<td>Province</td>
<td>Capital</td>
<td>Area</td>
<td>Population</td>
<td>Interesting Facts and Products</td>
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**ICELAND**: Total Area, 39,758 Sq. M.  
Population, 145,000  
Capital, Reykjavik

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<th>Population</th>
<th>Interesting Facts and Products</th>
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<td>Fort-de-France</td>
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<td>160,329</td>
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<tr>
<td>Trinidad (Br.)</td>
<td>Port of Spain</td>
<td>1,864</td>
<td>611,000</td>
<td>Discovered by Columbus; oil, spices, sugar</td>
</tr>
<tr>
<td>Windward Is. (Br.)</td>
<td>St. George's</td>
<td>821</td>
<td>273,000</td>
<td>Cacao, nutmeg, sugar, bananas</td>
</tr>
</tbody>
</table>

**Latin-American Republics**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Buenos Aires</td>
<td>1,072,745</td>
<td>15,400,000</td>
<td>1816</td>
<td>Wheat, beef, hides, metals, sugar</td>
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<tr>
<td>Bolivia</td>
<td>La Paz, Sucre</td>
<td>416,040</td>
<td>4,000,000</td>
<td>1825</td>
<td>Tin, silver, tungsten, oil, rubber</td>
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<tr>
<td>Brazil</td>
<td>Rio de Janeiro</td>
<td>3,286,169</td>
<td>51,100,000</td>
<td>1822</td>
<td>Coffee, rubber, sugar, cotton, gold</td>
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<tr>
<td>Chile</td>
<td>Santiago</td>
<td>286,396</td>
<td>5,800,000</td>
<td>1818</td>
<td>Nitrate, wool, manufacturing, wine</td>
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<tr>
<td>Colombia</td>
<td>Bogotá</td>
<td>439,825</td>
<td>11,200,000</td>
<td>1813</td>
<td>Coffee, tobacco, balsam, oil, gold</td>
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<tr>
<td>Costa Rica</td>
<td>San José</td>
<td>19,238</td>
<td>835,000</td>
<td>1821</td>
<td>Cacao, lumber, hemp, rubber, coffee</td>
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<tr>
<td>Cuba</td>
<td>Havana</td>
<td>44,217</td>
<td>5,360,000</td>
<td>1898</td>
<td>Discovered by Columbus; sugar, tobacco</td>
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<tr>
<td>Dominican Republic</td>
<td>Ciudad Trujillo</td>
<td>19,129</td>
<td>2,370,000</td>
<td>1844</td>
<td>Discovered by Columbus; sugar, cacao, coffee, rum, molasses</td>
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<tr>
<td>Ecuador</td>
<td>Quito</td>
<td>104,510</td>
<td>3,550,000</td>
<td>1822</td>
<td>Cacao, rice, bananas, Panama hats</td>
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<tr>
<td>El Salvador</td>
<td>San Salvador</td>
<td>13,176</td>
<td>2,180,000</td>
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<td>Coffee, henequen, gold, balsam</td>
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<tr>
<td>Guatemala</td>
<td>Guatemala City</td>
<td>42,044</td>
<td>3,800,000</td>
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<td>Land of Mayas; coffee, chicle</td>
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<tr>
<td>Haiti</td>
<td>Port-au-Prince</td>
<td>10,700</td>
<td>3,100,000</td>
<td>1804</td>
<td>Discovered by Columbus; coffee</td>
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<td>Honduras</td>
<td>Tegucigalpa</td>
<td>59,160</td>
<td>1,315,000</td>
<td>1821</td>
<td>Bananas, coconuts, lumber, cattle</td>
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<tr>
<td>Mexico</td>
<td>Mexico City</td>
<td>758,550</td>
<td>25,150,000</td>
<td>1813</td>
<td>Land of Aztecs; oil, hemp, silver</td>
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<tr>
<td>Nicaragua</td>
<td>Managua</td>
<td>57,144</td>
<td>1,200,000</td>
<td>1821</td>
<td>Gold, coffee, bananas, sugar</td>
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<td>Panama</td>
<td>Panama City</td>
<td>28,575</td>
<td>770,000</td>
<td>1803</td>
<td>Bananas, pineapples, cacao</td>
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<tr>
<td>Paraguay</td>
<td>Asunción</td>
<td>150,516</td>
<td>1,265,000</td>
<td>1811</td>
<td>Beef, hides, oranges, yerba mate</td>
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<tr>
<td>Peru</td>
<td>Lima</td>
<td>482,257</td>
<td>8,400,000</td>
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<td>Land of Incas; cotton, sugar, oil</td>
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<td>Uruguay</td>
<td>Montevideo</td>
<td>72,172</td>
<td>2,385,000</td>
<td>1828</td>
<td>Meat, wool, hides, textiles</td>
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<tr>
<td>Venezuela</td>
<td>Caracas</td>
<td>352,141</td>
<td>4,650,000</td>
<td>1811</td>
<td>Oil, coffee, cacao, hides, rubber</td>
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<tr>
<td>City, Ohio</td>
<td>Population</td>
<td>Interesting Facts and Products</td>
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<tr>
<td>Akron, Ohio</td>
<td>274,605</td>
<td>Rubber products, glass</td>
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<td>Albany, N.Y.</td>
<td>134,995</td>
<td>Rubber products, glass</td>
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<tr>
<td>Albuquerque, N. Mex.</td>
<td>96,815</td>
<td>Farm products, lumber</td>
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<tr>
<td>Allentown, Pa.</td>
<td>106,756</td>
<td>Textiles, cement, flour</td>
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<tr>
<td>Altoona, Pa.</td>
<td>71,177</td>
<td>Locomotives, textiles</td>
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<tr>
<td>Amarillo, Tex.</td>
<td>74,246</td>
<td>Wheat, gas, helium, oil</td>
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<td>Anacoda, Mont.</td>
<td>11,254</td>
<td>Copper smelting, zinc</td>
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<tr>
<td>Annapolis, Md.</td>
<td>10,047</td>
<td>U.S. Naval Academy</td>
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<tr>
<td>Asheville, N.C.</td>
<td>53,000</td>
<td>Resort; textiles, lumber</td>
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<tr>
<td>Atlantic City, N.J.</td>
<td>331,314</td>
<td>Rail center; center;</td>
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<td>Augusta, Me.</td>
<td>71,508</td>
<td>Seaplane base</td>
