

SECTION
2

Reading for Understanding

▶ Key Ideas

BEFORE, YOU LEARNED

The physical geography of much of Mexico, Central America, and the Caribbean Islands consists of mountains and highlands.

NOW YOU WILL LEARN

The physical geography of South America consists of a wide variety of landforms and climates.

▶ Vocabulary

TERMS & NAMES

Andes Mountains a mountain range located on South America's west coast and extending the full length of the continent

altiplano a high plateau

llanos (YAH•nohs) grasslands of western Venezuela and northeastern Colombia

Pampas grassy plains in south-central South America

Amazon River South America's longest river (about 4,000 miles, or 6,400 kilometers) and the second-longest river in the world

REVIEW

highlands mountainous or hilly sections of a country

rain forest a broadleaf tree region in a tropical climate



Visual Vocabulary *altiplano*

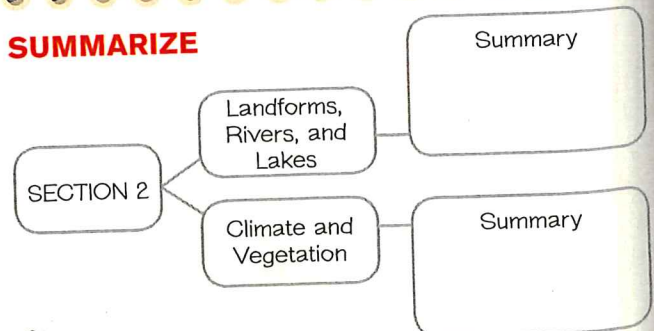
▶ Reading Strategy

Re-create the diagram shown at right. As you read and respond to the **KEY QUESTIONS**, use the diagram to summarize each of the main parts of Section 2.



See Skillbuilder Handbook, page R5

SUMMARIZE



GRAPHIC ORGANIZERS

Go to Interactive Review @ ClassZone.com



SECTION
2

GEOGRAPHY

Physical Geography of South America

Connecting to Your World

Look carefully at a map of South America, and you will see many physical features similar to those that define North America, particularly the United States. Just as the Rocky Mountains rise in western North America, the Andes Mountains stretch the entire length of western South America. Great river systems drain both continents, and large plains are central to both North and South America. Of course, as you will soon learn, there are important differences as well.

Landforms, Rivers, and Lakes

KEY QUESTION What are the main features of South America's landscape?

South America has nearly every type of physical feature, including mountains, grasslands, plains, and **highlands**. The continent has few large lakes but is drained by five major river systems, including the Amazon River, one of the largest rivers in the world.

Patagonia Deserts, plateaus, and highlands make up this area.



The Andes As the map on the opposite page shows, the **Andes Mountains** **A** stretch along western South America for a distance of about 5,500 miles. Longer than any other mountain range above sea level, the Andes are the world's second-highest range. Only the Himalayas in Asia are higher. The tallest Andean peak, Mount Aconcagua, is the Western Hemisphere's tallest mountain. People living in the Andes grow crops on terraces cut into the mountains.

The Andes region also includes valleys and the **altiplano**, or "high plateau," shared by Peru and Bolivia. Made up of a series of basins between mountains, the *altiplano* is one of the world's highest inhabited regions. Its southern half contains important deposits of copper, silver, tungsten, and tin.

Plains and Highlands The Central Plains extend eastward from the Andes and cover about three-fifths of South America. The *llanos*, Gran Chaco, Amazon rain forest, and Pampas make up the Central Plains. The **llanos** (YAH•nohs) are wide grasslands that stretch across northeastern Colombia and western Venezuela. There, cattle ranches and small farms are common.

