

The Americas: A Separate World, 40,000 B.C.–A.D. 700

Previewing Main Ideas

POWER AND AUTHORITY The first civilizations in the Americas arose as people came together to create more powerful and structured societies.

Geography *What geographical feature do most of these early American civilizations share?*

CULTURAL INTERACTION From their art to their technology, the early Mesoamerican and South American civilizations influenced the better-known empires that followed them.

Geography *Why is it likely that the Nazca and Moche civilizations were aware of each other?*

INTERACTION WITH ENVIRONMENT The Olmec in Mesoamerica took advantage of their surroundings, while the groups in South America carved societies out of rough terrain.

Geography *How were geographic conditions different for the Olmec and Chavín peoples?*

INTEGRATED TECHNOLOGY

eEdition

- Interactive Maps
- Interactive Visuals
- Interactive Primary Sources



INTERNET RESOURCES

Go to classzone.com for:

- Research Links
- Internet Activities
- Primary Sources
- Chapter Quiz
- Maps
- Test Practice
- Current Events

AMERICAS

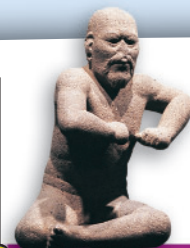
WORLD

10,000 B.C.

10,000 B.C.
Last Ice Age ends;
land bridge to Asia
disappears.

7000 B.C.
Agriculture
begins in
central Mexico.

1200 B.C.
Olmec civilization
emerges in southeast
Mexico. (figure of Olmec
wrestler or ball player)



1200 B.C.

1200 B.C.
◀ Egyptian Empire
begins to decline.
(Egyptian sphinx
and pyramid)





American Civilizations, 1200 B.C. – A.D. 700



900 B.C.
Chavín culture arises in Peru.

500 B.C.
Zapotecs build Monte Albán.

200 B.C.
Nazca civilization arises in southern Peru.

A.D. 100
Moche culture emerges. (Moche gold monkey head bead)



250 B.C.

A.D. 700

480 B.C.
Golden Age of Greece begins.

202 B.C.
Han Dynasty begins in China.

A.D. 120
Roman Empire reaches its height. (marble bust of Emperor Hadrian)



How can killing a mammoth help you survive?

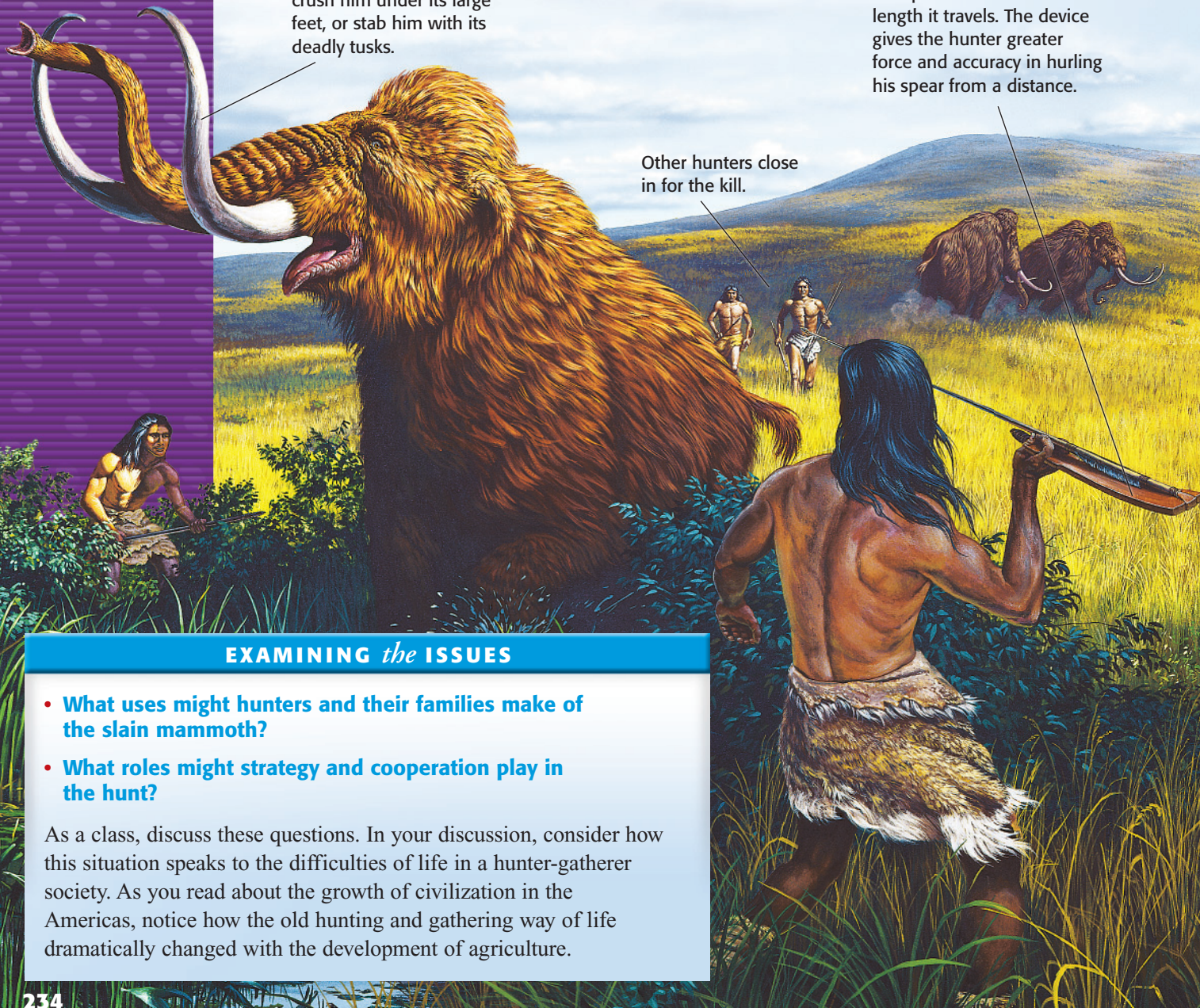
You are a hunter living in ancient North America. Along with several other hunters, you have been tracking the mammoth for days. This giant beast is a challenging prey. Close to 14 feet high at the shoulders, it can easily crush a human. Its curved tusks, measuring more than 15 feet in length, are sharp and therefore dangerous. Yet the rewards of killing the huge animal are worth the risks for you, your fellow hunters, and your families.

