

This image shows how Earth might look from a space shuttle.



Can you name the two countries that border these lakes?



Can you name this state?

Geography of the United States

1

What can geography teach us about the United States?

1.1 Introduction

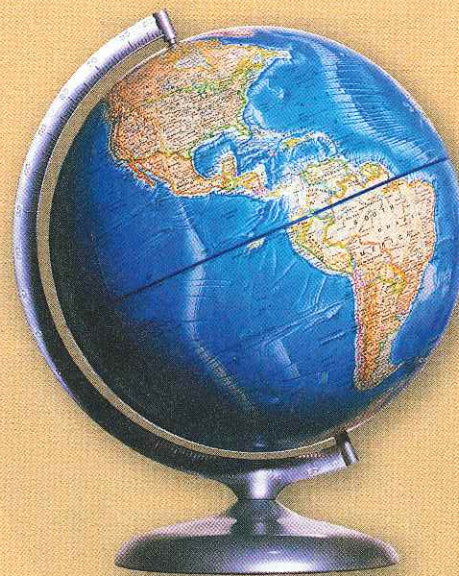
Before you study the history of the United States, you need to know about our country's **geography**. The word *geography* comes from two Greek words—*geo*, meaning “Earth,” and *graph*, meaning “describing.” Geography is the study of our physical world and how we interact with it. Geographers help us locate places. They describe plants, bodies of water, landmasses, and **climate**. Climate refers to aspects of weather, such as temperature, rainfall, and wind, that are measured over time in an area.

Geographers also study how our physical surroundings affect us. For example, they look at the reasons why mountains make it hard for people to move from place to place. Learning about the geography of the United States will help you understand our country's history.

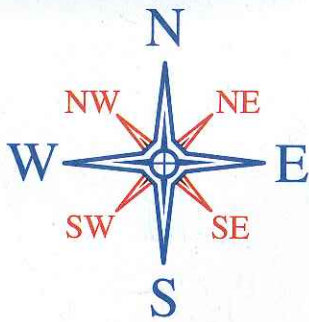
In this chapter, you will learn some geography skills for reading maps. You will first learn how to read a **globe**. A globe is a model of Earth. It is the most accurate way to represent Earth. You will then learn how to use **latitude** and **longitude**. These lines form a grid that helps us find any place on Earth. Next, you will learn some key **geographic terms**. These terms describe bodies of water, such as bays, and landmasses, such as islands. Finally, you will learn about major **physical features** of the United States. Physical features include landmasses, like the Great Plains, and bodies of water, like the Mississippi River.

Look at the picture of the globe on this page. What do you think a globe can teach you about the United States?

World Globe: Western Hemisphere



compass a tool or instrument for finding directions by first locating north



This compass rose shows the cardinal directions. They are the four main points in blue. Points in between them (in red) are intermediate directions.