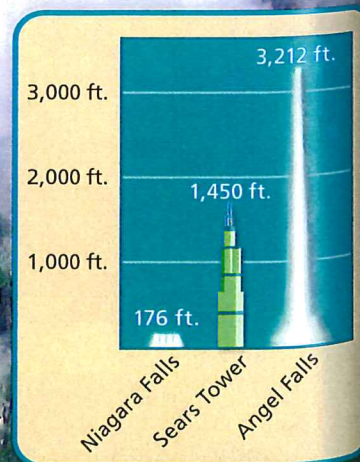
A tropical **rain forest** in the Amazon Basin **B** covers about 40 percent of Brazil. The Gran Chaco is a largely uninhabited area consisting of subtropical grasslands and low forests. Nearly half of this region is located in Argentina. The remainder extends into Paraguay and Bolivia. Just south of the Gran Chaco lies a large grassy plain called the **Pampas**, Argentina's most populated area.

The Eastern Highlands are two separate regions. The Guiana Highlands **C** to the north of the Amazon Basin consist of tropical forests and grasslands. The Brazilian Highlands **D** to the south cover about one-fourth of South America and consist mostly of hills and plateaus.

Fun Facts!

ANGEL FALLS

Angel Falls in the Guiana Highlands of southeastern Venezuela, the world's tallest waterfall, drops 3,212 feet. The waterfall was named for Jimmy Angel, an American pilot who spotted it from his airplane in 1935.



Physical Geography of South America

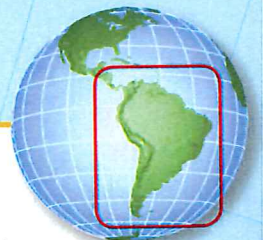


CONNECT Geography & History

READING A PHYSICAL MAP

Use the key in this physical map to identify the elevations of Patagonia and the Amazon Basin.

- 1. Place** What two oceans border South America?
- 2. Region** Where are large areas of highlands found in South America?



Rivers and Lakes South America has five large river systems. The largest is the Amazon river system, which carries about one-fifth of the Earth's river water. The **Amazon River** flows from the Andes to the Atlantic Ocean and is about 4,000 miles long. The river and its tributaries drain much of Brazil and Peru, as well as parts of Colombia, Ecuador, Bolivia, and Venezuela. South America's other river systems are the Rio de la Plata, the Magdalena-Cauca, the Orinoco, and the São Francisco.

South America has few large natural lakes. The largest, Lake Maracaibo in northwestern Venezuela, covers an area of more than 5,000 square miles. About two-thirds of Venezuela's total petroleum output comes from the Lake Maracaibo region. Lake Titicaca is the second largest lake in South America. Located in the altiplano at an elevation of 12,500 feet, Lake Titicaca is the world's highest navigable lake.

SUMMARIZE List the main geographic features of South America.



Lake Maracaibo A girl uses a pole to move her boat between houses on Lake Maracaibo. **How have people living on Lake Maracaibo adapted to their environment?**

Climate and Vegetation

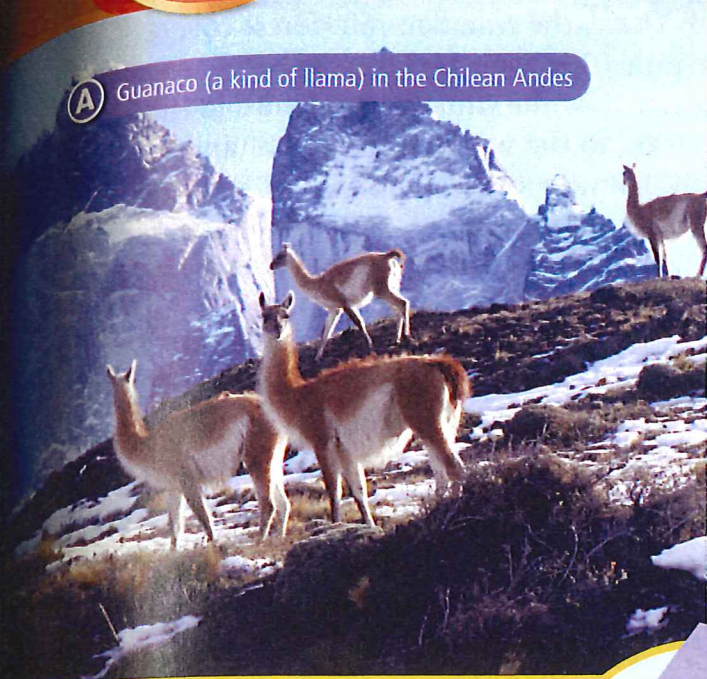
KEY QUESTION What kinds of vegetation are found in the tropical and desert climates of South America?

