

Ancient America



Before You Read: Anticipation Guide

Copy the statements below in your notebook. Write *agree* or *disagree* next to each one. After you have read the lesson, look over the statements again and see if you have changed your opinion.

- The geography of the Andes Mountains helped civilizations develop there.
- Some ancient American civilizations built pyramids.
- The Maya did not create a very advanced civilization.

Big Ideas About Ancient America

Science and Technology New inventions and techniques change the way humans live their daily lives.

Ancient American cultures arose in difficult environments. These cultures adapted to their challenging conditions by developing new farming techniques and irrigation systems. The techniques allowed them to grow food and build thriving civilizations.



Integrated Technology

eEdition

- Interactive Maps
- Interactive Visuals
- Starting with a Story



Ancient Maya



INTERNET RESOURCES

- Go to **ClassZone.com** for
- WebQuest
 - Homework Helper
 - Research Links
 - Internet Activities
 - Quizzes
 - Maps
 - Test Practice
 - Current Events

AMERICAS

WORLD

1200 B.C.

Olmec build the Americas' first known civilization in southeastern Mexico. (sculpture of Olmec wrestler) ▶



900 B.C.

Chavin culture arises in Peru and influences other cultures in South America.

1200 B.C.

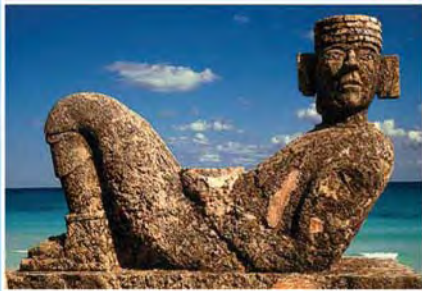
1200 B.C.

Attacked by invaders, Egyptian Empire begins to decline. (Egyptian sphinx and pyramid) ▶



American Civilizations, 1200 B.C.–A.D. 900

INTERACTIVE



Mayan rain god



Chavín stone sculpture of a warrior



200 B.C.
Nazca culture arises in southern Peru.
◀ (Nazca Lines)

A.D. 100
Moche culture emerges and produces beautiful art.

A.D. 250
Classic Period of Mayan civilization begins.

480 B.C.
Culture and science flourish during the Golden Age of Greece.



202 B.C.
Han Dynasty begins in China.
◀ (Emperor Liu Bang, who founded the Han Dynasty)

A.D. 120
Roman Empire reaches its height during a long period of peace.

300 B.C.

B.C. A.D.

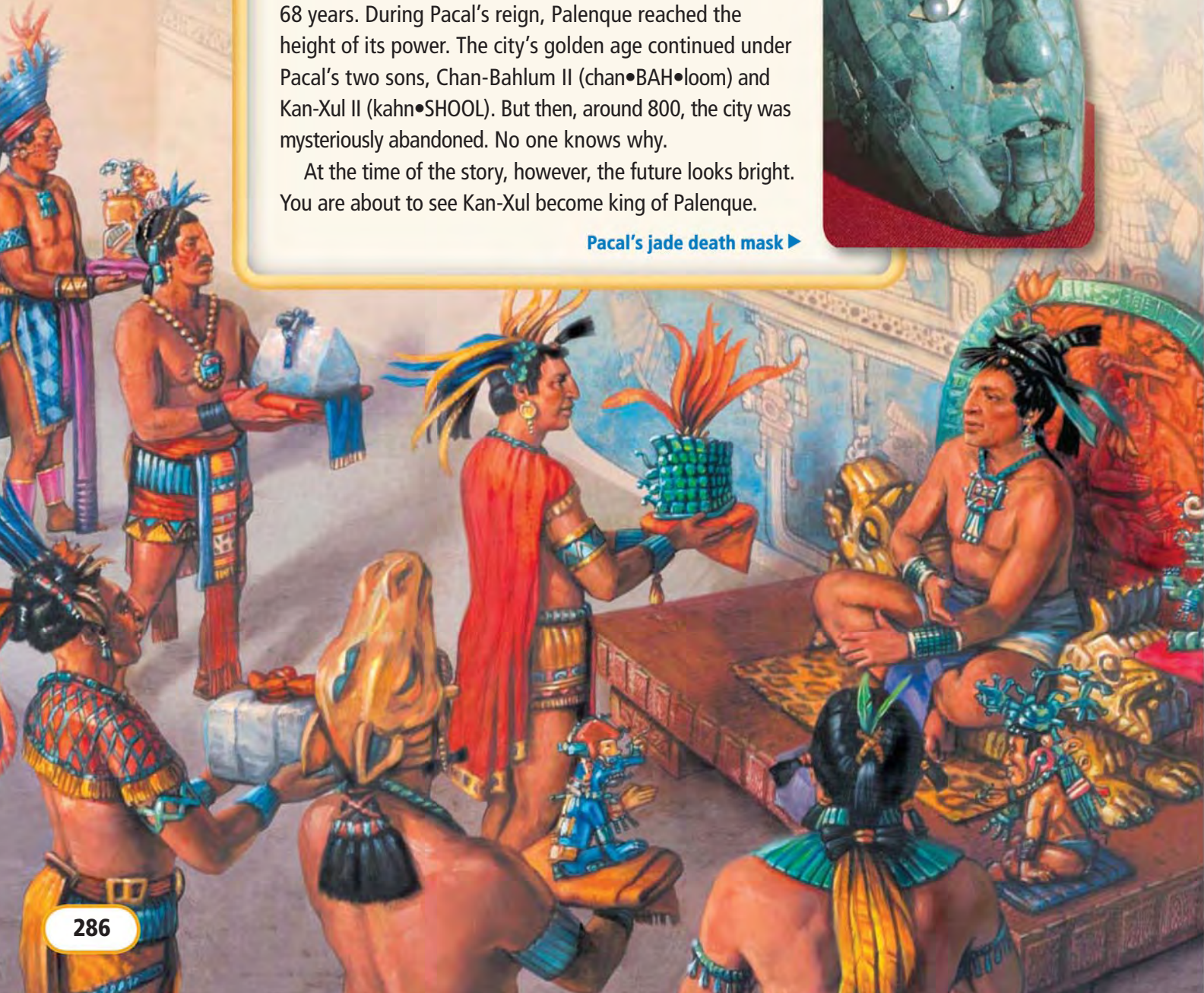
A.D. 300

King Pacal II and His Sons

Background: In southern Mexico stand the ruins of an ancient Mayan city-state called Palenque (pah•LEHNG•keh). The city's greatest leader, King Pacal II (pah•KAHL), came to power in A.D. 615 and ruled for 68 years. During Pacal's reign, Palenque reached the height of its power. The city's golden age continued under Pacal's two sons, Chan-Bahlum II (chan•BAH•loom) and Kan-Xul II (kahn•SHOOL). But then, around 800, the city was mysteriously abandoned. No one knows why.

At the time of the story, however, the future looks bright. You are about to see Kan-Xul become king of Palenque.

Pacal's jade death mask ▶



As an attendant in the palace, you have much to do before the ceremony begins. But as you work, placing the gifts and offerings around the throne, you think about Kan-Xul's father.

Pacal the Great made Palenque one of the most powerful Mayan cities in the land. He had beautiful temples built and decorated them with wonderful jade ornaments and stone sculptures. After Pacal died, the city's artists carved statues of the king. They also made necklaces and rings for him to wear on his journey to the underworld. You were one of the few servants to catch a peek of the life-sized jade mask that was placed over the dead king's face. Now you're almost sorry you looked. Whenever you recall the unblinking gaze of its eyes, you shiver.

After Pacal's funeral, slaves carefully lowered a stone block to seal his tomb. The enormous block weighed as much as 70 men. A long speaking tube extended from the tomb. The tube let Pacal's sons talk and pray to their dead father.

Pacal's oldest son, Chan-Bahlum, ruled for 18 years. He continued his father's work. Now that he has died, his brother Kan-Xul will be the king. After you finish the preparations, you stand at the back of the room and watch the ceremony.

Kan-Xul sits on the jaguar throne. He receives the magnificent jade headdress that his father and brother wore before him. His mother stands at his side and watches as Kan-Xul accepts gifts from the noblemen of the city. You happily imagine the many kings who will certainly follow Kan-Xul. Then suddenly, you feel a strange chill. You remember the cold, staring eyes of Pacal's death mask. The eyes seem to behold a darker future. What do they see?

What can happen when a new leader takes power?

Reading & Writing

- 1. READING: Supporting Citations** How was Pacal important to his sons and to the people of Palenque? Use citations from the story to support your answer.
- 2. WRITING: Description** Imagine that you are a reporter covering the ceremony as Kan-Xul becomes king. Write a short news feature in which you describe what you see.