Suddenly you spot the massive creature. Aside from spears, your only weapons are some simple tools and your superior intelligence.

Should a hunter get too close, the mammoth might crush him under its large feet, or stab him with its deadly tusks.

The hunter uses a spear-throwing device to steady the spear and extend the length it travels. The device gives the hunter greater force and accuracy in hurling his spear from a distance.

Other hunters close in for the kill.



EXAMINING *the* ISSUES

- **What uses might hunters and their families make of the slain mammoth?**
- **What roles might strategy and cooperation play in the hunt?**

As a class, discuss these questions. In your discussion, consider how this situation speaks to the difficulties of life in a hunter-gatherer society. As you read about the growth of civilization in the Americas, notice how the old hunting and gathering way of life dramatically changed with the development of agriculture.



The Earliest Americans

MAIN IDEA

POWER AND AUTHORITY The cultures of the first Americans, including social organization, developed in ways similar to other early cultures.

WHY IT MATTERS NOW

The Americas' first inhabitants developed the basis for later American civilizations.

TERMS & NAMES

- Beringia
- Ice Age
- maize

SETTING THE STAGE While civilizations were developing in Africa, Asia, and Europe, they were also emerging in the Americas. Human settlement in the Americas is relatively recent compared to that in other parts of the world. However, it followed a similar pattern. At first the ancient people of the Americas survived mainly by hunting. Over time, they developed farming methods that ensured a more reliable supply of food. This in turn led to the growth of the first civilizations in the Americas.

A Land Bridge

The American continents include North and South America. They are connected and span two hemispheres, from the frigid Arctic Circle in the north to the icy waters around Antarctica in the south. Although this land mass narrows greatly around modern-day Panama, it stretches unbroken for about 9,000 miles. This large and rugged land is isolated from the rest of the world by vast oceans. Yet, thousands of years ago, the Americas were connected by a land bridge to Asia. Most experts believe that some of the first people came to the Americas from Asia over this land bridge. The land bridge is known as **Beringia**. Other people may have arrived by boat.

Peopling the Americas The first Americans arrived sometime toward the end of the last **Ice Age**, which lasted from roughly 1.9 million to about 10,000 B.C. Huge sheets of moving ice, called glaciers, spread southward from the Arctic Circle. They covered large portions of North America. The buildup of glaciers locked up huge amounts of the earth's water. It lowered sea levels and created a land corridor between Asia and Alaska across what is now the Bering Strait.

Herds of wild animals from Siberia, including the mammoth, migrated across the plains of the Beringia land bridge. Gradually, Siberian hunters followed these animals into North America. They most likely were unaware that they were entering a new continent. These migrants became the first Americans.

