SECTION

What You Will Learn...

Main Ideas

- 1. The Renaissance was a period of new learning, new ideas, and new advances in art, literature, and science.
- 2. The Reformation changed the religious map of Europe.

The Big Idea

The periods of the Renaissance and the Reformation introduced new ideas and new ways of thinking into Europe.

Key Terms and Places

Renaissance, p. 344 Florence, p. 344 Venice, p. 344 humanism, p. 345 Reformation, p. 348 Protestants, p. 349 Catholic Reformation, p. 349

As you read, use a chart like the one below to help you take notes on the Renaissance and the Reformation.

Renaissance

Reformation

The Renaissance and Reformation

If **YOU** lived there...

You live in Florence, Italy, in the 1400s. Your father, a merchant, has just hired a tutor from Asia Minor to teach you and your sisters and brothers. Your new teacher starts by stating, "Nothing good has been written in a thousand years." He insists that you learn to read Latin and Greek so that you can study Roman and Greek books that were written long ago.

What can you learn from these ancient books?

BUILDING BACKGROUND The end of the Middle Ages brought important changes to European politics and society. These changes set the stage for an exciting new period of learning and creativity. During this period, new ideas influenced the arts, science, and attitudes toward religion.

The Renaissance

Do you ever get the urge to do something creative? If so, how do you express your creativity? Do you like to draw or paint? Maybe you prefer to write stories or poems or create music.

At the end of the Middle Ages, people across Europe found the urge to be creative. Their creativity was sparked by new ideas and discoveries that were sweeping through Europe at the time. This period of creativity, of new ideas and inspirations, is called the **Renaissance** (REN-uh-sahns). It lasted from about 1350 through the 1500s. Renaissance is French for "rebirth." The people who named this period believed it represented a new beginning, or rebirth, in Europe's history and culture.

New Ideas

The Renaissance started in Italy. During and after the Crusades, Italian cities such as Florence and Venice became rich through trade. Goods from faraway Asia moved through these cities.

Landscapes in the Andes differ from south to north. In southern Chile, rugged mountain peaks are covered by ice caps. In the north, the Andes are more rounded than rugged, and there the range splits into two ridges. In southern Peru and Bolivia these ridges are quite far apart. A broad, high plateau called the altiplano lies between the ridges of the Andes.

Water and Islands

Andean glaciers are the source for many tributaries of the Amazon River. Other than the Amazon tributaries, the region has few major rivers. Rivers on the altiplano have no outlet to the sea. Water collects in two large lakes. One of these, Lake Titicaca, is the highest lake in the world that large ships can cross.

At the southern tip of the continent, the Strait of Magellan links the Atlantic and Pacific oceans. A **strait** is a narrow body of water connecting two larger bodies of water. The large island south of the strait is Tierra del Fuego, or "land of fire."

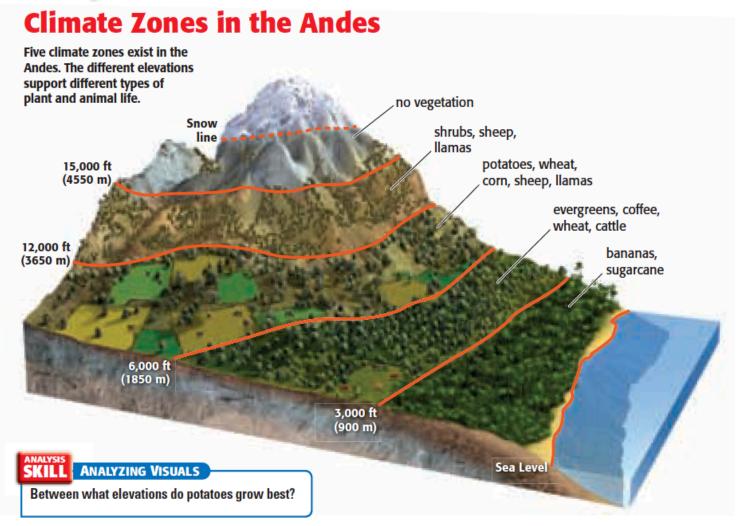
Chile and Ecuador both control large islands in the Pacific Ocean. Ecuador's volcanic Galápagos Islands have wildlife not found anywhere else in the world.

