Name _____ Date _____ Class _____

STUDY GUIDE Chapter 5, Section 1

For use with textbook pages 115–120.

The Land

Terms to Know

divide A high point or ridge that determines the direction that rivers flow *(page 118)*

headwaters The source waters of a river *(page 118)*

tributary A smaller brook, river, or stream that connects with a larger river *(page 118)*

fall line A boundary that marks the place where higher land drops to lower land *(page 118)*

fishery Place for catching fish and other sea animals *(page 120)*

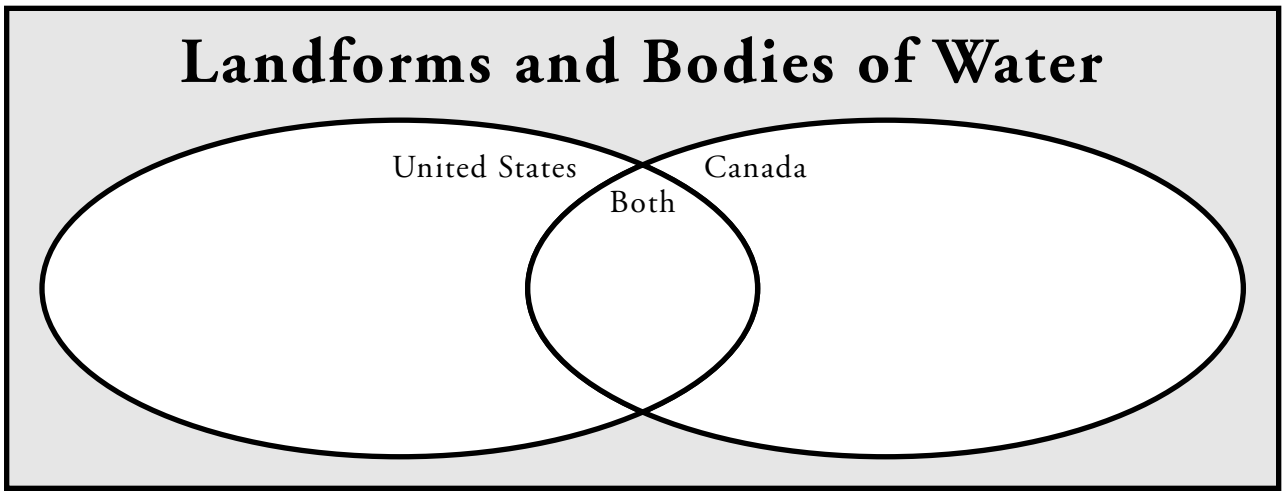
DRAWING FROM EXPERIENCE

Have you ever been to or read about famous natural features of the United States and Canada? What makes the natural features famous?

This section focuses on the physical geography of the United States and Canada.

ORGANIZING YOUR THOUGHTS

Use the Venn diagram below to help you take notes as you read the summaries that follow. Think about and compare the landforms and bodies of water of the United States and Canada.



(continued)

Name _____ Date _____ Class _____

READ TO LEARN

Introduction *(page 115)*

The United States and Canada share the northern part of North America. There is a great variety of natural features and resources in the region.

1. Where are the United States and Canada located?

_____

_____

_____

Landforms *(page 115)*

Several landforms are found in Canada and the United States.

A. The Rocky Mountains link the United States and Canada. These mountains stretch more than 3,000 miles from New Mexico to Alaska. The Pacific Ranges and the Rocky Mountains formed as a result of collisions between the Pacific and North American tectonic plates millions of years ago. Mt. McKinley in Alaska is the highest point in North America.

B. Dry basins and plateaus are found between the Pacific Ranges and the Rocky Mountains. The Colorado Plateau has been eroded by the Colorado River to form the Grand Canyon. The Great Basin includes Death Valley—the hottest and lowest place in the United States. Canada's Nechako Plateau and Fraser Plateau are narrower than the plateau areas in the United States.

C. The Great Plains are located east of the Rockies and extend 400 miles across the center of the region. They slope downward to the Central Lowlands along the Mississippi River.