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<tr>
<td>Augusta, Ga.</td>
<td>20,913</td>
<td>Textiles, brick, lumber</td>
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<tr>
<td>Austin, Tex.</td>
<td>132,459</td>
<td>Textiles, lumber, paper</td>
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<td>Baltimore, Md.</td>
<td>949,708</td>
<td>Leather, meat packing</td>
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<tr>
<td>Bangor, Me.</td>
<td>31,558</td>
<td>Lumber, shoes, paper</td>
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<tr>
<td>Barre, Vt.</td>
<td>10,922</td>
<td>Resort; granite</td>
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<td>Baton Rouge, La.</td>
<td>125,629</td>
<td>Oil, chemicals</td>
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<tr>
<td>Bayonne, N.J.</td>
<td>77,203</td>
<td>Oil refineries, ships</td>
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<tr>
<td>Berkeley, Calif.</td>
<td>113,805</td>
<td>College; resort</td>
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<tr>
<td>Beaumont, Tex.</td>
<td>94,014</td>
<td>Lumber, rice, cotton</td>
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<td>Bethlehem, Pa.</td>
<td>66,340</td>
<td>Music festival; steel</td>
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<tr>
<td>Billings, Mont.</td>
<td>31,834</td>
<td>Sugar beets, flour, meat</td>
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<tr>
<td>Biloxi, Miss.</td>
<td>37,425</td>
<td>Oysters, shrimps, boats</td>
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<tr>
<td>Birmingham, Ala.</td>
<td>326,037</td>
<td>Rail center; iron, steel</td>
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<tr>
<td>Bismarck, N.D.</td>
<td>18,640</td>
<td>Coal, wheat, poultry</td>
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<tr>
<td>Boise, Idaho</td>
<td>34,393</td>
<td>Gold, food processing</td>
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<tr>
<td>Boston, Mass.</td>
<td>801,444</td>
<td>Seaport; fish, wool</td>
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<tr>
<td>Bridgeport, Conn.</td>
<td>158,709</td>
<td>Ships, electrical goods</td>
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<tr>
<td>Brockton, Mass.</td>
<td>62,860</td>
<td>Shoes, leather, boxes</td>
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<tr>
<td>Buffalo, N.Y.</td>
<td>580,132</td>
<td>Lake port; flour, meat</td>
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<tr>
<td>Burbank, Calif.</td>
<td>78,577</td>
<td>Aircraft; movies</td>
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<tr>
<td>Burlington, Vt.</td>
<td>33,155</td>
<td>Lake port; maple sugar</td>
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<tr>
<td>Butte, Mont.</td>
<td>33,251</td>
<td>Leading copper area</td>
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<tr>
<td>Cambridge, Mass.</td>
<td>120,740</td>
<td>Soap, candy; colleges</td>
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<tr>
<td>Camden, N.J.</td>
<td>124,555</td>
<td>Ships, radios, chemicals</td>
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<tr>
<td>Canton, Ohio</td>
<td>116,912</td>
<td>Iron, steel; engines, oil</td>
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<tr>
<td>Carson City, Nev.</td>
<td>3,082</td>
<td>Resort; silver, livestock</td>
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<td>Casper, Wyo.</td>
<td>23,673</td>
<td>Oil refineries, canvas</td>
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<tr>
<td>Cedar Rapids, Iowa</td>
<td>72,296</td>
<td>Cereals, meat packing</td>
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<tr>
<td>Charleston, S.C.</td>
<td>70,174</td>
<td>Seaport; naval base</td>
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<tr>
<td>Charleston, W. Va.</td>
<td>73,501</td>
<td>Glass, coal, chemicals</td>
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<tr>
<td>Chattanooga, Tenn.</td>
<td>131,041</td>
<td>Heavy machinery; cotton</td>
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<td>Chester, Pa.</td>
<td>66,039</td>
<td>Ships, steel, cars</td>
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<tr>
<td>Cheyenne, Wyo.</td>
<td>31,935</td>
<td>Rail center; livestock</td>
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<td>Chicago, Ill.</td>
<td>3,620,962</td>
<td>Rail center; livestock</td>
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<td>2nd largest U.S. city</td>
<td>River port; soap, meat</td>
<td></td>
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<tr>
<td>2nd largest U.S. city</td>
<td>Lake port; iron, steel</td>
<td></td>
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<tr>
<td>Cities</td>
<td>503,998</td>
<td>Textiles, fertilized</td>
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<td>Columbus, Ohio</td>
<td>914,808</td>
<td>Cotton, lumber, iron</td>
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<td>Columbus, Ga.</td>
<td>89,549</td>
<td>Meat, aircraft; college</td>
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<td>Columbus, Ohio</td>
<td>79,611</td>
<td>Printing, yarn, granite</td>
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<td>Concord, N.H.</td>
<td>27,988</td>
<td>Seaport; resort; oil, gas, cotton</td>
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<tr>
<td>Corpus Christi, Tex.</td>
<td>108,287</td>
<td>X-ray equipment, clay</td>
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<td>Covington, Ky.</td>
<td>64,452</td>
<td>Textiles, soft drinks</td>
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<tr>
<td>Cranston, R.I.</td>
<td>55,060</td>
<td>Banking; insurance; oil</td>
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<tr>
<td>Dallas, Tex.</td>
<td>143,462</td>
<td>River port; engines</td>
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<tr>
<td>Davenport, Iowa</td>
<td>74,549</td>
<td>Chief U.S. air center</td>
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<tr>
<td>Dayton, Ohio</td>
<td>243,872</td>
<td>Automobiles</td>
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<tr>
<td>Dearborn, Mich.</td>
<td>94,994</td>
<td>Soybeans, starch, corn</td>
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<td>Decatur, Ill.</td>
<td>66,269</td>