READING CHECK Contrasting How do the Andes differ from north to south?

Interactive Map **Pacific South America: Physical** LOMBIA **ECUADOR** Amazon Rive Galápagos Islands PERU BRAZIL **PACIFIC** BOLIVIA **OCEAN** Lake Poop PARAGUAY of Capric CHILE **ELEVATION** URUGUAY Meters Feet 13,120 4.000 6,560 2,000 ARGENTINA 500 1,640 200 (Sea level) 0 0 (Sea level) Below Below sea level sea level ATLANTIC **OCEAN** 800 Kilometers Projection: Lambert Azimuthal Equal-Area Tierra del Fuego Cape Horn map Geography Skills Regions The Andes stretch all through the countries of Pacific South America. 1. Identify To what country do the Galápagos Islands belong? 2. Interpret How do you think the Andes affect life in the region? go.hrw.com (KEYWORD: SJ7 CH10)

Llamas graze on the high, dry altiplano. The climate on the altiplano is too dry for trees to grow.

Close-up



Climate and Vegetation

Focus on READING

What can you infer about the location of mountains in Ecuador?

Climate, vegetation, and landscapes all vary widely in Pacific South America. We usually think of latitude as the major factor that affects climate. However, in Pacific South America, elevation has the biggest effect on climate and vegetation.

Elevation

Mountain environments change with elevation. For this reason, we can identify five different climate zones in the Andes. You can see these different climate zones on the diagram above.

The lowest zone includes the hot and humid lower elevations near sea level. Crops such as sugarcane and bananas grow well there. This first zone is often found along the coast, but it is also found inland in eastern Ecuador and Peru and northern Bolivia. These regions are part of the Amazon basin. They have a humid tropical climate with thick, tropical rain forests.

As elevation increases, the air becomes cooler. The second elevation zone has moist climates with mountain forests. This zone is good for growing coffee. In addition, many of Pacific South America's large cities are located in this zone.

Higher up the mountains is a third, cooler zone of forests and grasslands. Farmers grow potatoes and wheat there. Many people in Pacific South America live and farm in this climate zone.

At a certain elevation, the climate becomes too cool for trees to grow. This fourth climate zone above the tree line contains alpine meadows with grasslands and hardy shrubs. The altiplano region between the two ridges of the Andes lies mostly in this climate zone.

The fifth climate zone, in the highest elevations, is very cold. No vegetation grows in this zone because the ground is almost always covered with snow and ice.

Deserts

Pacific South America also has some climates that are not typical of any of the five climate zones. Instead of hot and humid climates, some coastal regions have desert climates.

Northern Chile contains the **Atacama Desert.** This desert is about 600 miles (965 km) long. Rain falls there less than five times a century, but fog and low clouds are common. They form when a cold current in the Pacific Ocean chills the warmer air above the ocean's surface. Cloud cover keeps the air near the ground from being warmed by the sun. As a result, coastal Chile is one of the cloudiest-and driest—places on Earth.

In Peru, some rivers cut through the dry coastal region. They bring snowmelt down from the Andes. Because they rely on melting snow, some of these rivers only appear at certain times of the year. The rivers have made some small settlements possible in these dry areas.

El Niño

About every two to seven years, this dry region experiences **El Niño**, an ocean and weather pattern that affects the Pacific coast. During an El Niño year, cool Pacific water near the coast warms. This change may cause extreme ocean and weather events that can have global effects.

As El Niño warms ocean waters, fish leave what is usually a rich fishing area. This change affects fishers. Also, El Niño causes heavy rains, and areas along the coast sometimes experience flooding. Some scientists think that air pollutants have made El Niño last longer and have more damaging effects.