D. The Eastern Mountains includes the Canadian Shield and the Appalachian Mountains. The Canadian Shield is a giant core of rock that anchors North America. The Shield makes up the eastern half of Canada and the northeastern United States. The Appalachian Mountains are North America's oldest mountains. They extend 1,500 miles from Quebec to central Alabama.

E. Coastal Lowlands lie east and south of the Appalachians.

F. Islands are important to the region. Manhattan Island at the mouth of the Hudson River is a major world economic center. Hawaii formed by volcanic mountaintops in the Pacific Ocean. Canada's main islands in the east include Newfoundland, Prince Edward Island, and Cape Breton Island. In the west is Vancouver Island.

(continued)

2. What are the main landforms in the United States and Canada?

A Fortune in Water *(page 116)*

Abundant freshwater lakes and rivers help the United States and Canada to satisfy the water needs of cities and rural areas, provide power for homes and industries, and move resources across the continent.

In North America the high ridge of the Rockies is called the Continental Divide or Great Divide. A **divide** is a high point or ridge that determines the direction that rivers flow. East of the Continental Divide, the rivers flow toward the Arctic Ocean, Hudson Bay, the Atlantic Ocean, and the Gulf of Mexico. West of the Continental Divide the rivers flow toward the Pacific Ocean. Some rivers have their **headwaters,** or source, in the Rockies. Many **tributaries,** or brooks, rivers, and streams, flow into these rivers.

The Mississippi River is North America's longest river at 2,350 miles. It stretches from Minnesota to the Gulf of Mexico. It is one of the world's busiest commercial waterways. The St. Lawrence River is one of Canada's most important rivers. It is in eastern Canada. Quebec, Montreal, and Ottawa all lie along the St. Lawrence River.

In the eastern United States, a boundary called the **fall line** marks the place where the higher land of the Piedmont drops to the lower Atlantic Coastal Plain. Eastern rivers become rapids and waterfalls along the fall line. Many important U.S. cities—Philadelphia, Baltimore, and Washington D.C., are along the fall line. These cities have port facilities for ocean-going ships. In the Northeast and the South the water power of the falls is used for textile mills and factories. Niagara Falls, along the Canada-United States border, is a tourist area and a major source of hydroelectric power for both countries.

Glacial dams created Great Bear Lake and Great Slave Lake in northern Canada. Glaciers also created the Great Lakes in the central section of the continent. The Great Lakes-St. Lawrence Seaway is a series of canals, rivers, and other inland waterways linking the Great Lakes with the Atlantic Ocean. This link has been important to the economic development of North America.

(continued)

3. What are two important rivers of North America?

Natural Resources *(page 119)*

The geological processes that shaped the landscape of North America also gave the region a great variety of resources:

- **A.** **Fuels** include petroleum, natural gas, and coal.
- **B.** **Mineral resources** include gold, silver, copper, iron ore, nickel, and potash—a mineral salt used in fertilizer.
- **C.** **Timber** is an important resource for both countries. However, today forests cover less than 30 percent of the United States and 50 percent of Canada. Efforts to harvest the timber responsibly include planting new trees, protecting animals in forests, and preserving old-growth forests.
- **D.** **Fish** are important to the region. Some **fisheries,** or places for catching fish and other sea animals, have been overfished and are now regulated by government.

4. What natural resources are important in the United States and Canada?

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STUDY GUIDE Chapter 5, Section 2

For use with textbook pages 121–125.

Climate and Vegetation

Terms to Know

timberline The elevation above which trees cannot grow *(page 123)*

chinook A warm, dry wind that blows down the Rocky Mountains in late winter and early spring *(page 124)*

prairie A naturally treeless expanse of grasses *(page 124)*

supercell A violent spring and summer thunderstorm that causes a tornado *(page 124)*

hurricane An ocean storm hundreds of miles wide with winds of 74 miles per hour or more *(page 125)*

blizzard A long, severe snowstorm *(page 125)*

DRAWING FROM EXPERIENCE

What kind of climate do you have where you live? What kinds of plants grow where you live?

In the last section, you read about the physical geography of the United States and Canada. This section focuses on the climate regions and natural vegetation in the region.

ORGANIZING YOUR THOUGHTS

Use the chart below to help you take notes as you read the summaries that follow. Think about the great variety of climate regions and vegetation of the United States and Canada.