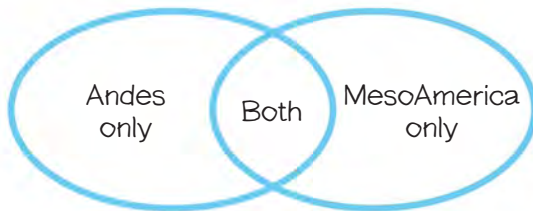
MAIN IDEAS

- 1 **Geography** The physical geographies of North and South America are very different.
- 2 **Geography** The Andes provide a harsh environment for the people who live there.
- 3 **Geography** Mesoamerica has a variety of landforms and climates.

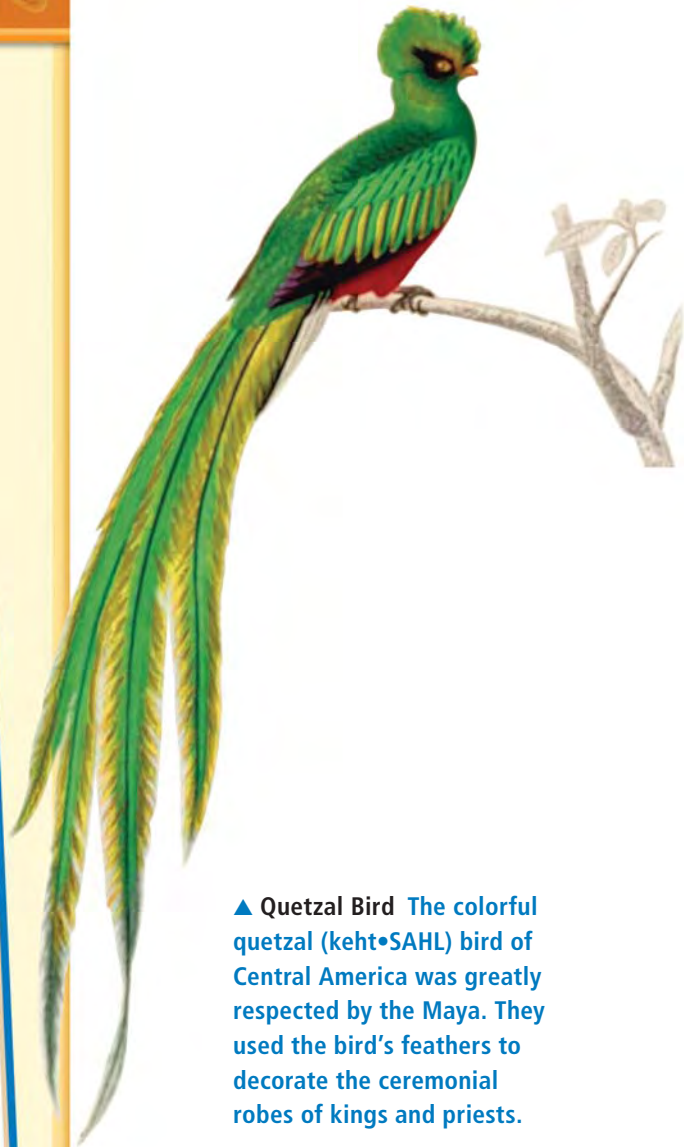
TAKING NOTES

Reading Skill: Comparing and Contrasting

When you compare and contrast two subjects, you discover how they are alike and how they are different. As you read Lesson 1, compare and contrast the geography of the Andes with the geography of Mesoamerica. Use a Venn diagram like the one below to record their similarities and differences.



 Skillbuilder Handbook, page R4



▲ **Quetzal Bird** The colorful quetzal (keht•SAHL) bird of Central America was greatly respected by the Maya. They used the bird's feathers to decorate the ceremonial robes of kings and priests.

Words to Know

Understanding the following words will help you read this lesson:

impact an effect
(page 290)

A region's climate has a major impact on the types of foods that it can produce.

severe very harsh or extreme
(page 291)

The severe conditions in the Andes Mountains offer many challenges to people living there.

subject likely to have or to get
(page 292)

Buildings can be in danger of collapse in a region that is subject to earthquakes.

The Geography of the Americas

TERMS & NAMES

isthmus

tropical

Mesoamerica

Yucatán Peninsula

slash-and-burn
agriculture

Build on What You Know Which do you like best—the mountains, the shore, the desert, the plains? You can find all of these regions in North America. In this lesson, you will compare the geography of North America with that of South America.

Physical Geography of the Americas

- 1 ESSENTIAL QUESTION** What is the physical geography of the Americas like?

Look at the map of North and South America on the following page. You can see that the continents are connected. A narrow land bridge called an **isthmus** links them. However, the geographies and climates of the two continents are very different.

Major Landforms and Rivers Mountains run along the western parts of both continents. North America has a north-south mountain range called the Rocky Mountains. South America has a mountain range called the Andes.

Water flows down these ranges to the continents' great rivers. The major river system of North America is the Mississippi. The Amazon and Paraná (**PAR•uh•NAH**) rivers are the major systems of South America.

Amazon River
Villagers of the
Amazon rain forest
paddle a canoe on
the river. The Amazon
carries more water to
the sea than any other
river in the world. ▼



A Variety of Climates The locations of the two continents has an impact on their seasons. As you can see on the map on this page, North America lies north of the equator. Most of South America lies south of it. As a result, the seasons are reversed. When it is summer in North America, it is winter in South America—and vice versa.

The locations of the continents also affect their climates. Much of North America has a mild or dry climate, with four distinct seasons. Most people live in these climates. Few people live in the northern regions of Canada, where the climate is very cold.

South America also has a wide range of climates. In addition, much of the continent receives a great deal of rainfall.

In fact, about half of South America is warm and rainy. These warm and rainy areas are called **tropical** zones. Some areas of North America are also tropical. These areas lie mostly in Central America. The people who built ancient civilizations in this Central American area learned to live and thrive in its tropical climate.

REVIEW What are some major differences between the geographies and climates of North America and South America?

Geography of the Andes

2 ESSENTIAL QUESTION What geographic features are characteristic of the Andes?

Ancient civilizations developed on both continents. Some arose high in South America's Andes Mountains. The Andes extend about 5,500 miles from Venezuela in the north to Chile at the southern tip of South America. They consist of very high plateaus surrounded by even higher peaks.



Tall Peaks The peaks of the Andes are the highest in the Americas. Many are over 20,000 feet, or almost four miles high. The highest elevations are covered only by a thin, stony soil. Lower down, the soil is a little richer.

The Andes' location along two colliding plates also makes life there hard. The plate movement causes volcanic activity and earthquakes in the Andes. The climate is severe too. At high altitudes it freezes, and in many places rainfall is unpredictable.

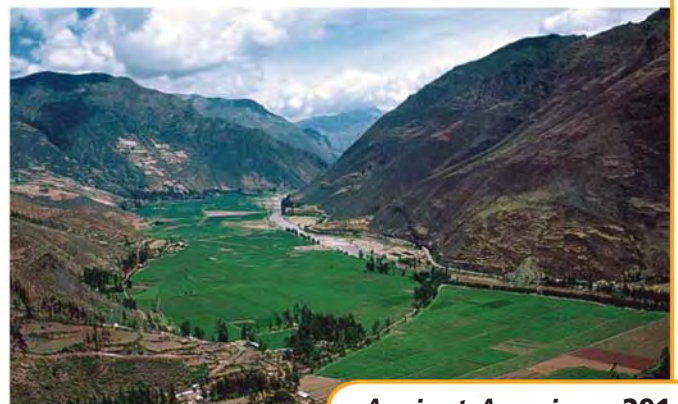
High Plateaus Over a long stretch of the Andes, the mountains split into two ranges. A large group of high plateaus lies between them. This area is filled with hills, valleys, plains, and deserts. A few large rivers water the area. But in the high desert regions, rain almost never falls.

As you might imagine, farming presents a challenge in the Andes. To grow their food, farmers in ancient Andean civilizations developed irrigation canals. These carried water to crops the farmers developed, such as potatoes.

REVIEW What makes the Andes a harsh environment?



Andes The Andes are the longest mountain range in the world. The top photograph shows a high plateau region. The bottom one shows the more fertile valley region.





Geography of Mesoamerica

- 3 ESSENTIAL QUESTION** How do the geography and climate of Mesoamerica contrast with those of the Andes?

Ancient civilizations arose in North America in a region called **Mesoamerica**. Mesoamerica includes southern Mexico and the Central American countries of Guatemala, El Salvador, Belize, and parts of Honduras and Nicaragua. In contrast with the Andes Mountains, Mesoamerica offers a milder environment.

The Land of Mesoamerica Mesoamerica has two main regions: highlands and lowlands. The tropical lowlands hug the coast of the Gulf of Mexico. These areas of dense jungle are also found on the **Yucatán** (YOO•kuh•TAN) **Peninsula**, which lies between the Gulf of Mexico and the Caribbean Sea. The highlands stretch between the mountains of the Sierra Madre mountain system. Like much of the Andes, this region is subject to earthquakes and volcanoes.