1.2 Understanding the Globe

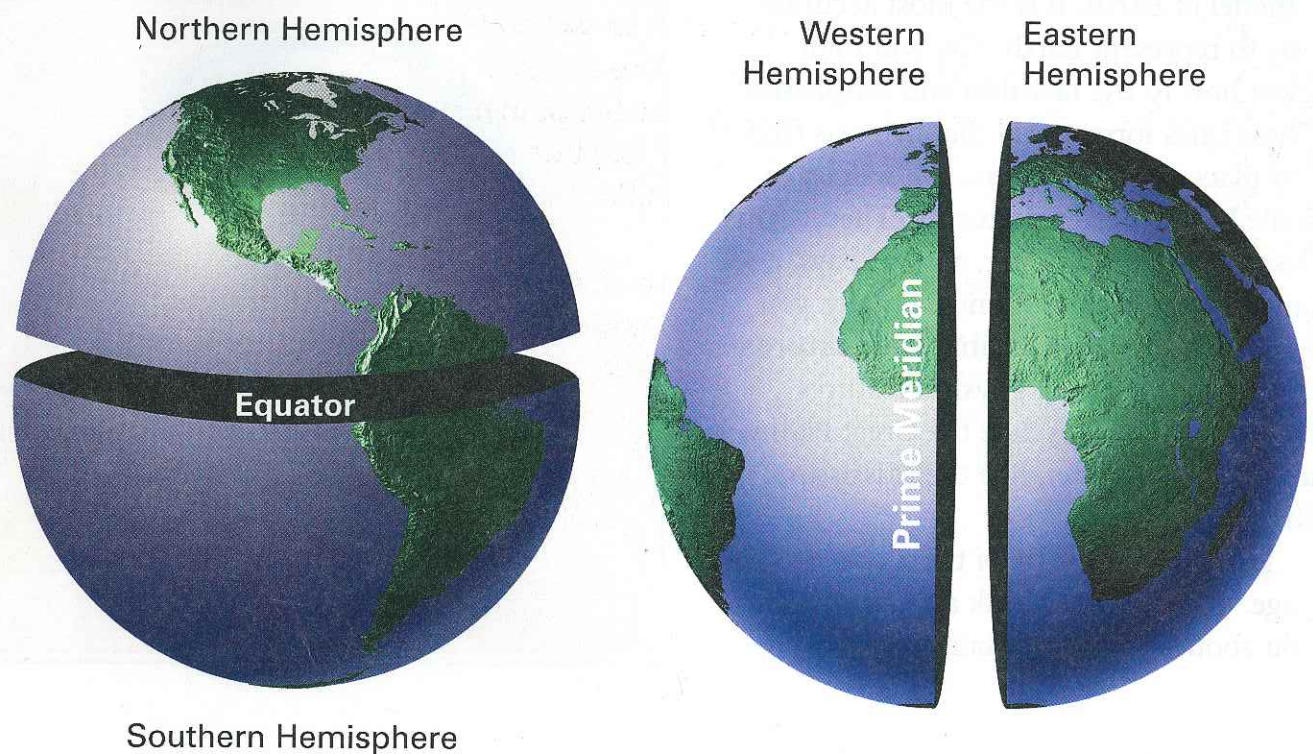
Earth is a huge sphere. A sphere is something that is shaped like a ball. A globe is also a sphere. Most maps that show Earth's surface are flat. Because a globe is shaped like Earth, it provides a more accurate picture of our planet.

The most northern point on Earth is the North Pole. The most southern point is the South Pole. No matter where you are on Earth, north is always in the direction of the North Pole. South is always in the direction of the South Pole. When you face north, east is to your right, and west is to your left. These four directions are the main points on a **compass**. They are called cardinal directions.

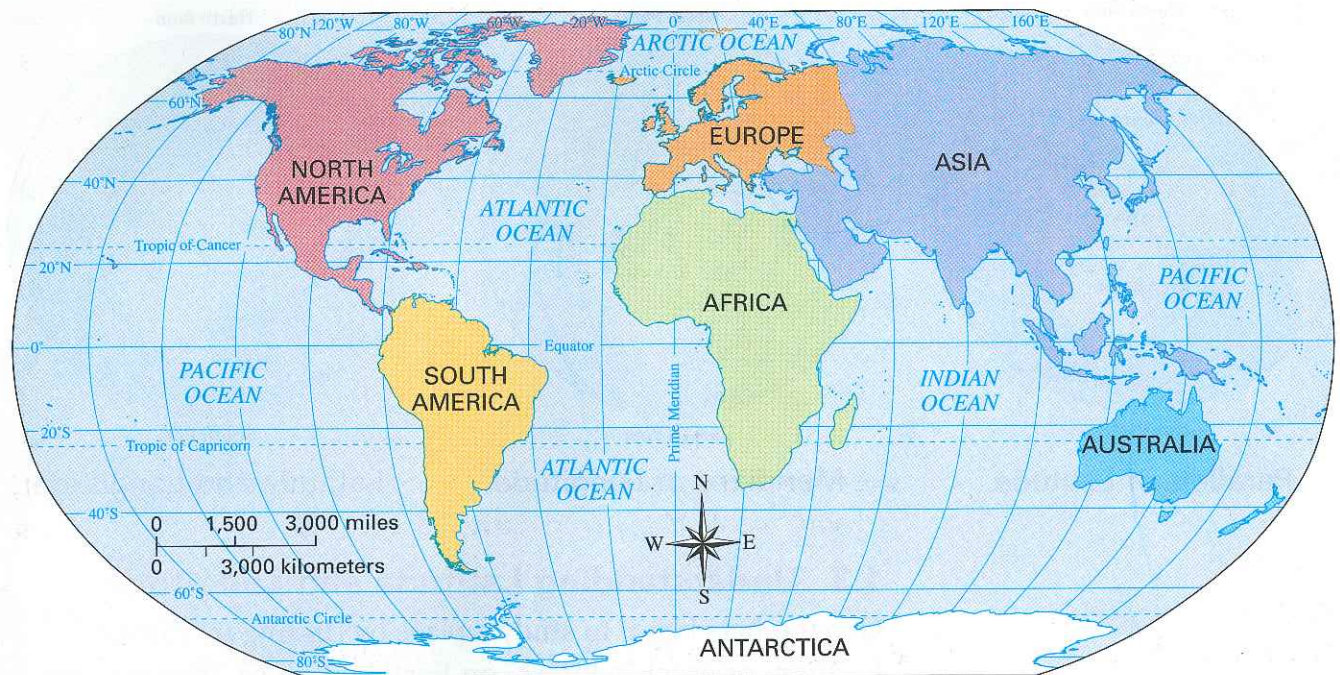
Points in between the cardinal points are called intermediate directions. These points include northeast, northwest, southeast, and southwest. Many maps have a symbol that shows all or some of these directions. This symbol is called a compass rose.