South America has a wide range of climates—from the steamy rain forest of the Amazon Basin to the icy cold of the upper Andes. Because climate largely determines the vegetation of a region, South America has a great variety of plant life as well.

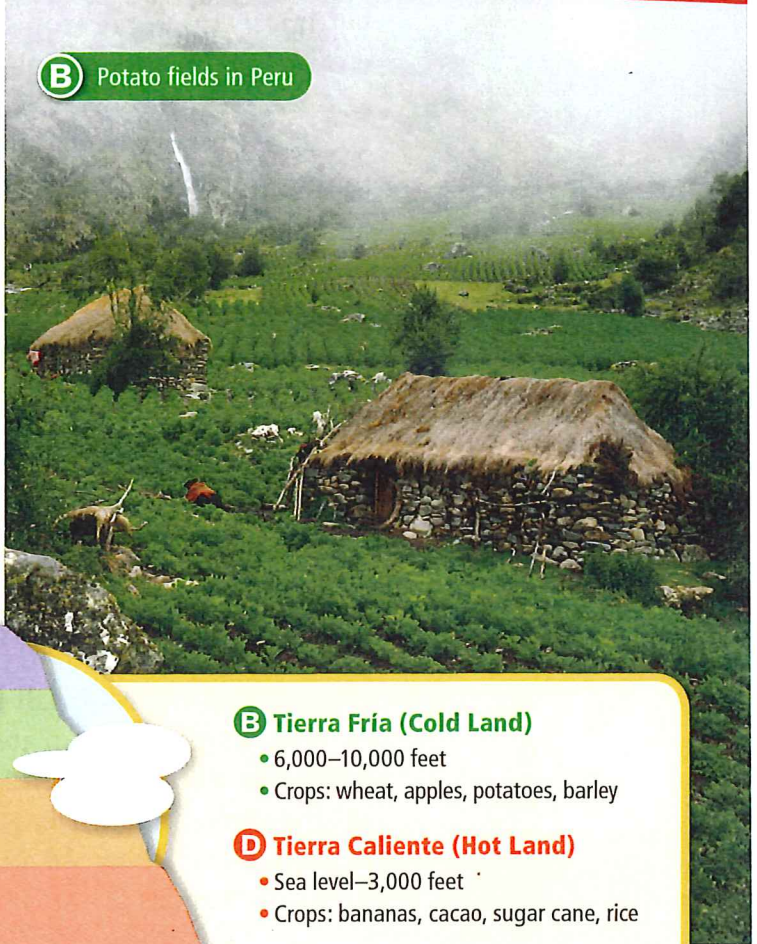
Mountain Climates The climate of the Andes Mountains changes with elevation. For example, near the equator, the climate at the lowest elevations is tropical. However, if you were to climb midway up the mountains, you would most likely find a more temperate, or mild, climate. At an elevation of more than 15,000 feet, you would encounter extremely low temperatures and icy winds. The only vegetation would be a sparse assortment of mosses, lichens, and dwarf shrubs. Climate zones at various elevations in the Andes are compared on the opposite page.