Climate Rainfall varies greatly in these two regions. It can rain more than 100 inches a year in the steamy lowlands, providing a good environment for palm, avocado, and cacao trees. As you climb toward the highlands, however, the air becomes cooler and drier. This region receives much less rainfall.

Early Mesoamerican farmers had to develop advanced agricultural practices to deal with both climates. In the dry highlands, farmers irrigated their fields, which produced corn, beans, and squash. In the lowlands, they practiced **slash-and-burn agriculture**. They cleared a patch of jungle by cutting back and burning it. When the field became less productive, farmers began again with a new piece of land.

REVIEW How does climate affect the two main regions in Mesoamerica?

Corn These ears of maize, or corn, are being sold in a Yucatán market. Corn was first developed in Mesoamerica. ▼



Lesson Summary

- North America and South America have contrasting climates and geographies.
- The Andes Mountains provided a challenging environment for ancient civilizations.
- The climates of Mesoamerica resulted in the development of different agricultural practices.

Why It Matters Now . . .

Today the potatoes developed in the Andes and the corn developed in Mesoamerica have become important crops in countries all over the world.

1 Lesson Review

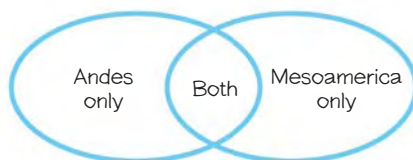
Terms & Names

1. Explain the importance of
- | | |
|-------------|----------------------------|
| isthmus | Yucatán Peninsula |
| tropical | slash-and-burn agriculture |
| Mesoamerica | |

Using Your Notes

Comparing and Contrasting Use your completed Venn diagram to answer the following question:

2. How is the geography of the Andes and Mesoamerica similar?



Activity

Making a Physical Map Trace a map showing Mesoamerica and the western coast of South America. Label the major landforms, bodies of water, and regions in both places. Use a legend to identify any symbols or colors on the map.



Main Ideas

3. Why are the seasons reversed in North and South America?
4. Why is farming a challenge in the Andes?
5. How did farmers grow crops in the rainy lowlands of Mesoamerica?

Critical Thinking

6. **Explaining Geographic Patterns** Why did farmers in the Andes and in Mesoamerica develop advanced agricultural techniques?
7. **Making Inferences** What might have happened if ancient peoples in the Americas had not adapted to their environments?

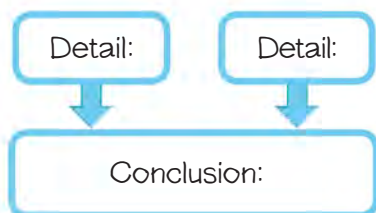
MAIN IDEAS

- 1 Culture** The art of the Chavín, which featured religious images, influenced other cultures.
- 2 Culture** The Nazca civilization left behind beautiful art and mysterious images.
- 3 Science and Technology** The Moche created a complex system of agriculture that supported important city structures.

TAKING NOTES

Reading Skill: Drawing Conclusions

When you draw conclusions, you form opinions about what you have read. Draw conclusions about the three ancient Andean civilizations as you read Lesson 2. Use a diagram like the one below to record your conclusions.



 Skillbuilder Handbook, page R25



▲ **Chavín Art** This golden ornament of a snarling cat is typical of Chavín religious art. Some archaeologists believe that artwork featuring snarling cats was used in religious rituals of the Chavín.

Words to Know

Understanding the following words will help you read this lesson:

ruin the remains of something that has been destroyed or has decayed (page 295)

Archaeologists study the ruins of ancient buildings.

extensive large in quantity or area (page 296)

Farming in the dry region required an extensive system of canals.

wool the soft, thick, often curly hair of sheep and other animals (page 297)

They used the wool of local animals to make clothing.

engineer a person who uses scientific knowledge to design and build things (page 298)

Only a skilled engineer could have built the irrigation system.

Chavín
textile
Nazca
aquifer
Moche

Ancient Andean Civilizations

Build on What You Know You have learned about the rugged landscape and harsh climate of the Andes Mountains. Now find out about the people who created civilizations in this tough environment.

The Chavín Civilization

1 ESSENTIAL QUESTION What was the Chavín civilization?

The ruins of a huge U-shaped temple stand high in the Andes of Peru in a place called Chavín de Huantar (chah•VEEN deh WAHN•tahr). The temple was built by a culture known as the **Chavín**. This culture flourished between about 900 and 200 B.C. Our understanding of the Chavín may increase as more discoveries are made. But for right now, the little we know is based on the ruins of the structures they built.

The Chavín Ruins Archaeologists believe that the Chavín civilization was united mainly by religion. Little is known about their political or economic organization. However, the religious images found at Chavín de Huantar tell us about their culture.

Chavín de Huantar
Heads like this one decorated the outer walls of the temple of Chavín de Huantar. The heads may have been designed to frighten away evil spirits. ▼



Religion and Art Some archaeologists believe that Chavín de Huantar was a holy city. The culture's ruler-priests may have called on farmers, who made up most of the society, to build the religious center. The farmers probably worked at Chavín de Huantar to fulfill their religious duty. Followers of the Chavín religion probably traveled to the center for special festivals.

The Chavín culture spread across much of northern and central Peru. Archaeologists know this because they have found the Chavín art style in religious images throughout the northern coast of Peru. This style is seen in stone carvings and in beautiful black and red pottery. The Chavín also embroidered images into woven cloth called **textiles**.

REVIEW How did the Chavín influence other cultures?

The Nazca Civilization

2 ESSENTIAL QUESTION How did the Nazca adapt to their harsh environment?

After the decline of the Chavín, other cultures arose in Peru. One of these was the **Nazca** (NAHZ•kuh) culture, which arose along the southern coast of present-day Peru. The Nazca prospered from around 200 B.C. to A.D. 600.

Irrigation and Agriculture Much about the Nazca remains a mystery. Like the Chavín, little is known about the political and economic structures of the Nazca. One of the things we do know about the Nazca is that they developed an extensive irrigation system. Their economy was based on farming, but the Nazca lived in an area that received less than an inch of rainfall a year. So to water their crops, the Nazca built a network of underground canals.



Art The Nazca civilization is also known for its beautiful pottery and textiles. Potters crafted bowls and double-spouted pitchers and decorated them with vividly painted people, birds, fish, fruits, and mythical creatures. Textile artists wove the wool of the alpaca, a camel-like animal, into ponchos, shirts, and headbands. They decorated these fine textiles with religious images and animals.

The Nazca Lines Probably the most striking legacy left behind by the Nazca are the Nazca Lines, which are shown below. To this day, no one knows the purpose of the Nazca Lines. Some people believe that the Nazca worshiped mountain or sky gods and created the drawings to please them. Other people believe the lines showed where surface water entered the plain. Still others say that the lines form a giant astronomical calendar and map. The latest theory is that some of them show the routes of **aquifers**, or underground water sources.

REVIEW What is the Nazca culture known for?

Geography

The Nazca Lines

Between 200 B.C. and A.D. 600, the Nazca made more than 1,000 pictures of birds, plants, animals, humans, and geometric shapes on the plains of southeastern Peru. The dry climate and winds in the region preserved the designs.

Most of the drawings are so big that you can't recognize them from the ground. The hummingbird (top) and parrot shown here, for example, are over 100 feet long. Some designs are more than 2,500 feet long. It's no wonder the Nazca Lines remained undiscovered until people saw them from airplanes in the 1920s.



GEOGRAPHY SKILLBUILDER INTERPRETING VISUALS

Human-Environment Interaction What do the lines suggest about the Nazca?

The Moche Civilization

3 ESSENTIAL QUESTION What does Moche art tell us about their civilization?

While the Nazca rose on the southern coast of Peru, the **Moche** (MOH•chay) culture dominated Peru's hot, dry northern coast between about A.D. 100 and 700. The culture is named for the city of Moche, which may have been the capital of the Moche civilization.

Agriculture Like the Nazca, the Moche used advanced farming techniques to make the most of their environment. The Moche channeled the rivers that flowed from the Andes Mountains into impressive irrigation systems. They used this water to grow corn, beans, squash, avocados, chile peppers, and peanuts. In fact, the Moche enjoyed a wide variety of foods. They hunted and fished, gathered snails and wild plants, and ate domesticated ducks and llamas.

City Structures In addition to being good engineers, the Moche were also skilled architects. Two large structures still stand in the city of Moche. The Temple of the Sun is a gigantic step pyramid, which you learned about in Chapter 5. The Temple of the Moon is a raised platform topped with big rooms and courtyards.

Some archaeologists believe that the temples may have served as centers of political power for the Moche. They think that nobles ruled over the people. The lower classes, made up of farmers and laborers, probably paid taxes for the repair of the temples and other city structures.

Art Recent discoveries of Moche tombs have increased our understanding of the Moche civilization. Archaeologists have found beautiful jewelry made of gold, silver, and turquoise. Leaders and the wealthy wore this jewelry. They also wore textiles covered with pictures of people, plants, and animals.