An imaginary line circles Earth halfway between the North Pole and the South Pole. This line is called the equator. The equator divides Earth into two half-spheres called hemispheres. The half of Earth north of the equator is the Northern Hemisphere. The southern half is the Southern Hemisphere.

The Hemispheres



World Map: Continents and Oceans

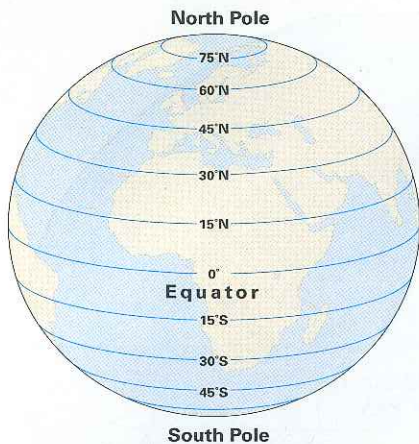


Another special line runs from the North Pole to the South Pole. It forms half of a circle that divides Earth into two equal parts. This line is called the prime meridian. The half of Earth to the east of the prime meridian is the Eastern Hemisphere. The half to the west is the Western Hemisphere.

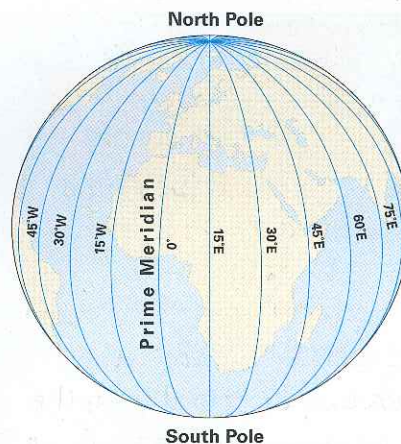
A globe shows that we live on a watery planet. In fact, water covers almost three-fourths of Earth's surface. This is mainly the salt water of oceans. Oceans are the largest bodies of water on Earth. There are four oceans. From largest to smallest, they are the Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Arctic Ocean.

Oceans surround large masses of land called continents. There are seven continents on Earth. In order from largest to smallest, they are Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

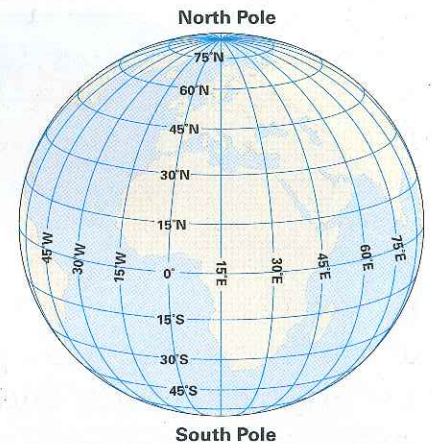
The Global Grid



Parallels of Latitude



Meridians of Longitude



Latitude and Longitude

You can find any spot on the globe by using latitude and longitude. This boat is in Earth's largest ocean at 40° S, 100° W. Read the next page to find this place on the world map.



