

From Coast to Coast

TERMS & NAMES

Sacagawea
landform
glacier
erosion
river system

MAIN IDEA

North America has varied regions and landforms.

WHY IT MATTERS NOW

North America's geography contributes to the prosperity of the people who live there.

DATELINE **EXTRA**

MOUNT ST. HELENS, WASHINGTON, MAY 18, 1980

Mount St. Helens, an ancient volcano in Washington's Cascade Mountains, erupted this morning, killing 60 people and thousands of animals. An earthquake caused the mountain's north face to fall away. The debris from this landslide filled Spirit Lake. Hot air blasts traveling at 300 miles per hour threw both gas and volcanic ash 12 miles high and destroyed 10 million trees. The avalanche and the mudslide that followed buried parts of the Toutle River Valley to a depth of almost 500 feet. The hot ash and rock started forest fires, ruined crops, and covered cities. Fortunately, the land around the volcano has begun to recover from the eruptions.



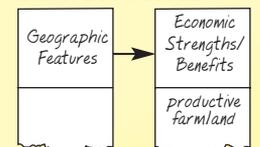
Place • Gas and volcanic ash from the eruption of Mount St. Helens vaporized trees and caused widespread devastation as far as 19 miles from the volcano. ▲

North America

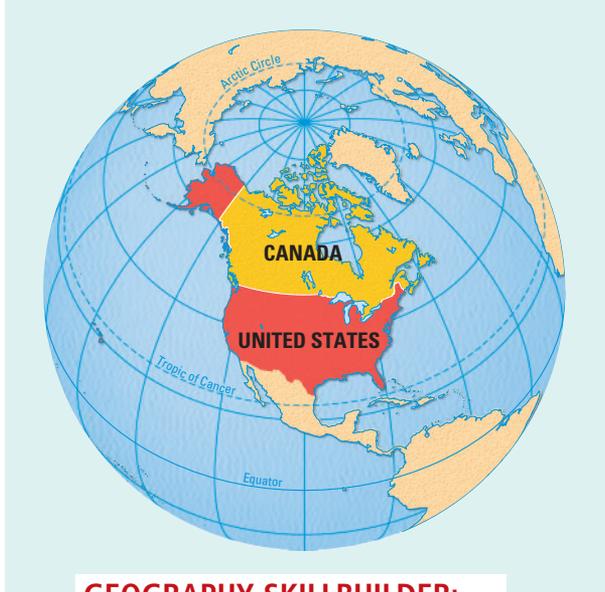
Earth's geography changes continually. Sometimes change happens violently, as in the eruption of a volcano such as Mount St. Helens, or the jolt of an earthquake. At other times, change occurs very slowly, as when rain washes away soil, or weather wears down a mountain. All these natural processes affect the physical geography of North America.

TAKING NOTES

Use your chart to take notes about the United States and Canada.



The Middle Latitudes



GEOGRAPHY SKILLBUILDER: Interpreting a Map

1. **Region** • Do you think Canada or the United States has the colder climate? Why?
2. **Location** • Where in Canada would you expect to find the most people living? Explain.

Human-Environment Interaction •

Crops raised in the United States and Canada feed the people of these countries and are exported to other countries all over the world. ▼



Countries on the Continent

North America's huge landmass is home to several large countries and many smaller ones. Find Canada and the United States on the Unit Atlas map on page 56. Canada is the second largest country in area in the world. The United States is almost as great in area. North America also includes the Danish dependency Greenland, which is the world's largest island.

Mexico, the Central American countries, and the Caribbean island nations, such as Cuba, the Dominican Republic, and Haiti, are part of the continent of North America. These countries, along with the South American nations, make up what is considered Latin America. Find these countries on the Unit 3 Atlas map on page 144. Their her-

itage differs from that of the United States and Canada. Historically, Latin America owes much of its culture to Spain and Portugal. The United States and Canada were greatly influenced by the British and French. Because of these different cultural heritages, geographers study the United States and Canada separately from Latin America.

Middle Latitudes Most of the United States and Canada is located in the middle latitudes of the northern hemisphere of Earth. This area between the Arctic Circle and the Tropic of Cancer has a temperate climate. It is not as hot as land closer to the Equator. It is not as cold as regions near the North or South Poles. Many plants and animals thrive in this climate. Productive farming enables countries in the middle latitudes to feed large populations.

An Isolated Continent

North America is almost completely surrounded by water. Its landmass stretches from the Arctic Ocean to the Gulf of Mexico and from the Pacific Ocean to the Atlantic Ocean. Find these bodies of water on page 54 of the Unit Atlas.