▲ Moche Pottery Archaeologists believe that this jug pictures an actual person. Some experts consider the Moche the most skilled artists of ancient America.

In addition, archaeologists have found pottery that tells us about Moche daily life. The pots show doctors with their patients, women weaving cloth, and musicians playing instruments. But we still don't know very much about Moche religious beliefs or why the civilization fell. One day, further archaeological discoveries may answer these questions.

REVIEW How have archaeologists learned about the Moche civilization?

Lesson Summary

- Chavín religion spread to a large area along Peru's coast.
- The Nazca developed irrigation systems and etched mysterious lines on the ground.
- The Moche civilization built large cities where artists crafted beautiful jewelry and pottery.



▲ Nazca Textile This colorful poncho was made around A.D. 600. Nazca textiles were sometimes used to show the owner's standing in the society.

Why It Matters Now . . .

The farming methods used by the ancient Andean civilizations can help people today bring water to their dry fields and develop crops that grow well there.

2 Lesson Review

Terms & Names

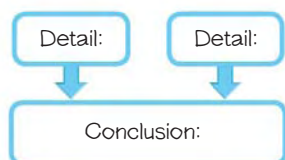
1. Explain the importance of

Chavín	Nazca	Moche
textile	aquifer	

Using Your Notes

Drawing Conclusions Use your diagram to answer the following question:

2. What conclusions can you draw about the Chavín culture?



Main Ideas

3. How do archaeologists know that the Chavín influenced other cultures?
4. What are the Nazca Lines?
5. How have recent discoveries increased understanding of the Moche?

Critical Thinking

6. **Comparing and Contrasting** Compare and contrast characteristics of the Chavín, Nazca, and Moche civilizations.
7. **Identifying Issues and Problems** Why is it difficult to know more about the Chavín, Nazca, and Moche cultures?

Activity

Making a Nazca Line Drawing Sketch a plan for a Nazca Line drawing that would be 100 feet long. Be sure to indicate the scale you use in your drawing.

MAIN IDEAS

- 1 Geography** The Olmec lived in a fertile land and developed the first civilization in the Americas.
- 2 Culture** The Olmec had a complex civilization with many great accomplishments in art and learning.
- 3 Culture** Olmec culture spread to other groups of people in Mesoamerica through trade.

TAKING NOTES

Reading Skill: Categorizing

Sorting similar kinds of information into groups helps you understand patterns in history. As you read Lesson 3, look for three categories about Olmec civilization. Record the information you learn about them in a web diagram like the one below.



S Skillbuilder Handbook, page R6



▲ **Olmec Figure** This Olmec jade figure shows an adult holding a baby. Jade was sacred to the Olmec. They traded throughout much of Mesoamerica to obtain it.

Words to Know

Understanding the following words will help you read this lesson:

scholar a person who knows a great deal about a topic (page 301)

The discovery of new evidence can cause scholars to give up long-held beliefs.

tomb a grave, chamber, or structure for holding a dead body (page 302)

Important rulers often had large and elaborate tombs built for themselves.

ton unit of weight equal to 2,000 pounds (page 302)

Some of the sculptures weigh as much as 20 tons, which is roughly equal to the weight of ten automobiles.

legacy something passed down from an ancestor or predecessor (page 303)

The legacy of the Olmecs can be seen in many elements of Mayan culture.

Olmec

mother culture

The Olmec of Mesoamerica

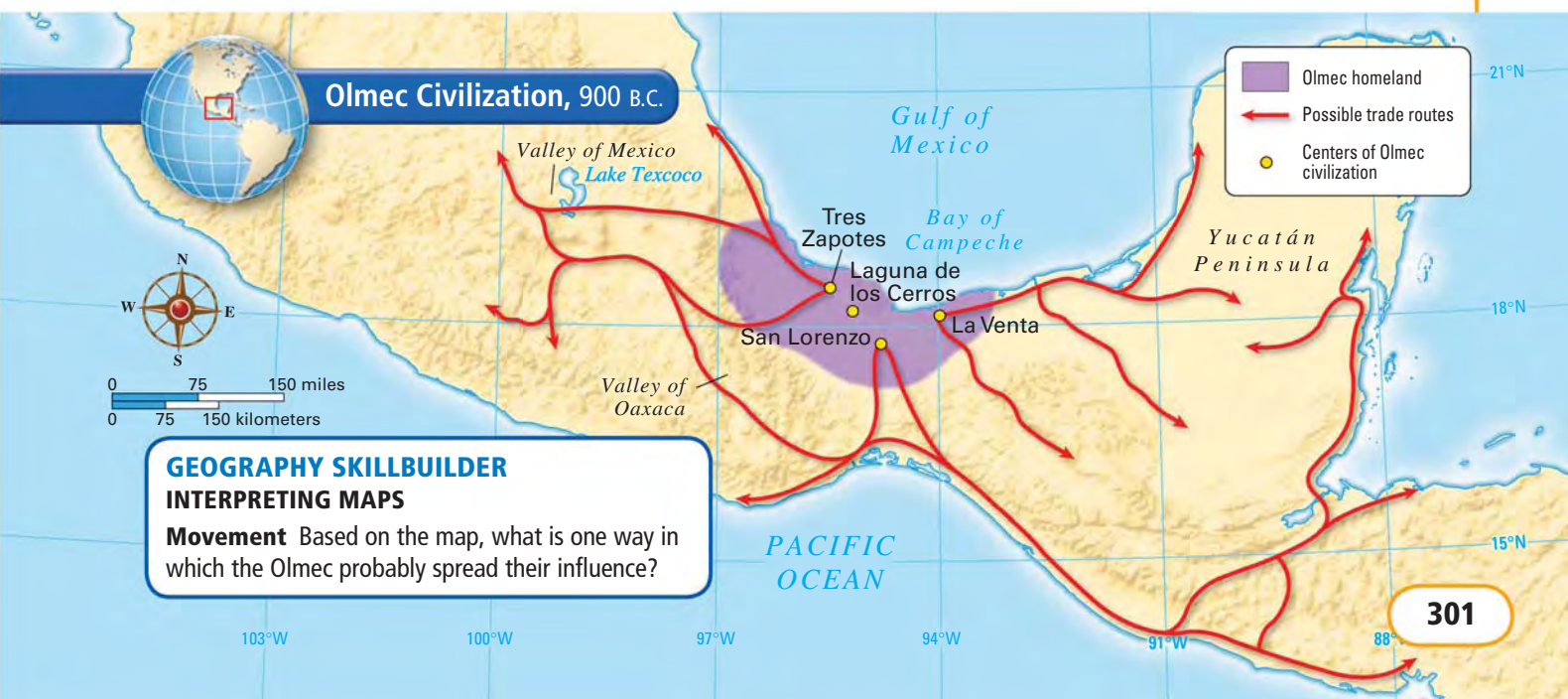
Build on What You Know You have learned about the ancient Andean civilizations in South America. Now you will read about the Olmec civilization, which arose even earlier in Mesoamerica. This North American region had better geographical conditions than the Andes.

The Earliest American Civilization

- 1 ESSENTIAL QUESTION** What helped the Olmec develop the first civilization in the Americas?

Scholars of Mesoamerica used to think that in 1200 B.C., people lived only in villages. Then they discovered the remains of a city-based culture in Mexico's lowlands. Archaeologists named Mesoamerica's first known civilization the **Olmec** (AHL•mehk).

Geography Olmec civilization took root in the jungles along southern Mexico's Gulf coast. Rich soil along the rivers in the region produced generous corn crops for Mesoamerican farmers, just as the fertile soil around the Nile supported Egyptian farmers. As you have already learned, successful agriculture usually comes before the rise of cities.



GEOGRAPHY SKILLBUILDER INTERPRETING MAPS

Movement Based on the map, what is one way in which the Olmec probably spread their influence?

Cities The Olmec built several cities, which served as political centers. One of the cities, now called San Lorenzo, dates back to around 1150 B.C. Archaeologists have found earthen mounds, courtyards, and pyramids in the city. Another Olmec city, now called La Venta, rose around 900 B.C. A 100-foot pyramid discovered there probably once contained the tomb of a great Olmec ruler.

Archaeologists believe that Olmec cities were ruled by powerful dynasties. Administrators, engineers and builders, and artists came below the rulers in the rigid Olmec social structure. Farmers formed the society's largest and lowest class.

REVIEW Why were the Olmec able to build cities?

Olmec Culture

2 ESSENTIAL QUESTION What did the Olmec accomplish in art and learning?

San Lorenzo and La Venta have given archaeologists greater insight into Olmec culture. These cities give us a glimpse into Olmec accomplishments in art and learning.

Olmec Art Some of the most amazing finds were huge stone heads. Crafted with simple tools, some heads stand as tall as 9 feet and weigh as much as 20 tons.

Archaeologists do not know who or what the heads represent. They may represent Olmec rulers or gods. Since all of the faces stare out from underneath helmets, they may also represent athletes who played a ritual ball game played during religious festivals. You will learn more about this ball game in Lesson 4.