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<td>Denver, Colo.</td>
<td>415,786</td>
<td>Livestock; U.S. Mint</td>
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<td>Des Moines, Iowa</td>
<td>177,965</td>
<td>Farm products, insurance</td>
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<td>Detroit, Mich.</td>
<td>1,849,568</td>
<td>Lake port; cars, planes</td>
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<td>Dover, Del.</td>
<td>6,225</td>
<td>Poutry, farm products</td>
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<tr>
<td>Dubuque, Iowa</td>
<td>49,671</td>
<td>Ships, poultry, meat</td>
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<td>Duluth, Minn.</td>
<td>104,511</td>
<td>Lake port; iron, wheat</td>
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<tr>
<td>Durham, N.C.</td>
<td>71,311</td>
<td>Tobacco, cotton</td>
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<td>East St. Louis, Ill.</td>
<td>122,385</td>
<td>River port; iron, steel</td>
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<tr>
<td>Elizabeth, N.J.</td>
<td>130,485</td>
<td>Seaport; refineries</td>
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<tr>
<td>El Paso, Tex.</td>
<td>35,879</td>
<td>Rail center; livestock</td>
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<tr>
<td>Erie, Pa.</td>
<td>130,803</td>
<td>Port; coal, gas</td>
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<td>Eugene, Ore.</td>
<td>128,636</td>
<td>Dairying, canneries</td>
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<tr>
<td>Evansville, Ind.</td>
<td>111,963</td>
<td>Cars, gas engines</td>
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<tr>
<td>Fall River, Mass.</td>
<td>38,256</td>
<td>Wheat, sugar beets</td>
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<tr>
<td>Fargo, N.D.</td>
<td>163,141</td>
<td>Automobiles, aircraft</td>
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<tr>
<td>Flint, Mich.</td>
<td>47,942</td>
<td>Furniture, glass</td>
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<tr>
<td>Fort Smith, Ark.</td>
<td>133,607</td>
<td>Trucks, electrical goods</td>
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<tr>
<td>Fort Wayne, Ind.</td>
<td>278,778</td>
<td>Airport; stockyards; oil</td>
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<tr>
<td>Fort Worth, Tex.</td>
<td>11,916</td>
<td>Race horses, tobacco</td>
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<tr>
<td>Frankfort, Ky.</td>
<td>91,669</td>
<td>Raisins, canneries</td>
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<tr>
<td>Fresno, Calif.</td>
<td>55,725</td>
<td>Iron, limestone, coal</td>
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<tr>
<td>Gadsden, Ala.</td>
<td>66,689</td>
<td>Seaport; resort; fishing</td>
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<tr>
<td>Galveston, Tex.</td>
<td>133,911</td>
<td>Steel, iron, coal</td>
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<td>Gary, Ind.</td>
<td>95,702</td>
<td>Aircraft, oil</td>
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<tr>
<td>Glendale, Calif.</td>
<td>22,682</td>
<td>Rail center; livestock</td>
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<tr>
<td>Grand Island, Neb.</td>
<td>176,515</td>
<td>Furniture, chemicals</td>
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<tr>
<td>Grand Rapids, Mich.</td>
<td>39,214</td>
<td>Copper, zinc, wire, oil</td>
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<tr>
<td>Great Falls, Mont.</td>
<td>20,354</td>
<td>Beet-sugar refining</td>
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<tr>
<td>Greeley, Colo.</td>
<td>52,735</td>
<td>Paper, cheese, lumber</td>
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</tr>
<tr>
<td>Green Bay, Wis.</td>
<td>74,389</td>
<td>Denim, tobacco, lumber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greensboro, N.C.</td>
<td>58,161</td>
<td>Textiles, food products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenville, S.C.</td>
<td>87,594</td>
<td>Rail center; iron, steel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hammond, Ind.</td>
<td>89,544</td>
<td>Steel, tools, brick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrisburg, Pa.</td>
<td>177,397</td>
<td>Insurance; tobacco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hartford, Conn.</td>
<td>20,211</td>
<td>Wheat-growing center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hasting, Neb.</td>
<td>17,581</td>
<td>Lead, livestock, grain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helena, Mont.</td>
<td>54,661</td>
<td>Paper, textiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holyoke, Mass.</td>
<td>29,307</td>
<td>Resort; national park</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot Springs, Ark.</td>
<td>596,163</td>
<td>Seaport; oil, ships</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houston, Tex.</td>
<td>86,355</td>
<td>Glass, shoes, stoves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huntsville, Tenn.</td>
<td>427,173</td>
<td>Rail center; livestock</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indianapolis, Ind.</td>
<td>98,271</td>
<td>Cotton market, lumber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson, Miss.</td>
<td>204,517</td>
<td>Lumber, naval stores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacksonville, Fla.</td>
<td>25,099</td>
<td>Clothing, shoes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jefferson City, Mo.</td>
<td>299,017</td>
<td>Seaport; soap, plastics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jersey City, N.J.</td>
<td>63,232</td>
<td>Iron, steel, coal, clay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnstown, Pa.</td>
<td>57,704</td>
<td>Paper, stoves, drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalamazoo, Mich.</td>
<td>129,553</td>
<td>Stockyards, flour mills</td>
<td></td>
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</tr>
<tr>
<td>Kansas City, Kan.</td>
<td>456,622</td>
<td>Stockyards, grain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas City, Mo.</td>
<td>54,368</td>
<td>Cars, metal products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenosha, Wis.</td>
<td>124,769</td>