1.3 Understanding Latitude and Longitude

Geographers begin to study a place by finding its absolute location, or exact “address” on Earth. To do so, they use two types of measurements, called lines of latitude and longitude. With these lines, they can pinpoint any place on Earth. Distances between these lines are measured in degrees ($^{\circ}$).

The lines that circle Earth from west to east are called parallels of latitude. They show how far north or south a place is. The distance between parallel lines is always the same.

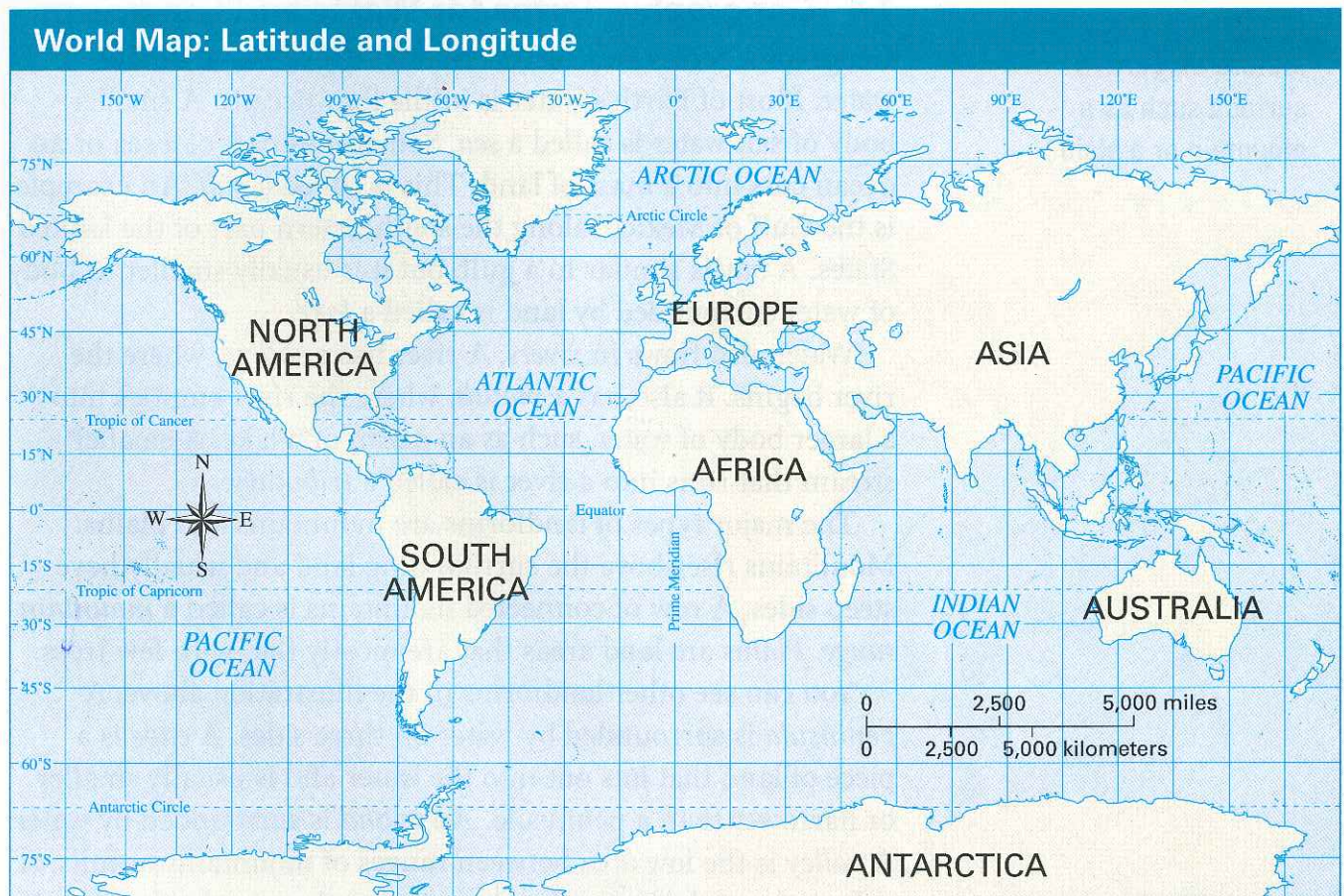
The starting point for measuring parallels of latitude is the equator. The equator is halfway between the North Pole and the South Pole. It is at 0° latitude. All places north of the equator are north latitude. Places south of the equator are south latitude. The places farthest from the equator are the poles. The North Pole is at 90° north latitude. The South Pole is at 90° south latitude.