Religion and Learning Much like the art of the ancient Andean civilizations, Olmec art was often tied to religion. The Olmec worshiped a number of nature gods. But above all, the Olmec worshiped the jaguar spirit.



Olmec Head The stone used for the heads was carried up to 80 miles over mountain ranges, rivers, and swamps. ▼



Primary Source

Jaguar Sculpture

Background: Scholars have not yet been able to decipher Olmec writing. But images of a jaguar, a big cat that still prowls the jungles of Mesoamerica, appear on many Olmec carvings and other artifacts. The jaguar is an important symbol of Olmec culture. Some historians have even called the Olmec “the people of the jaguar.”

The carvings often show an imaginary animal that is part human and part jaguar. Like the three-inch-high sculpture shown here, the creature usually has a snarling mouth and long, curved fangs. The Olmec worshiped the jaguar for its power. They believed that the jaguar could control nature and society.



DOCUMENT-BASED QUESTION

Why do you think the Olmec pictured the jaguar as part human?

Many Olmec sculptures represent this spirit as a half-human, half-jaguar creature. You can learn about these sculptures in the Primary Source feature above.

Advances in learning also reflect religious influence. Some archaeologists believe that the Olmec developed a calendar to keep track of religious ceremonies. They may also have used picture symbols to illustrate the calendar.

REVIEW How was Olmec art tied to religion?

Olmec Legacy

3 ESSENTIAL QUESTION How did the Olmec influence other cultures?

For reasons that are not fully understood, Olmec civilization ended some time after 400 B.C. Invaders, or the Olmec themselves, destroyed most of the monuments in cities such as San Lorenzo and La Venta.

Nevertheless, the Olmec legacy lived on in later Mesoamerican cultures. A large trading network throughout Mesoamerica helped spread Olmec influence. As a result, the Olmec are often called Mesoamerica’s **mother culture**.

Vocabulary Strategy

You can use **context clues** to understand the meaning of the term *mother culture*. Words like *legacy*, *spread influence*, and *mother* suggest a culture that supported and inspired others.

Influences Other cultures were particularly influenced by Olmec art styles. These styles—especially the use of the jaguar—can be seen in the pottery and sculpture of later peoples. In addition, the Olmec left behind their ideas for cities, ceremonial centers, and ritual ball games. Their use of picture symbols may also have influenced later writing systems. The Olmec greatly influenced the Mayan civilization, which you will learn about in Lesson 4.

REVIEW Why is Olmec civilization called Mesoamerica’s mother culture?

Lesson Summary

- Successful farming gave rise to a great civilization in Mexico’s lowlands.
- The Olmec made great advances in art and learning.
- Trade spread Olmec influence throughout Mesoamerica.

Why It Matters Now . . .

The Olmec mother culture continues to influence the cultures of Mexico and Central America today.

3 Lesson Review

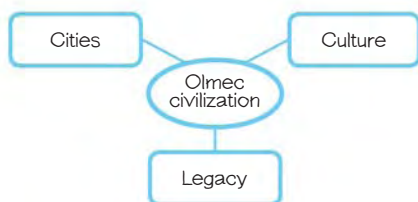
Terms & Names

1. Explain the importance of Olmec mother culture

Using Your Notes

Categorizing Use your completed web diagram to answer the following question:

2. What were important parts of Olmec culture?



Main Ideas

3. How were classes in the Olmec social structure ordered?
4. What does Olmec art tell us about their religious beliefs?
5. What was the effect of Olmec trade in Mesoamerica?

Critical Thinking

6. **Recognizing Changing Interpretations of History** Why did historians change their minds about how people lived in ancient Mesoamerica?
7. **Comparing and Contrasting** How was the rise of Olmec civilization similar to that of ancient Egypt?

Activity

Writing a Letter Imagine that you are an Olmec artist. Write a letter in which you explain why the jaguar is important to you.

Make a Shoebox Time Capsule

Goal: To understand that much of what we know about the Olmec and other ancient American civilizations is based on the artifacts archaeologists have found

Prepare

- 1 Get together with a small group of classmates.
- 2 Discuss items that represent today's culture in the United States.

Do the Activity

- 1 Use the paper and colored pencils to draw two pictures of items that represent U.S. culture.
- 2 Cut out each drawing with the scissors.
- 3 Label your drawings.
- 4 Place all of your group's drawings in a shoebox. Label the box with your group name or number.

Follow-Up

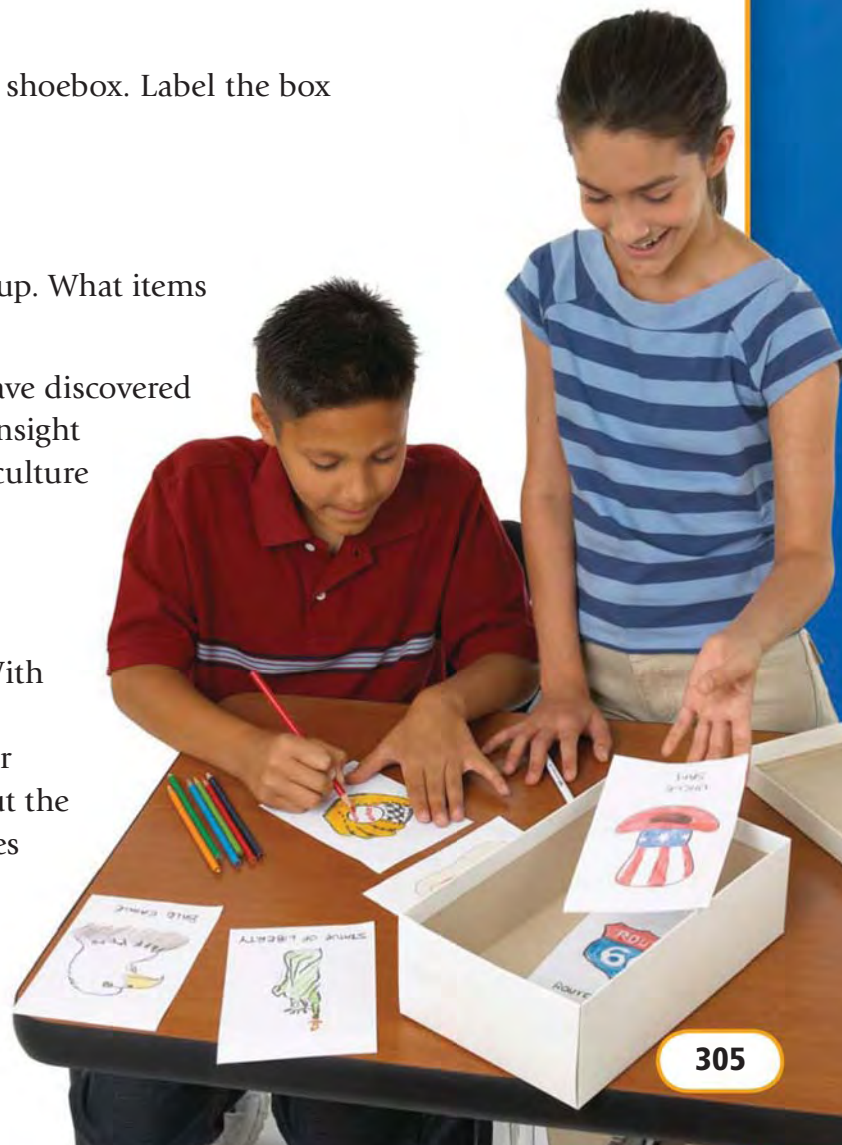
- 1 Exchange shoeboxes with another group. What items did this group place in its shoebox?
- 2 Pretend you are archaeologists who have discovered the box 1,000 years from now. What insight does each artifact provide about U.S. culture in the 21st century?

Extension

Making Historical Interpretations With your group, take the drawings out of your shoebox. Erase the labels and tear small pieces off the drawings. Then put the drawings back and exchange shoeboxes once again with another group. Try to identify the "ruins" in the shoebox.

Materials & Supplies

- paper
- colored pencils
- scissors
- shoebox



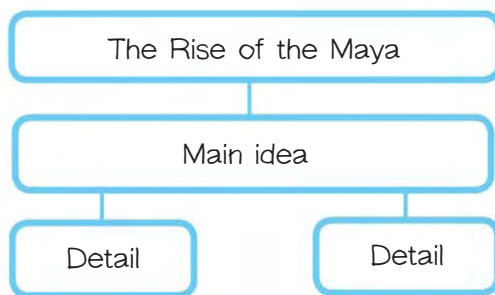
MAIN IDEAS

- 1 Geography** Mayan civilization rose in Central America as the Maya adapted to both highlands and lowlands.
- 2 Culture** Mayan society was divided into classes and shaped by religion.
- 3 Culture** The Maya produced beautiful art and made important advances in learning.

TAKING NOTES

Reading Skill: Summarizing

When you summarize, you supply only main ideas and important details. Identify the main ideas and important details in each section of Lesson 4. Then put them in your own words and record them in a diagram like the one below.