<td>Tobacco, textiles; TVA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knoxville, Tenn.</td>
<td>63,774</td>
<td>Linoleum, paint, steel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lancaster, Pa.</td>
<td>92,129</td>
<td>Cars, engines, chemicals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lansing, Mich.</td>
<td>24,624</td>
<td>Resort; gold, silver</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Las Vegas, Nev.</td>
<td>80,536</td>
<td>Woolen textiles, paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lawrence, Mass.</td>
<td>55,534</td>
<td>Tobacco, race horses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lexington, Ky.</td>
<td>98,884</td>
<td>Oil refineries, grain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lincoln, Neb.</td>
<td>102,213</td>
<td>Lumber, bauxite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little Rock, Ark.</td>
<td>250,767</td>
<td>Naval base; resort; fish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Beach, Calif.</td>
<td>1,970,358</td>
<td>Oil, planes, movies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles, Calif.</td>
<td>369,129</td>
<td>River port; tobacco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisville, Ky.</td>
<td>97,249</td>
<td>Textiles, shoes, printing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Population</td>
<td>Interesting Facts and Products</td>
<td>City</td>
<td>Population</td>
<td>Interesting Facts and Products</td>
</tr>
<tr>
<td>--------------------</td>
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</tr>
<tr>
<td>Lubbock, Tex.</td>
<td>71,747</td>
<td>Poultry, cotton, peanuts</td>
<td>Rockford, Ill.</td>
<td>92,927</td>
<td>Farm machines, cement</td>
</tr>
<tr>
<td>Lynn, Mass.</td>
<td>99,738</td>
<td>Shoes, electrical goods</td>
<td>Roswell, N. Mex.</td>
<td>25,738</td>
<td>Cotton, wool, grain</td>
</tr>
<tr>
<td>McKeensport, Pa.</td>
<td>51,502</td>
<td>Coal, steel products</td>
<td>Rutland, Vt.</td>
<td>17,659</td>
<td>Marble, scales</td>
</tr>
<tr>
<td>Macon, Ga.</td>
<td>70,252</td>
<td>Textiles, clay, bricks</td>
<td>Sacramento, * Calif.</td>
<td>137,572</td>
<td>Lumber, mining</td>
</tr>
<tr>
<td>Madison, * Wis.</td>
<td>96,056</td>
<td>Dairy products; college</td>
<td>Saginaw, Mich.</td>
<td>92,918</td>
<td>Sugar, automobiles</td>
</tr>
<tr>
<td>Manchester, N.H.</td>
<td>82,732</td>
<td>Textiles, shoes, lumber</td>
<td>St. Augustine, Fla.</td>
<td>13,555</td>
<td>Oldest U.S. city</td>
</tr>
<tr>
<td>Memphis, Tenn.</td>
<td>396,000</td>
<td>Mules, cotton market</td>
<td>St. Louis, Mo.</td>
<td>78,588</td>
<td>Livestock, flour, paper</td>
</tr>
<tr>
<td>Miami, Fla.</td>
<td>249,276</td>
<td>Airport; seaport; resort</td>
<td>St. Paul, * Minn.</td>
<td>856,796</td>
<td>Furs, grain, livestock</td>
</tr>
<tr>
<td>Milwaukee, Wis.</td>
<td>657,392</td>
<td>Lake port; rail center</td>
<td>St. Petersburg, Fla.</td>
<td>311,349</td>
<td>Dairy products, meat</td>
</tr>
<tr>
<td>Minneapolis, Minn.</td>
<td>521,718</td>
<td>Rail center; flour, wheat</td>
<td>Salem, * Ore.</td>
<td>96,738</td>
<td>Resort; furniture, fish</td>
</tr>
<tr>
<td>Mobile, Ala.</td>
<td>129,009</td>
<td>Seaport; naval stores</td>
<td>Salt Lake City, *</td>
<td>43,140</td>
<td>Canneries, linen, wool</td>
</tr>
<tr>
<td>Montgomery, * Ala.</td>
<td>166,525</td>
<td>Lumber, textiles</td>
<td>Utah</td>
<td>182,121</td>
<td>Airport; steel, oil, salt</td>
</tr>
<tr>
<td>Montpelier, * Vt.</td>
<td>8,559</td>
<td>Granite, maple sugar</td>
<td>San Antonio, Tex.</td>
<td>408,442</td>
<td>Alamo; air center</td>
</tr>
<tr>
<td>Muncie, Ind.</td>
<td>58,479</td>
<td>Jars, glass, iron</td>
<td>San Diego, Calif.</td>
<td>334,387</td>
<td>Naval base; aircraft</td>
</tr>
<tr>
<td>Muskogee, Okla.</td>
<td>37,289</td>
<td>Oil, livestock</td>
<td>San Francisco, Calif.</td>
<td>775,357</td>
<td>Seaport; banking; U.S. Mint</td>
</tr>
<tr>
<td>Nashua, N.H.</td>
<td>34,669</td>
<td>Paper, blankets</td>
<td>New Bedford, Mass.</td>
<td>109,189</td>
<td></td>
</tr>
<tr>
<td>Nashville, * Tenn.</td>
<td>174,307</td>
<td>Rayon, tobacco</td>
<td>New Britain, Conn.</td>
<td>73,726</td>
<td></td>
</tr>
<tr>
<td>Natchez, Miss.</td>
<td>22,740</td>
<td>River port; cotton</td>
<td>New Haven, Conn.</td>
<td>164,443</td>
<td></td>
</tr>
<tr>
<td>Newark, N.J.</td>
<td>438,776</td>
<td>Seaport; ships, cable</td>
<td>New Orleans, La.</td>
<td>570,445</td>
<td></td>
</tr>
<tr>
<td>New Bedford, Mass.</td>
<td>109,189</td>
<td>Cotton textiles, fish, needles</td>
<td>Newport, R.I.</td>
<td>37,650</td>
<td></td>
</tr>
<tr>
<td>New Bedford, Mass.</td>
<td>109,189</td>
<td>Hardware, tools</td>
<td>Newport News, Va.</td>
<td>42,358</td>
<td></td>
</tr>
<tr>
<td>New York, N.Y.</td>
<td>7,891,957</td>
<td></td>
<td>New York, N.Y.</td>
<td>7,891,957</td>
<td></td>
</tr>
<tr>
<td>Niagara Falls, N.Y.</td>
<td>90,872</td>
<td></td>
<td>Norfolk, Va.</td>
<td>213,513</td>
<td></td>
</tr>
<tr>
<td>Oakland, Calif.</td>
<td>384,575</td>
<td></td>
<td>Oakland, Calif.</td>
<td>357,645</td>
<td></td>
</tr>
<tr>
<td>Oakland Ridge, Tenn.</td>
<td>30,229</td>
<td></td>
<td>Ogden, Utah</td>
<td>57,112</td>
<td></td>
</tr>
<tr>
<td>Oklahoma City, *</td>
<td>243,504</td>
<td></td>
<td>Oklahoma City, Okla.</td>
<td>162,399</td>
<td></td>
</tr>
<tr>
<td>Olympia, * Wash.</td>
<td>15,819</td>
<td></td>
<td>Omaha, Neb.</td>
<td>251,117</td>
<td></td>
</tr>
<tr>
<td>Orlando, Fla.</td>
<td>52,367</td>
<td></td>
<td>Orlando, Fla.</td>
<td>104,577</td>
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</tr>
<tr>
<td>Pasadena, Calif.</td>
<td>139,597</td>
<td></td>
<td>Paterson, N.J.</td>
<td>139,597</td>
<td></td>
</tr>
<tr>
<td>Pawtucket, R.I.</td>
<td>81,469</td>
<td></td>
<td>Pensacola, Fla.</td>
<td>43,479</td>
<td></td>
</tr>
<tr>
<td>Peoria, Ill.</td>
<td>111,856</td>
<td></td>
<td>Phoenix, Ariz.</td>
<td>106,818</td>
<td></td>
</tr>
<tr>
<td>Pittsburgh, Pa.</td>
<td>676,806</td>
<td></td>
<td>Pocatello, Idaho</td>
<td>26,131</td>
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</tr>
<tr>
<td>Pontiac, Mich.</td>
<td>73,681</td>
<td></td>
<td>Portland, Me.</td>
<td>77,634</td>
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</tr>
<tr>
<td>Portland, Ore.</td>
<td>373,628</td>
<td></td>
<td>Portland, Ore.</td>
<td>18,830</td>
<td></td>
</tr>
<tr>