Other parallels of latitude have special names. The Arctic Circle is located at 66.5° north latitude, also written as 66.5° N. The Tropic of Cancer is at 23.5° N. The Antarctic Circle is at 66.5° S. The Tropic of Capricorn is at 23.5° S. Find these special lines on the map on page 7. These lines mark areas of Earth that receive different amounts of sunlight throughout the year.

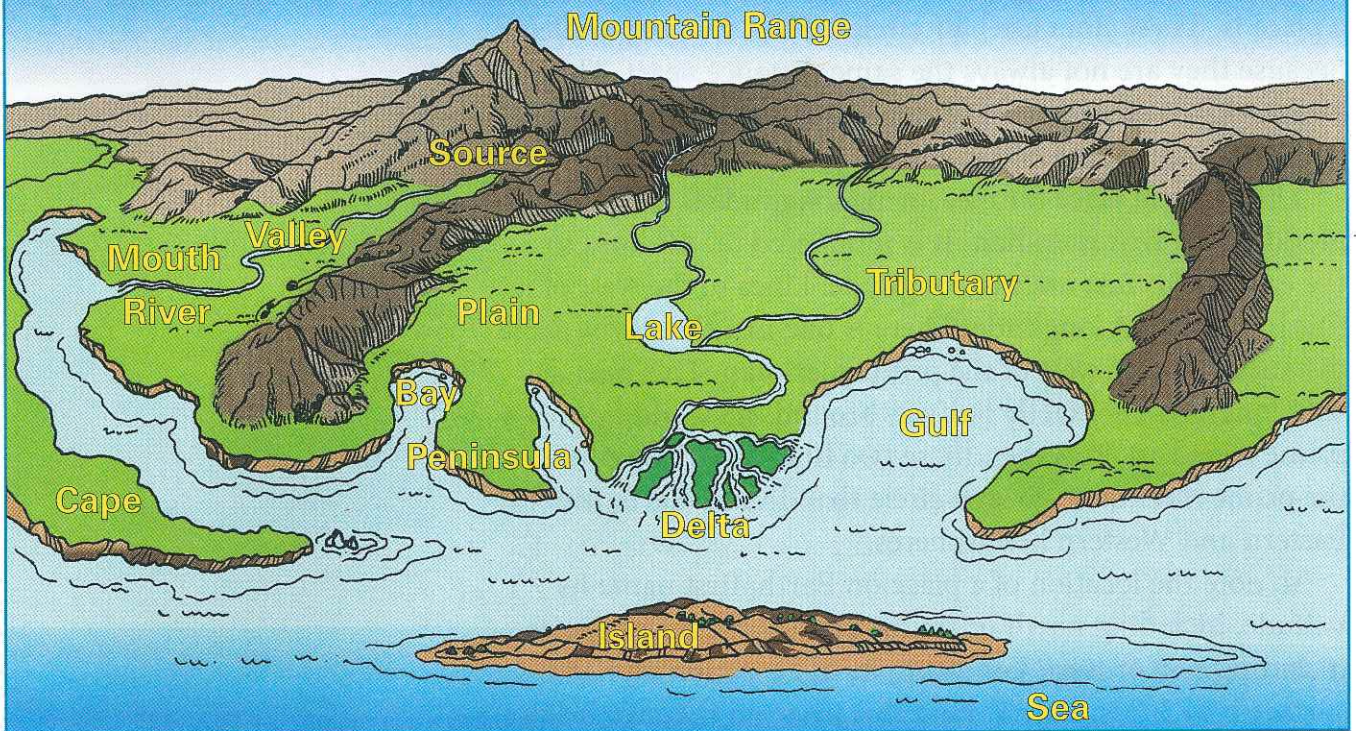
The lines that run from the North Pole to the South Pole are called meridians of longitude. They show how far east or west a place is. These lines are half-circles. They are not parallels because they are not always the same distance apart. They are farthest apart where they cross the equator. All meridians of longitude meet at the two poles.