 Skillbuilder Handbook, page R3



▲ **Mayan Mask** This jade mask, found in a tomb in Tikal, covered the face of a dead Mayan nobleman. The Maya believed that the nobleman would wear the mask during his voyage to the afterlife to protect him from evil spirits.

Words to Know

Understanding the following words will help you read this lesson:

plaza a public square in a town or city (page 308)

Plazas have been a feature of Central American towns and cities since ancient times.

bed the ground under a body of water (page 309)

Soil found in the beds of streams and rivers can be extremely fertile.

rotted decayed (page 309)

Many things rotted quickly in the region's warm and humid climate.

bark the protective outer covering on trees (page 309)

The Mayan people used tree bark to make paper.

Maya
maize
stele
glyph
codex

The Mayan Civilization

Build on What You Know You have learned that the Olmec influenced other cultures. Now you'll read about one of them, the Maya, who built a powerful civilization in Mesoamerica.

The Rise of the Maya

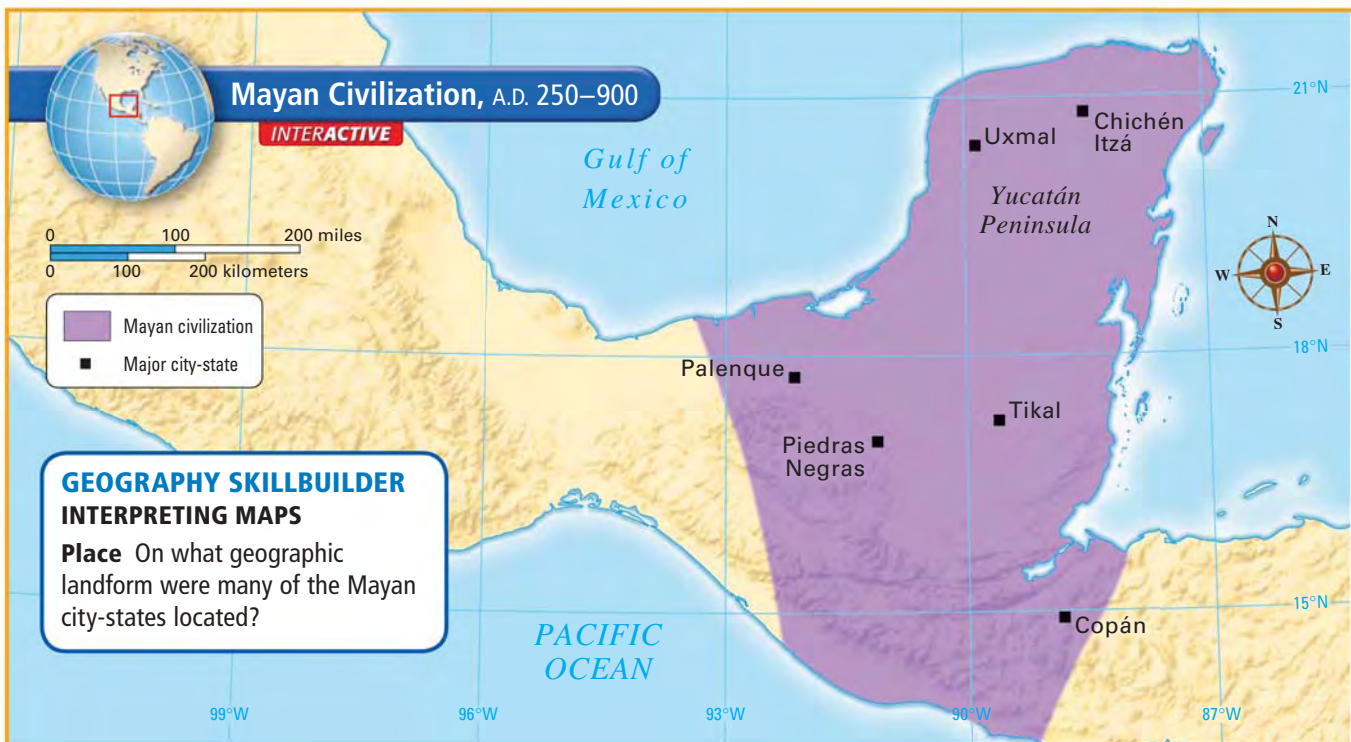
1 ESSENTIAL QUESTION Where did Mayan civilization rise?

As the Olmec declined, the **Maya** began to develop a civilization from present-day southern Mexico into northern Central America. This area included the lowlands in the north, the dry forests of the Yucatán Peninsula, and the dense jungles of present-day Mexico and Guatemala. The area also included the highlands in the south. This is a range of cool mountains stretching from southern Mexico to El Salvador.

Early Settlements By about 1500 B.C., people speaking Mayan languages first began settling lowland villages, where they farmed and traded. The first ceremonial centers, where the Maya practiced their religion, appeared in wealthier villages by 500 B.C. Eventually, these villages developed into cities.

Tikal The pyramid shown here is the Temple of the Jaguar. It stands in Tikal, one of the great Mayan cities. ▼





Classic Period Recent findings may cause the dates to change, but the period from A.D. 250 to 900 is traditionally known as the Classic Period of Mayan civilization. During this period, the Maya built magnificent city-states with temples, pyramids, and plazas.

Some of the largest city-states included Tikal (tee•KAHL), Copán (koh•PAHN), and Palenque. (You read about Palenque and some of its kings in *Starting with a Story* on page 286.) Each city-state was independent and was ruled by a king. However, the cities were linked through trade. Cities traded local products, such as salt, textiles, and jade.

REVIEW How did the Maya develop into a great civilization?

Mayan Life

2 ESSENTIAL QUESTION How was Mayan society structured?

Thousands of people lived in the city-states. Over time, a clear social structure developed. The Mayan king was at the top of this structure, followed by the noble class, made up of priests and leading warriors. Merchants and artisans came next, followed by farmers and then slaves. Slaves were mostly prisoners captured during wars.

Daily Life Most of the Mayan people lived and worked as farmers. They grew beans, squash, and **maize** (mayz), a type of corn. This corn crop was important to the Maya. In fact, according to Mayan legends, people had been created out of maize.

Mayan farmers used a variety of agricultural techniques, including irrigation. To irrigate dry areas, they dug canals that carried water to their fields. They also added rich soil from the canal beds to their fields to lift them above river level. To keep their families dry when the rivers flooded, the farmers built their houses on poles that raised the houses above the ground.

In contrast with the farmers, members of the noble class lived in decorated stone palaces. The Mayan nobles and their children wore beautiful clothes and jade beads.

Religious Beliefs Mayan life was shaped by religion. The Maya prayed to many gods. Their supreme god was the lord of fire. Other gods included the god of the sun, goddess of the moon, and the gods of death, war, corn, and rain.

To gain favor with their gods, the Maya made offerings of animals, plants, and jade. Sometimes they even made human sacrifices. In most large cities, the Maya also played a ritual ball game on a huge court. One of the reasons the Maya played this game is because they believed it would bring life-giving rains. You will learn more about the Mayan ball game in the Daily Life feature on pages 312–313.

REVIEW How was Mayan life shaped by religion?

Mayan Culture

3 ESSENTIAL QUESTION What were Mayan achievements in art and learning?

Mayan art and learning were also linked to religion. Art was produced for religious ceremonies. Religious beliefs led to the development of the calendar and to advances in mathematics and astronomy.

Art Mesoamerica's tropical climate long ago rotted Mayan art made of wood, bark, feather, and gourds. Only pottery, sculpture, jade work, and **steles** (STEE•leez)—carved stone slabs—have survived. Steles were used to mark special religious dates and celebrate a ruler's reign.

P Primary Source Handbook

See the excerpt from the *Popol Vuh*, page R44.

Stele This carved stone slab of a Mayan ruler stands in a ceremonial center at Copán. Artistic expression in Copán reached its height during the reign of this ruler. ▼



Mayan and Egyptian Civilizations

The Mayan and the Egyptian civilizations built pyramids and developed writing systems that had striking similarities and differences. Both civilizations used their pyramids as tombs and filled them with treasure. But Mayan pyramids were also used for religious rituals.

Both the Egyptians and the Maya developed writing systems based on picture symbols. However, Mayan symbols—called glyphs—stood for whole words, syllables, or sounds. Egyptian symbols, called hieroglyphs, stood for sounds, ideas, or letters.



Mayan pyramid



Mayan glyphs



Egyptian pyramid



Egyptian hieroglyphs

SKILLBUILDER

INTERPRETING VISUALS

As you study the Mayan and Egyptian pyramids above, what other similarities and differences do you see?

Achievements in Math and Science In Chapter 7, you learned that ancient Indian mathematicians used a symbol for the zero and positions to show place. The Maya also developed these two important mathematical ideas.