<td>Portsmouth, N.H.</td>
<td>18,830</td>
<td></td>
<td>Portsmouth, Va.</td>
<td>80,039</td>
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</tr>
<tr>
<td>Providence, * R.I.</td>
<td>248,674</td>
<td></td>
<td>Providence, R.I.</td>
<td>212,397</td>
<td></td>
</tr>
<tr>
<td>Provo, Utah</td>
<td>28,937</td>
<td></td>
<td>Pueblo, Colo.</td>
<td>63,685</td>
<td></td>
</tr>
<tr>
<td>Quincy, Mass.</td>
<td>83,835</td>
<td></td>
<td>Quincy, Mass.</td>
<td>71,193</td>
<td></td>
</tr>
<tr>
<td>Racine, Wis.</td>
<td>65,679</td>
<td></td>
<td>Raleigh, * N.C.</td>
<td>109,320</td>
<td></td>
</tr>
<tr>
<td>Reading, Pa.</td>
<td>32,497</td>
<td></td>
<td>Reno, Nev.</td>
<td>99,545</td>
<td></td>
</tr>
<tr>
<td>Richmond, Calif.</td>
<td>230,310</td>
<td></td>
<td>Richmond, * Va.</td>
<td>332,488</td>
<td></td>
</tr>
<tr>
<td>Rochester, N.Y.</td>
<td>65,679</td>
<td></td>
<td>Rockford, Calif.</td>
<td>7,891,957</td>
<td></td>
</tr>
</tbody>
</table>

*Note: This is a partial list of cities and industries. The full list includes many more cities and industries not shown here.*
WORD LIST

abolish (āb’o-līsh’ish’): to do away with entirely
abolitionist (āb’o-līsh’ān-ist): a person who believed that all slaves should be freed
adobe (ā-dō’bi): sun-dried clay used to make houses
adopt (ā-dōpt’): to accept by vote
aggression (ā-grēsh’än): an attack by one nation upon another
al fal’fa: a plant grown chiefly for hay
alpaca (āl-pāk’ā): a kind of llama with fine, long, woolly hair
altiplano (ālt’ē-plā’nō): the high, bleak plateau of Bolivia
a mend’: to change something, such as a law, for the better
a mend’ment: a law which makes a change in the Constitution
anthracite (ān’thrā-sīt): hard coal
arbitration (ār’bī-trā’shän): a peaceful way of settling quarrels between nations in which an outside person or persons is asked to decide which nation is right
as bes’tos: a mineral which will not burn
asphalt (ās’fält): a mineral substance used in paving roads
Aztecs (āz’tēks): Indians of old Mexico
babassu (bā’bā-sō’): oil: the product of a kind of palm tree used in making soap and cooking oil
backwoodsman (bāk-wōd’z’mān): a person living on the frontier away from settled light
balsa (bōl’so): a tropical tree whose light, strong wood is used in making boats and airplanes
balsam (bōl’sām): the sap of a tree used in making medicine and perfume
barge (bār’j): a flat-bottomed boat usually used to carry freight on canals and rivers
bar’ter: to trade by exchanging one thing for another without using money
basin (bās’n): a low, fertile region surrounded by higher lands
bauxite (bōks’it): the ore from which aluminum is made

Bill of Rights: the first ten amendments to the Constitution
bituminous (bī-tū’mī-nūs): coal: soft coal
blast furnace: a furnace through which air is forced, used in making steel
blimp: a kind of airship which floats like a balloon when filled with a light gas
blockade (blōk’ād’): the shutting up of a place by troops or ships to keep people from moving either in or out
bran: the dark coating of the wheat seed
breakwater: a wall built to protect a harbor from high waves
buck’skin: strong, soft leather made from the hides of deer or sheep
burgess (būr’jēs): a representative in the assembly at Jamestown
by product (bī’prōd’ākt): something made from what is left after the main product has been manufactured
Cabinet (kāb’ə-nět): a group of people, chosen by the President, who help and advise him
campos (kām’pōs): grassy plains in Brazil
can’ner y: a factory where food is prepared and packed in cans
capital (kāp’o-tōl): the city in which the laws of a state or country are made
capitol (kāp’o-tōl): the building in which the law-makers of a state or country meet
Capitol: the building in Washington in which Congress meets
caribou (kār’ō-bō): a kind of reindeer found in northern North America
carnauba (kār’ō-nō’bō) wax: the wax of a kind of palm tree used in making furniture polish, film, and phonograph records
carpetbagger (kār’pēt-bāg’er): a Northerner who went to the South to make money in the hard times after the War Between the States
char’ter: a paper giving a person or company certain rights, such as land in the New World given by the king of England
chicle (chē’kīl): milky sap from the sapota tree used in making chewing gum
chuño (chūn’yō): a kind of meal made from frozen potatoes by the Bolivian Indians
chute (shōōt): a sloping trough down which things may slide to a lower level
circumnavigate (sūr’kām-nāv’t-gāt): to sail all the way around the world
citrus (sī’trōs) fruits: fruits with hard peel and pulpy flesh, such as oranges and lemons
civil (sī’vēl) war: a war between two groups of people in the same country
clip’ per ship: a fast-moving sailing vessel
coastal (kōst’āl) plain: low, flat land along a coast
coke (kōk): coal with the gases removed
combine (kōm’bān): a machine which cuts grain and also separates it from the straw
compass (kōm’pās): an instrument used by sailors to find directions at sea
compromise (kōm’prō-mīz): an agreement reached by each side giving up part of what it wanted
Conestoga (kōn’ēs-tō’gā) wagon: a large, boat-shaped covered wagon
Confederacy (kōn’fēd’ər-ā-sī): the union of the Southern states which had seceded
congress (kōng’grēs): a meeting of representatives to do government business
conservation (kōn’ser-vā’shūn): the wise use of our natural resources
collection (kōn’stāk’shūn): laws or rules for governing a nation or a state
Constitution: the body of laws of the whole United States
Continental (kōn’tō-nēn’tāl) Divide: a dividing ridge in the Rockies which separates the rivers flowing east from the rivers flowing west
continental shelf: the part of the Atlantic Coastal Plain which is still below sea level
convention (kōn’ven’shūn): a group of people meeting for a common purpose
conveyor (kōn-vā’rēr): a moving belt which carries loads from one place to another
Corn Belt: the area in the North Central States where corn is the chief crop
Cotton Belt: the area in the Southeast and the Southwest where cotton is the chief crop
cotton gin: a machine which separates seeds from cotton
council (koun’sēl): a group which meets to make laws and decide community matters
cradle: a frame fastened to a scythe to catch grain as it is being cut