COMPARING Mountain Climate Zones

A Guanaco (a kind of llama) in the Chilean Andes



B Potato fields in Peru



A Tierra Helada (Frozen Land)

- Above 10,000 feet
- Livestock: llamas, sheep

C Tierra Templada (Temperate Land)

- 3,000–6,000 feet
- Crops: corn, cotton, coffee, citrus fruits



B Tierra Fria (Cold Land)

- 6,000–10,000 feet
- Crops: wheat, apples, potatoes, barley

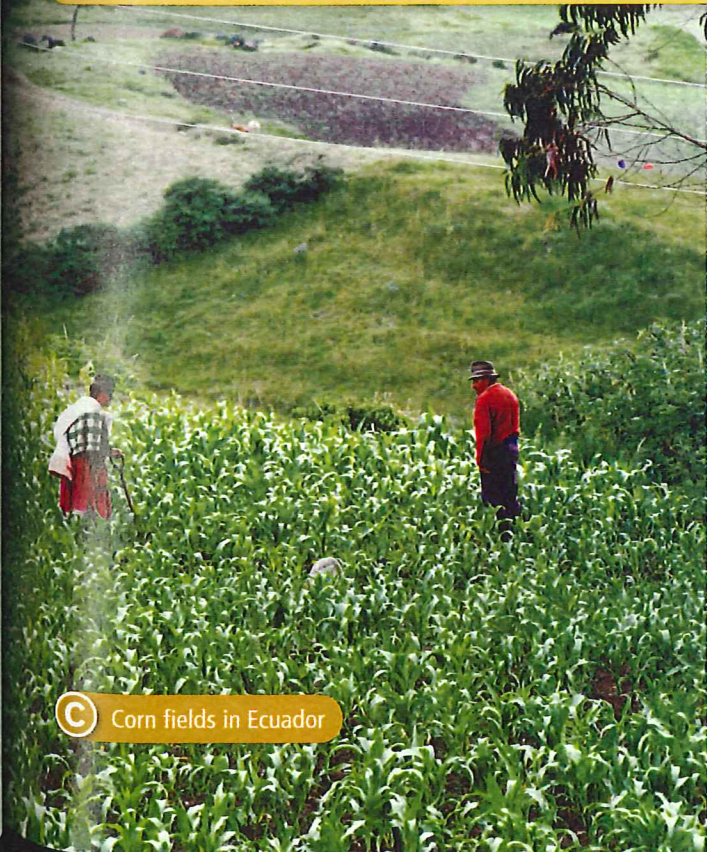
D Tierra Caliente (Hot Land)

- Sea level–3,000 feet
- Crops: bananas, cacao, sugar cane, rice

CRITICAL THINKING

Draw Conclusions What zones are most productive for growing crops?

C Corn fields in Ecuador



D Sugar cane fields in Colombia



Tropical Rain Forests Much of South America lies in the low latitudes, which are tropical. There, the Amazon rain forest covers more than 2 million square miles. Located primarily in Brazil, the rain forest is bounded to the north by the Guiana Highlands, to the south by Brazil's central plateau, to the west by the Andes, and to the east by the Atlantic Ocean. The rain forest climate is hot and wet. Although the average temperature remains a fairly constant 80°F, high humidity makes it seem hotter. Rain falls throughout the year, for a yearly average of between 50 to 175 inches.

The Amazon rain forest has the world's richest collection of life forms. In fact, many of its insects, birds, and plants have yet to be named. Wildlife includes jaguars, monkeys, and manatees. Plant life is abundant. The rain forest's many varieties of trees include rosewood, Brazil nut, rubber, mahogany, and cedar.

Grasslands Located in Venezuela and Colombia, the *llanos* cover an area of about 220,000 square miles. They extend north and west to the Andes and south to the Amazon Basin. The *llanos* have a warm climate, and their rainfall averages between 45 and 180 inches.