The starting place for measuring longitude is the prime meridian, or first meridian. It is numbered 0° . All lines to the east of this line are east longitude. Lines to the west of this line are west longitude. There is one line that is the same distance east and west of the prime meridian. This line, at 180° longitude, is exactly halfway around the world from the prime meridian. Together, these two lines— 180° longitude and the prime meridian—form a circle that divides Earth into the Eastern and Western hemispheres.

To note the location of a place on Earth, first name its latitude, including north or south. Then name its longitude, including east or west. For example, one location on Earth's surface is at 30° N, 90° W. Find this place on the map below.



Geographic Terms



landform a physical feature on Earth's surface such as a mountain or a plain

1.4 Geographic Terms for Water and Landforms

Geographic terms help us describe **landforms** and bodies of water. Most of Earth's water is in the four oceans. A smaller body of salt water is called a *sea*. Sometimes part of a sea or an ocean cuts into a mass of land. This is called a *gulf*. An example is the Gulf of Mexico, along the southeastern part of the United States. A *bay* is similar to a gulf, but it is usually smaller. A body of water surrounded by land is called a *lake*.

Water also flows in *ivers*. A river has a *source*, where the river begins. It also has a *mouth*, where the river empties into a larger body of water, such as an ocean or a lake. A smaller stream that runs into a river is called a *tributary*.

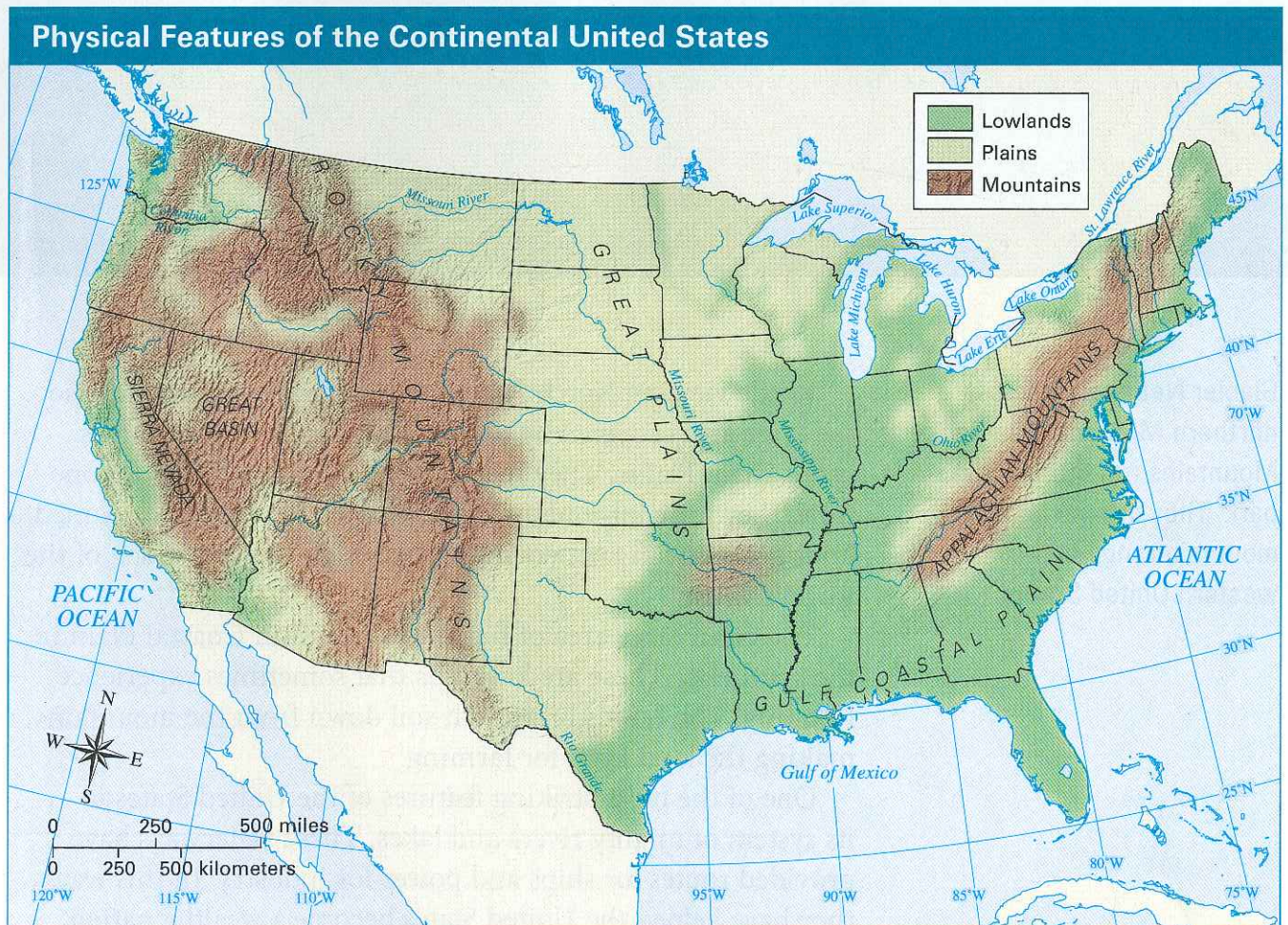
The major types of landforms are mountains and plains. Mountains rise above the surrounding land and usually have steep sides. A row of connected mountains is called a *mountain range*. *Plains* are land areas that are mostly flat, with few trees.