Mayan astronomers and mathematicians applied these ideas to develop a calendar system. The 365-day calendar they created is nearly as accurate as a modern calendar. The calendar helped identify the best times to plant crops and attack enemies. It was also used to keep track of religious holidays.

Writing Only a few writing systems developed in the ancient world. The Maya developed the most advanced writing system in the ancient Americas. Mayan writing on steles and books contains symbolic pictures called **glyphs** (glihfs). Some of these glyphs stood for whole words, syllables, or sounds. The Maya used the glyphs to record important historical events in a bark-paper book called a **codex** (KOH•DEKS). Only four of these books have survived.

Abandoned Cities By 900, the Maya had abandoned their great cities. To this day, no one knows why. Warfare, which broke out in the 700s, may have caused a decline. Overcrowding and overfarming may have led to food shortages. When Spanish conquerors arrived in the 1500s, only small, weak city-states remained. However, Mayan peoples still live in Mesoamerica. Many of them still speak the Mayan languages, as well as Spanish.

REVIEW How were art and learning linked to religion?

Lesson Summary

- The Maya built magnificent cities.
- A clear class structure developed in the Mayan civilization.
- The Maya created lasting artworks, invented a writing system, and made great advances in astronomy and mathematics.

Why It Matters Now . . .

The influence of Mayan culture is found in the United States as a result of immigration from Mesoamerica.



Connect to Today

▲ **Maya Today** The modern-day descendants of the ancient Maya follow many traditional practices. For example, these women carry corn much like their ancestors did.

4 Lesson Review

Terms & Names

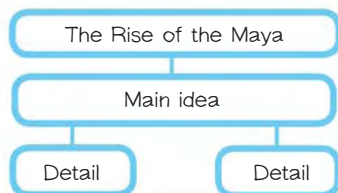
1. Explain the importance of

Maya	stele	codex
maize	glyph	

Using Your Notes

Summarizing Use your completed diagram to answer the following question:

2. What is the main idea of the section "Mayan Life"?



Main Ideas

3. What happened during the Classic Period in Mayan civilization?
4. Who belonged to the main classes in Mayan society?
5. Why did the Maya develop a calendar?

Critical Thinking

6. **Understanding Cause and Effect** Why do you think archaeologists were able to find many Mayan steles?
7. **Comparing and Contrasting** How did the Olmec influence Mayan culture and religion?

Activity

Internet Activity Use the Internet to learn more about the Mayan calendar. Create a poster with pictures and captions that shows how the Mayan system worked.

INTERNET KEYWORD *Mayan calendar*

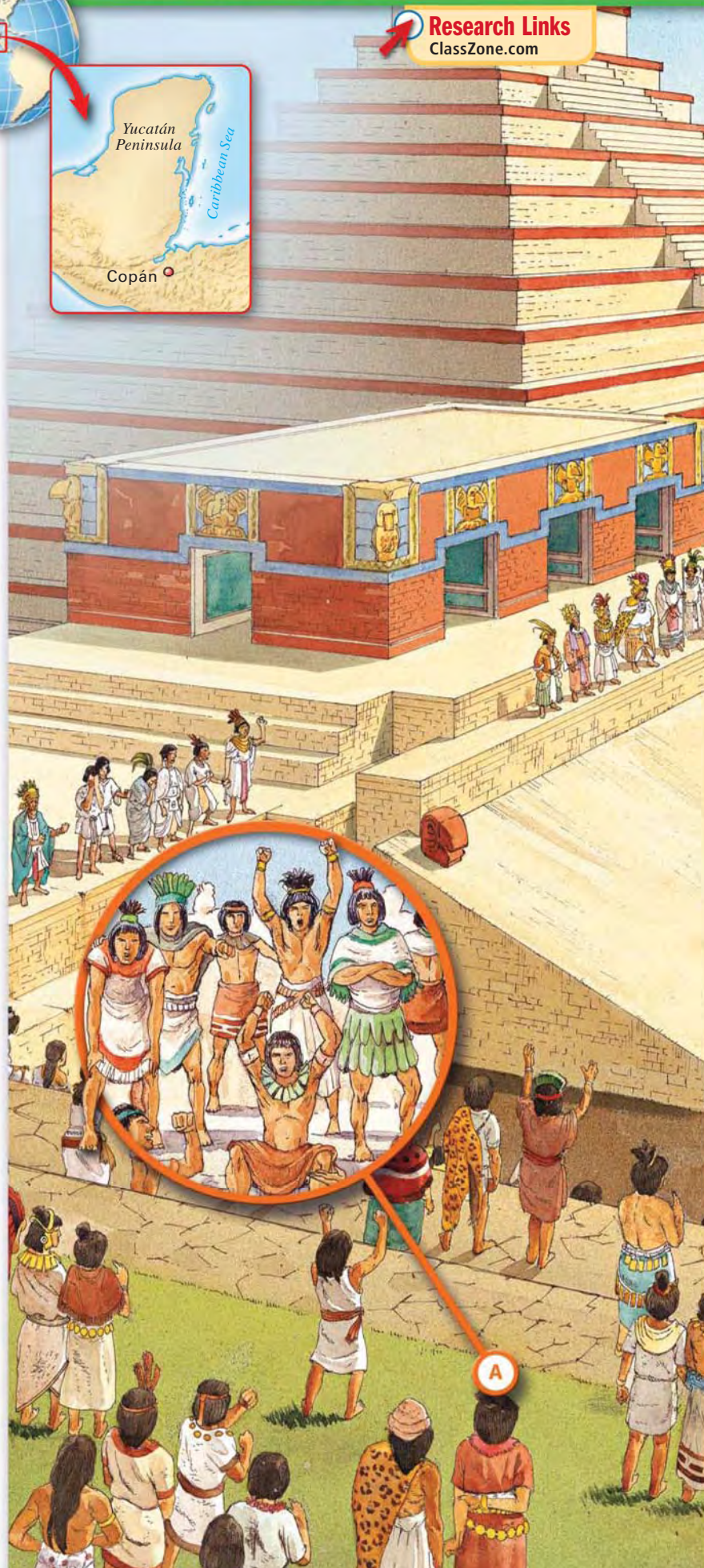


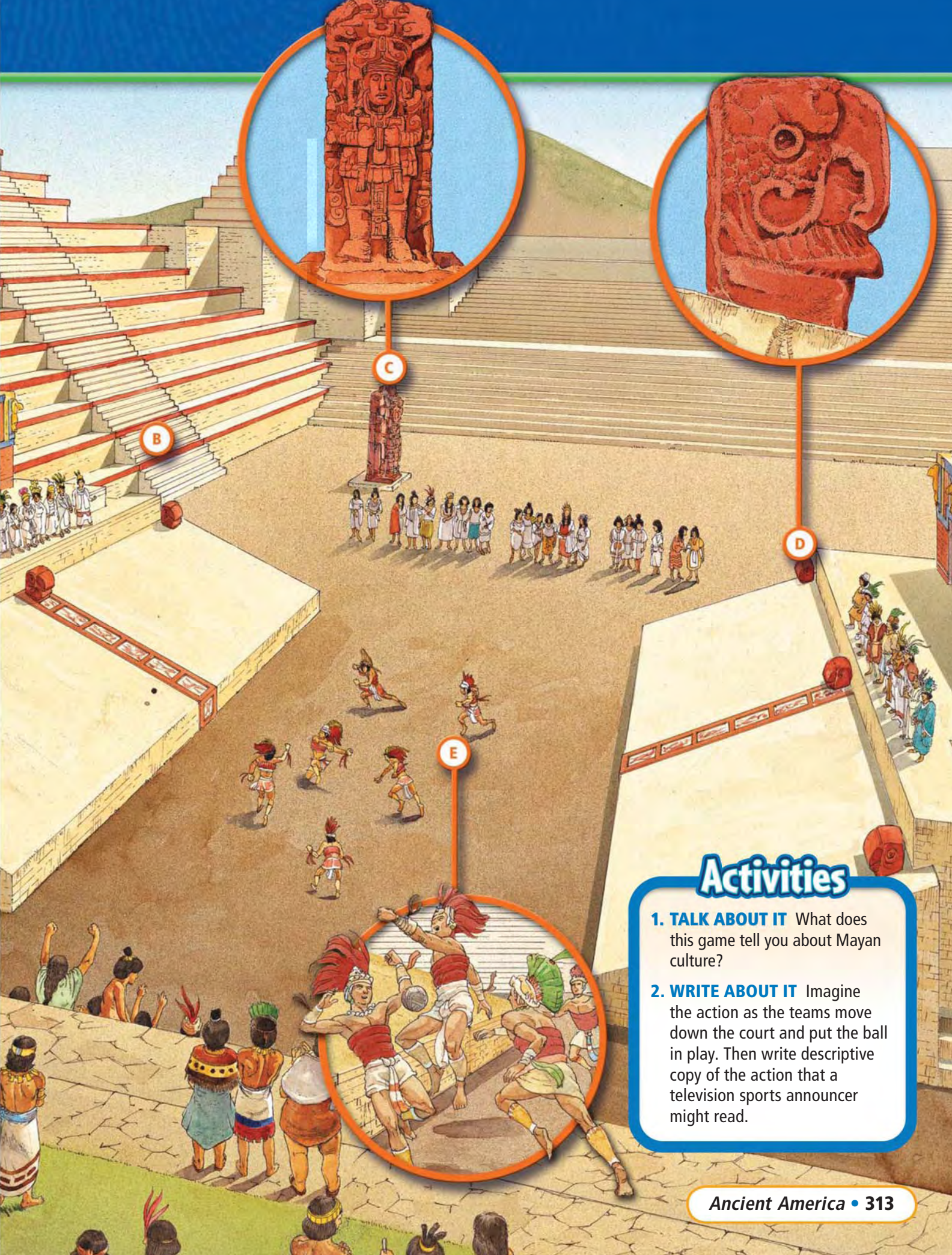
Playing the Mayan Ball Game

Purpose: To learn about the rules and risks of the Mayan ball game

Ball courts, like this one in Copán, were found in every major Mayan city-state. Most players belonged to the noble class and considered it a great honor to play the Mayan ball game. But the stakes were high. The Maya believed that the gods rewarded the winning team's city with fertile soil and plentiful crops. However, the captain of the losing team was often sacrificed to the gods. Here are some typical features of the Mayan ball game.