Reading Social Studies

A. Analyzing Effects Why do the middle latitudes have a moderate climate?

At one time, these waters isolated North America, or kept it separate from the rest of the world. Unique plants, such as the giant sequoia and the saguaro cactus, and animals, such as the bald eagle and the American alligator, developed in North America.



Region • The bald eagle has been the national bird of the United States since 1782. ▲

The oceans and seas were also a barrier to people. The earliest settlers arrived 12,000 to 35,000 years ago. No other people reached this continent until thousands of years later.

Crossing the Barriers

As people learned more about shipbuilding and navigation, the oceans became a hazardous but passable travel route. Settlers arrived in North America with plants and animals from their home countries. Many of these plants and animals were new to the continent. In some places, these replaced the native plants and animals.

In the 20th century, the distance from other countries helped protect Canada and the United States mainland from attack during the two World Wars. Today, satellites, the Internet, modern transportation, and other technologies link people everywhere.

BACKGROUND

Hawaii, the 50th state of the United States, is a group of volcanic islands in the central Pacific Ocean.



Place • Sailors have used the sextant to navigate their ships since its invention in 1731. ▲

Biography



Sacagawea *Sacagawea* (SAK•uh•guh•WEE•uh) was a Shoshone woman who had a vital role in the exploration of what is now the northwestern United States. She guided explorers Meriwether Lewis and William Clark from what is now North Dakota into the Pacific Northwest. They had been sent to explore the newly purchased Louisiana Territory. Sacagawea's husband, French Canadian trapper Toussaint Charbonneau, and their baby son were also on the journey, which lasted from 1804 to 1806.

Sacagawea identified fruits and vegetables for the group to eat and helped the explorers communicate with the Native Americans whom they met along the trail. Historians believe that she was born around 1786 and probably died in 1812.



Regions of the United States and Canada

The United States and Canada share many geographic regions. Find these regions on the Unit Atlas map on page 54.

Atlantic Coastal Plain This region runs along the Gulf of Mexico and the east coast of North America. The region has much rich farmland and some swamps and wetlands.

Appalachian Mountains This 400-million-year-old mountain range lies west of the Atlantic Coastal Plain. These forest-covered mountains have weathered, or worn down, over time.

Central Lowlands West of the Appalachians are the Central Lowlands. They extend west to the Great Plains and are generally flat. The soil is rich, and many farms are located here.

Great Plains The Great Plains have grasslands and few trees. The land gradually rises from the Central Lowlands to the Rocky Mountains. Farmers grow crops and ranchers raise cattle in some areas.

The Rocky Mountains and Coastal Ranges North America's highest mountain ranges lie in the west. They include the Rocky Mountains, the Sierra Nevada and the Cascade ranges of the United States, and the Coast Mountains of Canada. These high, rugged, and heavily forested mountain ranges run along the western part of the continent from Mexico to Alaska.

Intermountain Region Located between the Rocky Mountains and the western coastal mountains, this region is dry and contains plateaus, basins, and deserts. Ranchers raise cattle and sheep in some areas. The Grand Canyon is found here.

Region • The Canadian Rocky Mountains are part of the rugged range that reaches from Mexico to Alaska in western North America. ▼

Region • The Grand Canyon in Arizona is one of the natural wonders of the world. ▼



Reading
Social Studies

B. Clarifying
Which regions of Canada and the United States have productive farmland?

Canadian Shield or Laurentian Plateau The Canadian Shield covers most of Greenland, curves around the Hudson Bay, and reaches into the United States along the Great Lakes. The central and northwestern part of this huge rocky region has flat plains with hills and lakes. The northeast has high mountains and the south is covered with forests. The shield is rich in minerals, such as iron, gold, copper, and uranium. Most of the land is not farmable and is sparsely populated.

Physical Processes That Shaped the Land

Natural processes have shaped North America. Some of the continent's most dramatic landforms were created by the action of wind, water, ice, and moving slabs of Earth's crust. **Landforms** are features of Earth's surface, such as mountains, valleys, and plateaus.

A **glacier** is a thick sheet of ice that moves slowly across land. Thousands of years ago, when Earth was much colder, glaciers covered much of North America. As they flowed across the land, they smoothed out rough surfaces, carved depressions and deep trenches, and piled up rock and dirt. When the ice melted, North America had new valleys, lakes, and hills.

Strange but TRUE

Quakes Shake Central U.S. Lands Usually, earthquakes shake up California and other parts of the western United States. But from December 1811 to February 1812, Mississippi River Valley residents were shocked by several powerful quakes.