You can see other landforms in the illustration above. A *peninsula* is surrounded by water on three sides. A *cape* is a piece of land that juts out into the water and is usually smaller or narrower than a peninsula. An *island* is surrounded by water. A *valley* is the low area between ranges of mountains or hills. A *delta* is formed when soil is deposited at the mouth of a river. It is usually shaped like a triangle.

1.5 Physical Features of the United States

The United States is on the continent of North America. In land, it is the world's third largest country. (Russia is the largest. Canada is the second largest.) Our country is bordered by three large bodies of water. The Pacific Ocean is to the west. This is Earth's largest ocean. The Atlantic Ocean is to the east. This is Earth's second largest ocean. The Gulf of Mexico lies to the southeast.

From a space shuttle, you would see mountain ranges that run from north to south in North America. In the west, the Rocky Mountains stretch about 3,000 miles from Alaska, through Canada, to New Mexico. The Rockies are the largest mountain range in the west. The Appalachian Mountains are the largest range in the east. They extend more than 1500 miles, from Quebec Province in Canada to Alabama. The Sierra Nevada range in the far west is about 400 miles long. It includes Mount Whitney, the tallest peak in the continental United States, or the 48 states not including Alaska and Hawaii.





Glacier National Park is in northern Montana. The Rocky Mountains run through the park. They are the largest mountain range in the western United States.

While viewing North America from space, you would also see large areas covered by plains. The biggest of these areas is the Great Plains. They reach from Canada to Texas. At one time, they were huge natural grasslands where buffalo roamed. Today, American farmers in the Great Plains grow much of the world's wheat.

The other large area of flat land is the Gulf Coastal Plain in the southeast. These are lowlands that sometimes experience flooding. The floods bring rich soil down from the mountains, making the land ideal for farming.

One of the most striking features of the United States is its system of mighty rivers and lakes. These waterways have provided routes for ships and power for industry. In this way, they have helped the United States become a wealthy nation.

The largest river in the nation is the Mississippi River. The Mississippi has its source in Minnesota and runs 2,350 miles before emptying into the Gulf of Mexico. Two of its largest tributaries are the Ohio River and the Missouri River.

The St. Lawrence River is a key river in the northeastern United States. It flows from one of the Great Lakes, Lake Ontario, into the Atlantic Ocean. The St. Lawrence forms part of the border between the United States and Canada.

In the south, the Rio Grande forms much of the U.S. border with Mexico. The Columbia River is a major river in the west. It forms part of the border between the states of Oregon and Washington. The Columbia River runs into the Pacific Ocean. Turn to the physical world map at the back of this book to see a detailed view of the physical features you have read about.

Summary

In this chapter, you learned that geography is vital to the study of history. Geography explains how our physical surroundings affect our lives. You used globes and maps to learn about U.S. geography.

Geographers use special tools to study Earth. A globe has the same shape as Earth. It displays physical features such as oceans and continents. A compass shows directions. Lines of latitude and longitude help us to locate places on Earth.

Geographic terms such as *mountain* and *ocean* describe Earth's landforms and bodies of water. In this chapter, you used these terms to study geographic features of our country. In this book, you will learn how these features, including mountains, plains, and rivers, played a key role in the history of the United States.



This is a photograph taken from a satellite. Picture yourself in a spaceship, looking down at this view of Earth. What do you see?