crater (krā’ter): the opening in a volcano
Creole (krē’ōl): a person born in America of Spanish parents
crew: the group of seamen who sail a ship
crop rotation (rō-tā’shūn): building up the soil by planting a different crop on a piece of land every two or three years
crossroads: places where ways of travel meet and cross
crusade (krōd’sād’): a war to take the Holy Land away from the Turks
curd: the thickened part of milk from which cheese is made
cur’rent: a stream of water moving in a certain direction
debtor’s (dē’tīr’z) prison: a jail for people who owe money
deep-sea fishing: fishing in deep waters far from the coast
dehydrate (dē-hī’drāt): removing water by a special method
delegate (dē’lē-gāt): a representative
democracy (dē-mōk’rā-sī): a way of life in which each person is believed to have certain rights that cannot be taken from him
der’rick: the framework which supports the machinery used to drill an oil well
disk harrow: a machine with sharp steel teeth used to break up lumps of earth
dory: a rowboat carried by a fishing vessel
drift mining: a way of mining coal through tunnels cut from the side of the valley and leading directly into the seam of coal
dry farming: the growing of only one crop in two years in a dry area to save moisture
ejido (a-hē’thō): land belonging to a farm village in Mexico
El Camino Real (el kā-mē’nō rá-ā’l): the old road from San Diego to San Francisco whose Spanish name means “The King’s Road”
e lect’: to choose a person for an office
Emancipation Proclamation (ə-mān’shūn prōk’lā-mā’shūn): the paper, signed by President Lincoln, which freed the slaves in the Confederacy
ereupt’: to burst forth, as hot liquid rock from a volcano
Eskimos (ēsk’ē-mōz): people who live on the arctic shores of North America
estuary (ēs’tū-ēr’ē): an arm of the ocean which extends into the land
expedition (ēks’pē-dish’ūn): a journey for some purpose, such as exploring
ex’ports: goods and products shipped out of a country for sale or trading purposes
factory (fak’tō-ri): a building where people work at machines to manufacture goods
fazenda (fā-zēn′dā): a plantation in Brazil
federal (fē′dər-əl): national, or having to do with a whole nation
fertilize (fur′tə-līz): to make soil richer and more productive
fiesta (fī-ē′sē-tə): a holiday celebration
fisheries: places where fish are caught
fishing banks: shallow places in the ocean where fish come to feed
fleece: the thick wool of a sheep
flood plain: part of the coastal plain where rivers overflow because of the ocean tide
flowing well: an oil well which produces oil in a steady stream without being pumped
fod′der: coarse, dry food such as corn stalks used as feed for farm animals
forty-niners: people who went to California in 1849 after the discovery of gold
freedman: a slave who had been set free
freedom of religion: the right to worship God as one chooses or not to worship at all
free states: states that did not keep slaves
frontier (frün′tər′): the place where settlements end and the wilderness begins

galleon (gāl′ən): a large sailing vessel having three or four decks
gap: a low valley or pass in the mountains
gaucho (gō′chō): a cowboy of the pampas
geyser (gī′zər): a spring which throws shafts of hot water and steam into the air
girdle (gī′rd′l): to kill a tree by cutting a strip of bark from around it
Good-Neighbor policy: the plan of friendliness and co-operation adopted by the United States toward the Latin-American republics
grain elevator (glen′ə-vā′tər): a tall building where grain is stored
grasslands: grassy plains
great circle route: the shortest and most direct route between two places on the earth
guano (gō′nō): bird droppings from which fertilizer is made
gusher: a well from which oil, when it is struck, shoots high in the air

hacienda (ā-syēn′dā): a large plantation in Spanish America
hatch: the opening into the lower part of a ship where the cargo is carried
head of ocean navigation: the distance upstream that ocean boats can go on a river
helium (hē′lē-əm): a very light gas which does not burn or explode
hemp: a plant whose fiber is used in making strong cord and rough toweling

henequen (hēn′ē-kēn): a thorny cactus plant from which a strong twine is made
high latitudes: the parts of the earth between the Arctic Circle and the North Pole and between the Antarctic Circle and the South Pole
hogan (hō′gən): an Indian house of logs and mud
hold: the lower part of a ship where the cargo is carried
homespun (hōm′spūn): cloth made at home or from yarn spun at home
Homestead Act: a law by which the government gave land free to farmers if they would live on it and farm it for five years
House of Representatives: the part of Congress which has the most members
house-raising: in pioneer days a gathering of neighbors to help build a house
hurricane (hūr′kē-nə): a tropical storm with strong winds and heavy rains
husking bee: a gathering of neighbors to husk corn

immigrant (im′ər-grānt): a person who moves from one land to another to make his home
im′ports: goods and products brought in from another country
im press′ment: forcing men into service
inaugurate (in′ə-gə-rāt): to put into office
Incas (in′kəz): Indians of ancient Peru
indentured (in′dən′tərd) servant: a person who signs an agreement to work for another person for a certain length of time
independence (in′dē-pěn′dəns): self-government or freedom from outside control
indigo (in′dī-gō): a plant from which a blue dye is made
industrial (in′dēs′trī-əl) center: a city where manufacturing is carried on
ingot (in′gōt): a bar or other shape into which metal is cast
inshore fishing: fishing near the shore
interior (in′tēr-ər): an area which lies inland, or away from the coast
international (in′tər-nəsh′ən-əl): belonging to, or having to do with, two or more nations
Iroquois (ir′ō-kwō): Indians who lived in the forests of the Northeast
irrigation (ir′ə-gā′shən): bringing water to dry land in order to grow crops
isthmus (is′mūs): a narrow strip of land connecting two larger bodies of land

kayak (ki′āk): a narrow boat made of skin, used by Eskimos
keelboat (kē′lō-bōt′): a long, narrow boat used on western rivers in pioneer days
latex (lá’tēks): the sap of the rubber tree
Latin America: the countries of the West Indies, Mexico, Central America, and South America