- A Spectators** People crowded along the walls above the court to cheer on their team and favorite players.
- B Temple** At the end of the game, the captain of the losing team followed the priest up the staircase to the temple and accepted his fate.
- C Steles** The glyphs on the steles were meant to inspire the home team. They celebrated the city's king and the team's great victories.
- D Goal** It is thought that to win the game, players had to bounce the ball off of carved parrot heads set about 20 to 30 feet off the ground along the court. But this could take hours or even days.
- E Players** Players could not touch the ball with their hands or feet. They could only hit the solid, eight-pound rubber ball with their hips, knees, and elbows. Even though players wore heavy padding, they often got hurt.





C

B

D

E

Activities

- TALK ABOUT IT** What does this game tell you about Mayan culture?
- WRITE ABOUT IT** Imagine the action as the teams move down the court and put the ball in play. Then write descriptive copy of the action that a television sports announcer might read.

Chapter 9 Review

VISUAL SUMMARY

Ancient America

Geography

- The Andes provided a harsh environment for the Chavín, Nazca, and Moche civilizations.
- The Olmec and Maya lived in fertile land in Mesoamerica.



Culture

- Trade helped spread Olmec culture throughout Mesoamerica.
- Ancient Americans left behind beautiful carvings, pottery, and textiles.
- The Maya built pyramids and temples in their great city-states.



Science and Technology

- The Moche created irrigation systems.
- The Maya developed a calendar and the concept of zero.



TERMS & NAMES

Explain why the words in each set below are linked with each other.

1. **tropical** and **slash-and-burn agriculture**
2. **Nazca** and **aquifer**
3. **Olmec** and **mother culture**
4. **glyph** and **codex**

MAIN IDEAS

The Geography of the Americas (pages 288–293)

5. How did civilizations in the Americas arise in difficult environments?
6. Name some geographical differences between the Andes and Mesoamerica.

Ancient Andean Civilizations (pages 294–299)

7. How were art and religion linked in the Chavín and Nazca cultures?
8. How have archaeologists learned about the Chavín, Nazca, and Moche?

The Olmec of Mesoamerica (pages 300–305)

9. What was the importance of discovering ruins in San Lorenzo and La Venta?
10. What aspects of the Olmec civilization influenced other cultures?

The Mayan Civilization (pages 306–313)

11. Describe the geography of the area where Mayan civilization rose.
12. What artistic and architectural traditions did the Maya develop?

CRITICAL THINKING

BIG IDEAS: Science and Technology

13. **MAKING INFERENCES** What innovations of the early Andean cultures probably helped later civilizations survive?
14. **UNDERSTANDING CAUSE AND EFFECT** How did religious practices in ancient America lead to developments in science?
15. **EVALUATING INFORMATION** How did the development of the concept of zero help the Maya calculate numbers?

ALTERNATIVE ASSESSMENT

- 1. WRITING ACTIVITY** Imagine that you have just flown over and discovered the Nazca Lines. Write a letter to a friend describing them and telling what you think they were used for.
- 2. INTERDISCIPLINARY ACTIVITY—MATHEMATICS** Learn about the symbols the Maya used in their number system. Then use the symbols to write a few simple addition problems.
- 3. STARTING WITH A STORY**
 Review the news feature you wrote about the ceremony in Palenque. Use the feature to write a brief scene about what happened after the ceremony. Create dialogue and interesting characters to make the scene come alive.

Technology Activity

4. WRITING A VIDEO SCRIPT

Use the Internet or the library to find out about the hardships archaeologists and explorers suffered to uncover information about the Maya. Then work with a group of classmates to write a video script for a documentary about the explorers.

- Include interviews with the archaeologists and explorers.
- Write a dramatic scene describing their struggles.
- Use maps and pictures to help illustrate the geography of Mesoamerica.

 **Research Links**
ClassZone.com

Interpreting Visuals Use this Mayan clay figure of a warrior to answer these questions.



- 1. What class in Mayan society did warriors belong to?**
 - A. nobles
 - B. merchants
 - C. farmers
 - D. slaves
- 2. Which of the following indicates this warrior's class?**
 - A. his modest appearance
 - B. his frightened expression
 - C. his humble pose
 - D. his clothing and jewelry

 **Test Practice**
ClassZone.com

Additional Test Practice, pp. S1–S33

Writing About History

Expository Writing: Comparison and Contrast

Two Ancient Civilizations

Purpose: To write a composition comparing and contrasting life in ancient India or China to life in the Americas

Audience: Your classmates

You just read about three ancient civilizations that developed over 3,000 years. How can you get a good understanding of the main ideas from such a long span of history? One way is to organize the information by similarities and differences. When you write an essay about similarities and differences, you are writing a type of expository composition called **comparison and contrast**.



▲ Hindu temple and pyramid in Tikal

Organization & Focus

Your assignment is to write a 500- to 700-word expository essay that compares and contrasts ancient Asian and American civilizations. Focus on just one aspect of life so that you can cover it thoroughly.

Choosing a Topic Study the Visual Summaries on pages 246, 282, and 314, and look for topics to compare and contrast. For example, the visual summaries of the three chapters group information by the themes of this book: Geography, Culture, Economics, Government, Belief Systems, and Science & Technology. By using one of the themes, you can compare and contrast an aspect of life in two cultures.

Identifying Purpose and Audience Your communication purpose in this assignment is to compare and contrast, and your audience is your classmates. However, there is another useful purpose for writing this essay. It will help you to review and draw meaning from the unit.

Finding Details Reread all the information in this unit about your topic. Take notes about important details. After you finish your notes, look for details that are similar and those that are different across the two cultures.

Outlining and Drafting You might organize and present your ideas in one of three possible ways, as the chart above right shows.

Ways to Organize Comparison and Contrast Details

Point by Point	Whole by Whole	Similarities & Differences
Presents one aspect at a time, showing both comparisons (similarities) and contrasts (differences)	Presents each subject as a whole, pointing out comparisons and contrasts during the presentation of the second subject	Presents the similarities together and the differences together
Example:	Example:	Example:
1) Goods traded in China; goods traded in the Americas (how they were alike and different)	1) Trade in China (the goods traded and the effect of trade on the rest of the culture)	1) Trade in China and the Americas were alike in these ways.
2) Effect of trade on Chinese culture; effect of trade on ancient American cultures (how they were alike and different)	2) Trade in ancient America (the goods traded and the effect of trade on the rest of the culture, with references back to the first section using phrases such as "Unlike Chinese trade" or "As in China")	2) Trade in China and the Americas were different in these ways.

Decide which order works best for your topic and create an outline for your essay. Follow your outline as you draft your essay. Be sure to use transitions that highlight the comparisons, such as *like*, *also*, *as well*, and the contrasts, such as *in contrast*, *on the other hand*, *unlike*.

Research & Technology

As you draft your essay, you may need additional information. One good source would be an encyclopedia, either online or in print. Articles in the same encyclopedia often cover the same general topics for each civilization. That will help you to compare and contrast.



Technology Tip Make the settings in your word processor for margins, tabs, and spacing match the form your school requires. These settings are usually found in the Format menu.

Evaluation & Revision

When you have finished your first draft, put it aside for a day. Then read it as if you had never read it before, to see what might still need work. In particular, check the organization of ideas within and between paragraphs. Make revisions until you are satisfied.

Self-Check

- Does my essay have
- a clear focus?
 - a formal introduction?
 - supporting evidence of similarities and differences?
 - transitions that show comparisons and contrasts?
 - a strong conclusion?

Publish & Present

Make a neat final copy of your essay that conforms to your school's guidelines. Share it with your classmates and take turns reading and commenting on each other's work.