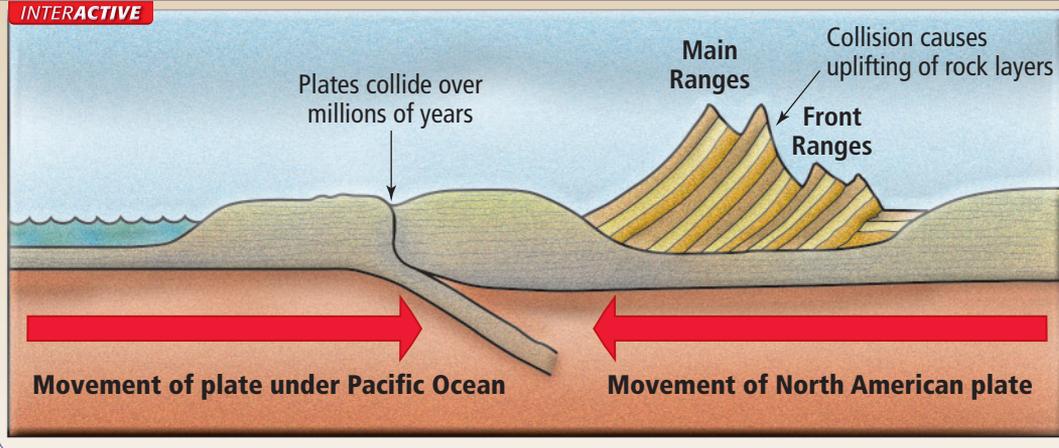
The earthquakes changed the Mississippi River's path. Islands disappeared, riverbanks collapsed, and waves capsized boats and drowned people. Farmland was flooded, new lakes appeared, and forests were destroyed. Trees such as this one were uprooted.

Eyewitnesses saw "houses, gardens, and fields . . . swallowed up" in New Madrid, Missouri, in the final quake.



Formation of the Rocky Mountains

INTERACTIVE



Region •
The Rocky Mountains were formed 40 to 70 million years ago as a result of a collision between the tectonic plate under the Pacific Ocean and the North American plate. ◀

The WORLD'S HERITAGE

The St. Lawrence Seaway This seaway, completed in 1959 by Canada and the United States, is one of the largest civil engineering projects ever built. It enables ships to travel 2,340 miles inland from the Atlantic Ocean through locks such as this one, to the Great Lakes. As a result, trade between the United States and Canada and between North America and other continents has improved. Grain, iron ore, and coal are three vital goods shipped on the seaway.



Wind, rivers, and rain wear away soil and stone in a process called **erosion**. Erosion can create magnificent landforms. The Grand Canyon is at least partly the result of millions of years of erosion by the Colorado River. Volcanoes, such as Mount St. Helens, and earthquakes are other natural forces that change the land. All these mighty forces have created landforms across North America.

Waterways

North America has an extensive **river system**, or network of major rivers and their tributaries. The longest rivers are the Mississippi and Missouri rivers in the United States and the Mackenzie River in Canada. Find these rivers on the Unit Atlas map on page 54. When snow melts and rain falls, the water runs down into creeks that collect more water, becoming rivers. North America's rivers empty into bays, oceans, seas, gulfs, lakes, and other rivers.

Vocabulary

gulf: large area of a sea or ocean partially enclosed by land

SECTION 1 ASSESSMENT

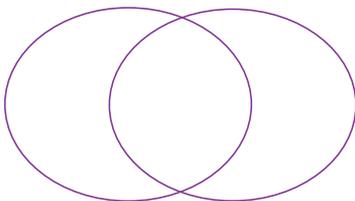
Terms & Names

1. Explain the significance of:
- | | | |
|---------------|------------------|-------------|
| (a) Sacagawea | (b) landform | (c) glacier |
| (d) erosion | (e) river system | |

Using Graphics

2. Use a Venn diagram like the one shown, to compare two geographic regions of North America.

Region 1 Both Region 2



Main Ideas

3. (a) Describe North America's location on Earth and tell how this affects its climate and plant and animal life.
- (b) What barriers prevented plants, animals, and people from reaching North America? How were the barriers overcome?
- (c) What processes of nature help to shape the land?

Critical Thinking

4. Making Inferences

What natural features of North America attracted people from other lands? Support your conclusion with details from the text.

Think About

- ♦ the natural resources
- ♦ the climate

ACTIVITY -OPTION-

List two regions of North America. Describe in a few words the kinds of plants, animals, and jobs that are found in each.