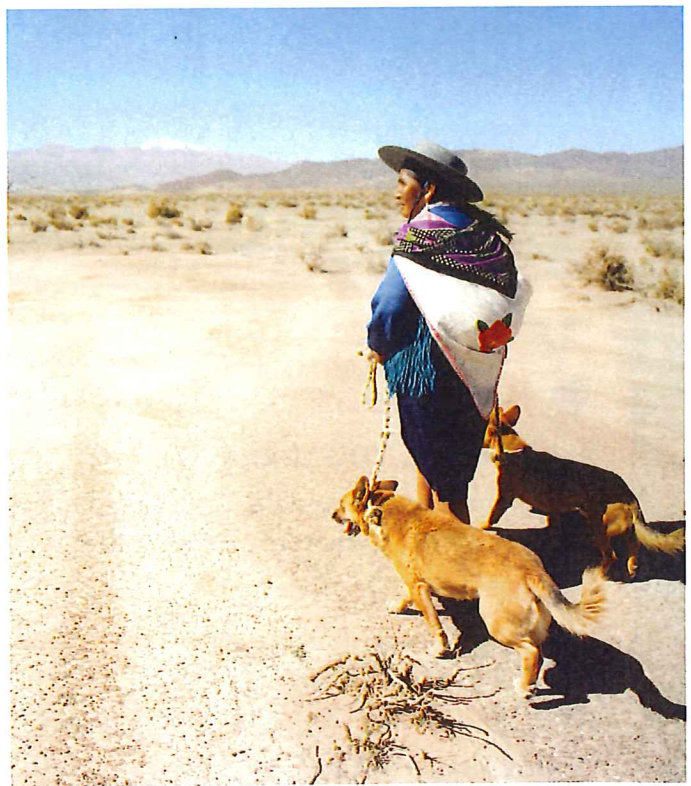
The Pampas cover an area of about 295,000 square miles in central Argentina, and they extend into Uruguay. The grasslands are good for raising cattle, and the rich soil produces a variety of crops, particularly soybeans and wheat. In addition to being an important agricultural area, the Pampas are also home to most of Argentina's cities.

The Llanos Cattle graze on the *llanos* in Venezuela. Why is this area a good place to raise cattle?



Deserts Desert climates occur along much of Peru's coast, as well as in northern Chile's Atacama Desert and southern Argentina's Patagonian desert. Desert climates are dry, and temperatures may be hot or cold. The desert in southern Patagonia is an example of a cold desert, with temperatures averaging only about 44°F.

The Atacama Desert is warmer, with summer temperatures averaging in the mid-60s°F. Although an ocean current from the Antarctic mixes with warm air to produce clouds and fog in the Atacama Desert, there is little rain. In fact, in the center of the Atacama, no rainfall has ever been recorded. There, nothing grows. Yet in the desert's fog zones, cacti, ferns, and many other types of vegetation grow.



Jujuy Desert The Jujuy Desert is located in northwestern Argentina.

CATEGORIZE Identify the kinds of vegetation found in South America's tropical and desert climates.

Section 2 Assessment

ONLINE QUIZ
For test practice, go to
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TERMS & NAMES

1. Explain the importance of

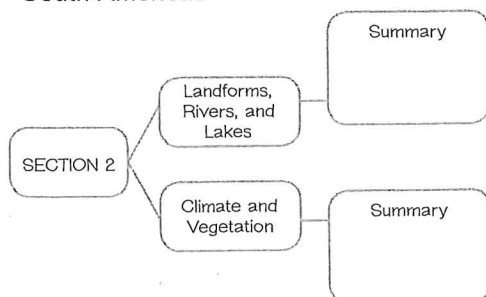
- *altiplano*
- *llanos*
- Pampas
- Amazon River

USE YOUR READING NOTES

2. Summarize

 Use your completed chart to answer the following question:

How is Lake Maracaibo important to South America?



KEY IDEAS

3. What are the main river systems of South America?
4. Where are the Guiana and Brazilian Highlands located?
5. What relationship exists between elevation and climates of the Andes?

CRITICAL THINKING

6. **Compare and Contrast** How are the four main regions of the Central Plains different from one another?
7. **Analyze Causes and Effects** Why is a variety of plant life able to grow in the Atacama Desert?
8. **CONNECT to Today** The Amazon rain forest is a popular destination for tourists today. What features do you think attract tourists to this area?
9. **ART Create a Mural** Draw a panoramic mural of the geographic features of South America. Include the continent's landforms and waterways.