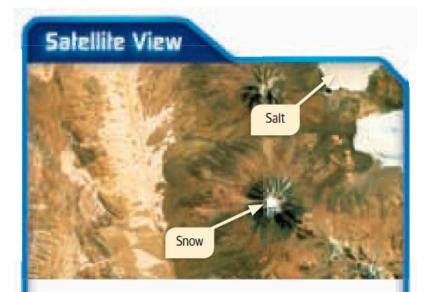
ACADEMIC Vocabulary

cause to make something happen

READING CHECK Finding Main Ideas How does elevation affect climate and vegetation?

Natural Resources

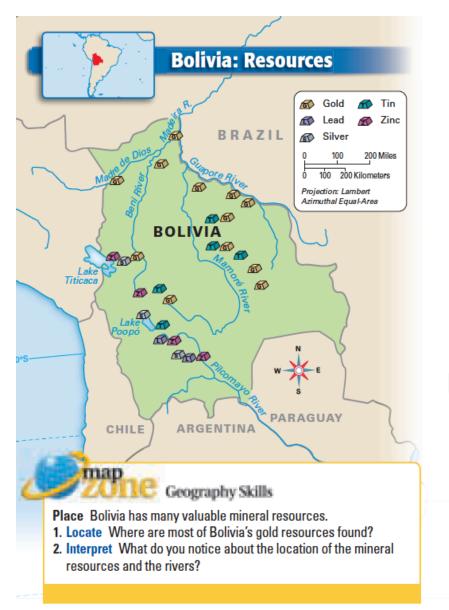
The landscapes of Pacific South America provide many valuable natural resources. For example, forests in southern Chile and in eastern Peru and Ecuador provide lumber. Also, as you have read, the coastal waters of the Pacific Ocean are rich in fish.



Atacama Desert

The Atacama Desert lies between the Pacific coast and the Andes in northern Chile. In this image you can see two snowcapped volcanoes. The salt in the top right part of the image is formed from minerals carried there by rivers that only appear during certain months of the year. These seasonal rivers also support some limited vegetation.

Drawing Conclusions Why do you think there is snow on the volcanoes even though the desert gets hardly any precipitation?



In addition, the region has valuable oil and minerals. Ecuador in particular has large oil and gas reserves, and oil is the country's main export. Bolivia has some deposits of tin, gold, silver, lead, and zinc. Chile has copper deposits. In fact, Chile exports more copper than any other country in the world. Chile is also the site of the world's largest open pit mine.

Although the countries of Pacific South America have many valuable resources, one resource they do not have much of is good farmland. Many people farm, but the region's mostly cool, arid lands make it difficult to produce large crops for export.

READING CHECK Categorizing What types of resources do the countries of Pacific South America have?

SUMMARY AND PREVIEW The Andes are the main physical feature of Pacific South America. Next, you will learn how the Andes have affected the region's history and how they continue to affect life there today.

Section 1 Assessment

Reviewing Ideas, Terms, and Places

- 1. a. Identify What is the main physical feature of Pacific South America?
 - **b. Analyze** How is Bolivia's location unique in the region?
- 2. a. Define What is El Niño, and what are some of its effects?
 - **b. Draw Conclusions** Why are parts of Ecuador, in the tropics, cooler than parts of southern Chile?
- **3. a. Identify** What country in this region has large oil reserves?
 - **b. Make Inferences** Why do you think much of the region is not good for farming?
 - c. Elaborate What effects do you think copper mining in Chile might have on the environment?

Critical Thinking

4. Categorizing Review your notes on climate. Then use a diagram like this one to describe the climate and vegetation in each of the five climate zones.



Online Quiz

KEYWORD: SJ7 HP10

FOCUS ON SPEAKING

5. Describing Physical Geography Note information about the physical features, climate and vegetation, and resources of Pacific South America. Write two questions and answers you can use in your interview.