Location	Climate Zones	Vegetation

(continued)

Name _____ Date _____ Class _____

READ TO LEARN

Introduction *(page 121)*

The climate regions and natural vegetation of the United States and Canada are diverse.

1. How would you describe the climate regions and natural vegetation of the region?

_____

_____

_____

A Varied Region *(page 121)*

Much of the United States and Canada have climates that match their latitudes. Most of Canada and Alaska are in high latitudes, so they experience long, cold winters and short, mild summers. Most of the continental United States and the southern one-third of Canada lie in more temperate latitudes where the climate regions vary with elevation. Hawaii has a tropical climate.

2. What are two factors that influence climate in the United States and Canada?

_____

_____

_____

Northern Climates *(page 122)*

There are two northern climate zones:

A. The **subarctic climate zone** covers large parts of Canada and Alaska. The winters are very cold and the vegetation is mostly coniferous forests.

B. The **tundra climate zone** is found in lands along the Arctic coastline. This zone has very cold winters and cool summers. Most plants cannot live there. Greenland's tundra vegetation is sedge, cotton grass, and lichens. Some small trees and scrubs can grow there. Few people live in this climate zone.

3. What are the two northern climate zones in the United States and Canada?

_____

_____

_____

(continued)

Western Climates *(page 122)*

The climate and vegetation patterns in the western areas of the United States and Canada vary widely. This is because of the combined effects of latitude, elevation, ocean currents, and rainfall.

A. A **marine west coast climate zone** is found along the Pacific coast from northern California to southern Alaska. The mix of ocean currents and winds with the Pacific Ranges causes this climate. The mountains force the wet ocean air upward where it cools and releases its moisture. This area receives more than 100 inches of rain each year. Coniferous trees, ferns, and mosses are common.

B. A **Mediterranean climate zone** is found in southern California.

C. A **desert climate zone** is found between the Pacific Ranges and the Rocky Mountains. The rain shadow effect keeps the plateaus and basins in the area hot and dry. This climate supports cacti. During brief spring rains, hardy wildflowers bloom.

D. A **steppe climate zone** is also found between the Pacific Ranges and the Rocky Mountains. The steppe climate is usually in areas near deserts. Desert scrub, grasslands, or coniferous forests grow in this steppe climate, depending on latitude.

E. A **highland climate** is found in the higher elevations of the Rocky Mountains and Pacific Ranges. Coniferous forests cover the middle elevations of the western mountains. Beyond the **timberline,** the elevation above which trees cannot grow, only lichens and mosses grow in the constant cold. In the late winter and early spring, a warm, dry wind called the **chinook** may blow down the eastern slopes of the Rockies. This wind quickly melts and evaporates the snow at the base of the mountains.

4. What are the western climate zones and vegetation?

Interior Climates *(page 124)*

The Great Plains of the United States and Canada are far from large bodies of water which moderate climate. This area is a humid continental climate zone with bitterly cold winters and hot summers. **Prairies,** or naturally treeless expanses of grasses, cover the land. In the Great Plains and

(continued)

eastern United States, **supercells,** or violent spring and summer thunderstorms, create tornadoes. The Great Plains supply most of North America's wheat harvest.

5. What climate zone and vegetation do the Great Plains have?

Eastern Climates *(page 125)*

There are two eastern climate zones in the region.

A. A **humid subtropical climate zone** with long, humid summers and mild winters is found in the southeastern part of the region. Deciduous forests grow there. Wetlands and swamps in the area are home to a great variety of vegetation and wildlife. **Hurricanes,** or ocean storms hundreds of miles wide with extremely strong winds, are common during the late summer and early autumn.

B. A **humid continental climate zone** extends from northeastern United States into southern Canada. Deciduous and mixed deciduous-evergreen forests grow in this climate zone. In winter, much of northern North America has **blizzards.** These snowstorms have winds over 35 miles per hour, temperatures below freezing, and visibility of less than 500 feet.

6. What climate zones and vegetation does the eastern part of the region have?

Tropical Climates *(page 125)*

There are two tropical climate zones in the United States.

A. A **tropical savanna climate zone** is found in the southern tip of Florida.

B. A **tropical rain forest zone** is located in Puerto Rico and Hawaii.

7. Where are the tropical climates found?