latitude (lā’tī-tūd): distance north or south of the equator
lava (lā’vā): hot, liquid rock flowing from a volcano
lease (lēs): the right to use land or a building for a certain time by paying rent for it
legislature (lēj’īs-lā’tūr): a body of persons chosen to make laws
legumes (lēg’ūmz): vegetables, like peas and beans, which grow in pods
leave (lēv’ē): a bank of earth built along a river to keep it from flooding the land
linseed (līn’sēd) oil: oil from flax seed, used in making paint and varnish
llaneros (lā’nărōz): cowboys on the grassy plains of northern South America
llanos (lā’noz): grassy plains of northern South America
lock: the part of a canal in which ships are raised or lowered as they pass from level to level
low latitudes: areas of the earth between the Tropic of Cancer and Tropic of Capricorn
maguey (māg’wā): a plant from which strong cloth and cord are made
mahogany (mā-hōg’ā-nī): a kind of hard wood used to make fine furniture
main’land: a country or continent without its near-by islands
maize (māz): Indian corn
mar’i time: bordering on or near the ocean
Mayas (mā’yāz): Indians living in Yucatan and in Guatemala when the white men came
Mayflower Compact (mā-fﬂ’pākt): an agreement made by the Pilgrims, before landing in America, as to a plan of government
merchant marine (mā-rēn’): ships which carry on the trade of a nation
mesa (mā’sā): a high, flat-topped mountain
mestizo (mēs-tē’zō): a person with mixed white and Indian blood
middle latitudes: the parts of the earth between the Tropic of Cancer and the Arctic Circle and between the Tropic of Capricorn and the Antarctic Circle
migration (mi-grā’shēn): movement of people from one place to another for settlement
minuteman (mīn’ūt-mān’): a colonist who was ready to fight at a minute’s notice
mission (mīsh’ēn): a church settlement built by the Spaniards in the New World to teach the Indians
Missouri Compromise: a law, passed in 1821, which said that all new states north of the northern boundary of Missouri were to enter the Union as free states and all new states south of that line were to be slave states
mixed farming: raising many different kinds of crops and livestock on the same farm
mohair (mō’hār’): cloth made from goat hair
money crop: the principal product of a farm, raised to be sold
Mormons (mōr’mänz): a religious group which founded Salt Lake City
mosaic (mō-zā’ık): a picture or design made by fitting small colored stones together

National Government: central government, or government for our whole nation; also called the Federal Government
natural regions: the surface features of land, such as lowlands, hills, and mountains
natural resources: gifts of nature, such as soil, forests, minerals, and wild animal life
naval stores: products from the pine tree which are used in shipbuilding
navigable (nāv’ī-gā-b’l): capable of being sailed upon, such as a river that is deep and wide enough for ships
navigation (nāv’ī-gā’shēn): the act of sailing ships or piloting planes
nav’i ga tor: a person who sails a ship well
news’print: cheap paper, usually made from wood pulp, and used for newspapers
nitrate (nī’trāt): a mineral used in making chemicals and fertilizer
Northern Hemisphere: the half of the earth that is north of the equator
oath of office: a solemn promise taken by an elected official to carry out the laws
open-pit mining: mining that is done on the surface of the earth
over se er: the hired manager of a plantation
pampas (pām’pāz): treeless plains in Argentina Pan-American Highway: a road which will connect North America with South America
Pan American Union: a union of the twenty-one republics of the Western Hemisphere
pasteurize (pāst’ür-iz): to kill germs in milk by means of heat
patch’work: fancy work made by sewing together pieces of cloth of different colors and shapes
patio (pā’tē-ō): a courtyard or garden
patriot (pā’trē-ō): a colonist who worked for our country’s independence
patroon (pā-trōōn̩'): a person who received a large tract of land in the New World from the Dutch West India Company
peninsula (pən-ˈin-sə-lə): a body of land surrounded on three sides by water
perˈma nent: something which lasts
phosphate (fəsˈfāt) rock: a mineral from which fertilizer is made
piedmont (pědˈmōnt): an upland region between a coastal plain and mountains
pig iron: iron melted and hardened into bars
pilgrim: a person who travels to holy places to worship
pilgrimage (pilˈgrə-mij): a journey made for religious reasons, usually to a holy place
Pilgrims: the people who settled Plymouth in 1620 to find freedom of worship
pitchˈblend: an ore, the elements of which are used in manufacturing atomic bombs
plan taˈtion: a large farm which specializes in one crop
plaza (pláˈzą): a park or square in a Spanish or Latin-American town
polar region: an area in the high latitudes
ponˈcho: a blanket with a slit in the middle for the head, worn in Latin America
possessions: distant lands belonging to a country
power loom: a weaving machine run by water, steam, or electric power
prairie (prāˈtə): a grassy plain
privateer (prəˈvī-tər'): an armed sailing vessel owned by an individual or a private company
proˈcess ing: preparing for market by means of several changes or operations
province (prəˈvins): a division of Canada like a state in our country
pueblo (pweˈblo): an Indian village built of stone or sun-dried brick
Pueblos: Indians of Arizona and New Mexico
puncheon (pənˈchən) floor: a floor made of logs split in half and laid with the flat side up
Puritan (pərˈtə-nən): a member of the Church of England who wanted plainer churches and simpler services
Quakers: a religious group who dressed in gray and worshiped in plain churches
quarry (kwɔrˈn): an open pit from which building stone is cut
quarrying: cutting stone from a quarry
quebracho (kə-brəˈchō): a hard wood used for railroad ties, paving blocks, fence posts, and which yields tannic acid
quilting bee: a meeting of women to make quilts
quinine (kwəˈnīn): a medicine made from the bark of the cinchona tree
rainfall: the amount of water in the form of rain or snow which falls in a place in a year
ratˈi fy: to approve and accept
raw sugar: the brown crystals formed when the juice of sugar cane has been boiled
rayon (rāˈən): cloth that looks like silk
reaper: a machine for cutting grain
rebellion (rē-bēˈlən): the organized, armed effort of the colonists to throw off the control of Great Britain in the War for Independence
re finˈer-y: a building where materials like raw sugar and petroleum are purified
re pealˈ: to remove or recall a law
representative (rərˈpə-zəˈtə-təv): a person who acts for, or represents, a group
representative government: a plan of government in which a few persons are chosen to act or speak for many
republic: a country governed by the people through their chosen representatives
reservation (rəˈzər-vəˈzhən): an area set aside by the government for the use of Indians
reservoir (rəˈzər-vər): a place, such as a lake behind a dam, where water is stored
river system: a large river with all its branches
rodeo (rōˈdē-ə): a contest in which cowboys show their skill in riding horses and steers
salt lick: a place where salt is found on the ground and where animals go to lick it up
sapota (səˈpə-tə) tree: a tree whose sap is used in making chewing gum
scythe (sītʰ): a curved blade fastened to a long handle, used for cutting grain
scythe (sītʰ): a curved blade fastened to a long handle, used for cutting grain
sceˈcede: to withdraw from, or leave, an organization
Secretary (sēkˈrə-tərˈi): a member of the President’s Cabinet
seed drill: a machine used to plant corn or other grain
selvaˈs (səlˈvəs): rainy forests of the Amazon
Senate (sənˈtən): the part of Congress that is made up of two members from each state
Senator: a member of the Senate
sequoia (sēˈkwō-ə): a kind of pine tree which grows very high and lives to be very old
settˈle ment: a village or community started by people from another country
shaft mining: a way of mining coal through a deep hole or shaft
shareˈcrop per: a person who works another’s farm for part of the produce
shearing: cutting off the wool of a sheep
shellfish: fish which have shells
sickle: a curved blade fastened to a short handle, used for cutting grain
silo (sī’lō): a tall building, usually circular, used to store green corn for winter feed
silt: mud and sand carried down by a river
slag: the impurities left after ore is smelted
slaughtering (slō’ tér-ing): butchering animals for market
slave states: the states that held slaves
smelting: melting ore to separate the metal from other materials
smuggle (smūg’l): to bring goods into or take them out of a country secretly without paying the taxes required by law
soil erosion (ē-ro’zhān): the washing away of soil by heavy rains or floods
sorghum (sōr’gūm): a canelike grass grown for fodder, grain, or for making syrup
sound: a channel of water which connects the ocean with another body of water or which separates an island from the mainland
Southern Hemisphere: the half of the earth that is south of the equator
soy’bean: a kind of bean first brought from China; used for food and in industry
spawning place: a fresh-water nesting place where salmon lay their eggs
specialized (spēsh’əl-izd) farming: raising special crops for sale in cities
spinning jenny: an early machine which could spin many threads at a time
steel: form of tough hard iron
sterilize (stēr’liz): killing germs by heat
ster’ling: an article made of solid silver
stockade (stōk’-ad’): a high fence built around something to protect it from attack
store’house: a building where supplies are kept
subtropical (sūb-trōp’t-kəl) land: land which lies near the tropics
sulphur (sūl’fər): a yellow mineral
Supreme Court: our country’s highest court
sur’plus: something extra
suspension (sūs-pən’shən) bridge: a bridge hung on heavy chains or cables between towers
tagua (tä’gwä): nuts from which artificial ivory is made
tan’ner y: a place where hides are made into leather
tan’nic a’cid: a substance made from the wood or bark of certain trees, used in making leather
tariff (tār’if): a tax on goods coming into or going out of a country
taxes: money paid to help run a government
temperate (tēm’pər-ët) regions: places in the middle latitudes
ten’ant farmer: a farmer who rents land and pays his rent with cash or part of his crop
tepee (tē’pē): a skin tent, shaped like a cone, used by the Plains Indians
territory (tər’rī-tōr’ē): a settled area not yet a state, which is governed by Congress
textiles (tēks’tīlz): woven cloth
thresh: to separate grain from straw
tidewater region: part of the coastal plain where the rivers overflow because of the ocean tide
tipple: a building in which coal is sorted
toll (tōl): a tax paid by a traveler for use of a road or a bridge
toquilla (tō-ke’ya) palm: the tree from whose leaves Panama hats are made
tortillas (tōr-tē’ya’z): thin cornmeal pancakes
Tory: a colonist who took the side of Great Britain in the War of Independence
town meeting: a meeting at which laws are made and officers chosen for a town	rade route: a route used by travelers going to and from cities to trade
trade wind: a wind that blows steadily in the same direction
transcontinental (trān’skən-tə-nənt’i): extending across a continent
transportation (trān’spər-tən’shən): carrying people and goods from place to place
treason (trē’zən): trying to change the government by force or giving help to the enemies of one’s country
traity (trā’ti): an agreement between nations
tropics (trōp’tiks): places in the low latitudes
truck farming: raising vegetables for market
tundra (tōn’dra): treeless plain in the arctics
tung oil: oil made from the nuts of a tree first brought from China
tung’sten: a mineral used to harden steel
vegetation (vēj’ə-tən’shən): plant life of a region
veen: a thin layer of wood used to cover furniture and to make baskets and barrels
viking (vi’kīng): a sea rover in early times
volcano (vōl’kən’o): a mountain with an opening from which melted rock and steam flow
vulcanize (vūl’kən-iz): a way of treating rubber to harden it and improve its stretchiness
Wheat Belt: the area in the North Central States where wheat is the chief crop
whey (hwä): the watery part of milk left after the curd is formed
wood pulp: wood that has been ground up and mixed with water, used in making paper
yellow fever: a tropical disease
yerba mate (yēr’bā mà’tā): a favorite drink in South America, also called Paraguayan tea
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