Thomas Canby, a writer for *National Geographic* magazine, spent a year with archaeologists as they searched for ancient burial sites throughout the Americas. From his experience, Canby described the type of world that might have greeted these hunters and migrants as they entered the Americas:

TAKING NOTES

Analyzing Causes and Recognizing Effects

Use a chart to list causes and effects of the development of the Americas.

Cause	Effect
1.	1.
2.	2.



PRIMARY SOURCE **A**

What a wild world it was! To see it properly, we must board a time machine and travel back into the Ice Age. The northern half of North America has vanished, buried beneath ice sheets two miles thick. Stretching south to Kentucky, they buckle the earth's crust with their weight. . . . Animals grow oversize. . . . Elephant-eating jaguars stand tall as lions, beavers grow as big as bears, South American sloths as tall as giraffes. With arctic cold pushing so far southward, walrus bask on Virginia beaches, and musk-oxen graze from Maryland to California.

THOMAS CANBY, "The Search for the First Americans," *National Geographic*

MAIN IDEA

Analyzing Primary Sources

A What might account for the abundance of animal life that Canby describes?

No one knows for sure when the first Americans arrived. Some scholars contend that the migration across the land bridge began as early as 40,000 B.C. Others argue it occurred as late as 10,000 B.C. For years, many researchers have regarded the discovery of spearheads dating back to 9500 B.C. near Clovis, New Mexico, to be the earliest evidence of humankind in the Americas.

However, recent discoveries of possible pre-Clovis sites have challenged this theory. One such discovery was made at Monte Verde, Chile, near the southern tip of the Americas. Researchers there have found evidence of human life dating back to 10,500 B.C. Underneath this site—a sandy bank near a creek—archaeologists discovered pieces of animal hide and various tools. They also found a preserved chunk of meat and a child's single footprint. The evidence at Monte Verde suggests that the first Americans arrived well before the Clovis era. To reach southern Chile at such an early date, some experts believe, humans would have had to cross the land bridge at least 20,000 years ago.

Most experts believe the earliest Americans traveled by foot across the land bridge. However, some scholars think they also may have paddled from Asia to the Pacific Coast in small boats. A skull discovered near Mexico City has recently been dated to about 11,000 B.C., making it the oldest skull ever found in the Americas. Some scientists studying the skull believe that it is related to the Ainu people of Japan and that these descendants of the Ainu reached the Americas by island-hopping on boats.

Hunters and Gatherers

Questions remain about how and when the first Americans arrived. What appears more certain—from the discovery of chiseled spearheads and charred bones at ancient sites—is that the earliest Americans lived as hunters. Perhaps their most challenging and rewarding prey was the mammoth. Weighing more than seven tons, this animal provided meat, hide, and bones for food, clothing, shelters, and tools.

Following the Game Eventually, large animals like the mammoth were overhunted and became extinct. Hunters soon turned to smaller prey, such as deer and rabbits, for their survival. They also fished and gathered edible plants and fruits. Because they were hunters, the earliest Americans found it necessary to move regularly in search of food. Whenever they did settle in one place for a short time, prehistoric Americans lived in caves or temporary shelters in the open air. **B**

With the end of the Ice Age, around 12,000 to 10,000 years ago, came the end of land travel across Beringia. As the great glaciers melted, sea levels rose. The ancient land bridge disappeared under the Bering Strait. By this time, however, humans inhabited most regions of the Americas. Wherever they roamed, from the grassy plains of the modern-day United States to the steamy tropical forests of Central America, the first Americans adapted to the variety of environments they inhabited. In doing so, they carved out unique ways of life.

MAIN IDEA

Recognizing Effects

B How did the earliest Americans adapt to the loss of large animals?



Migration Routes, 40,000–10,000 B.C.

INTERACTIVE



Travelers across Beringia might have encountered landscapes such as this in Alaska.



At the Meadowcroft Rockshelter site in Pennsylvania, pre-Clovis blades have been found that date back many thousands of years.



Spearheads similar to these were first discovered near Clovis, New Mexico, and later throughout North America. Many of these artifacts date back to around 9500 B.C.



- Glacier ice, 12,000 B.C.
- Beringia
- Possible land migration routes
- Possible water migration route
- Fossil site



Recent findings at Monte Verde, Chile, have provided evidence of human life in the Americas as early as 10,500 B.C.

GEOGRAPHY SKILLBUILDER: Interpreting Maps

1. **Location** What two continents does the Beringia land bridge connect?
2. **Movement** From where do scholars believe the first Americans came? How did they come?

> Analyzing Artifacts

INTERACTIVE

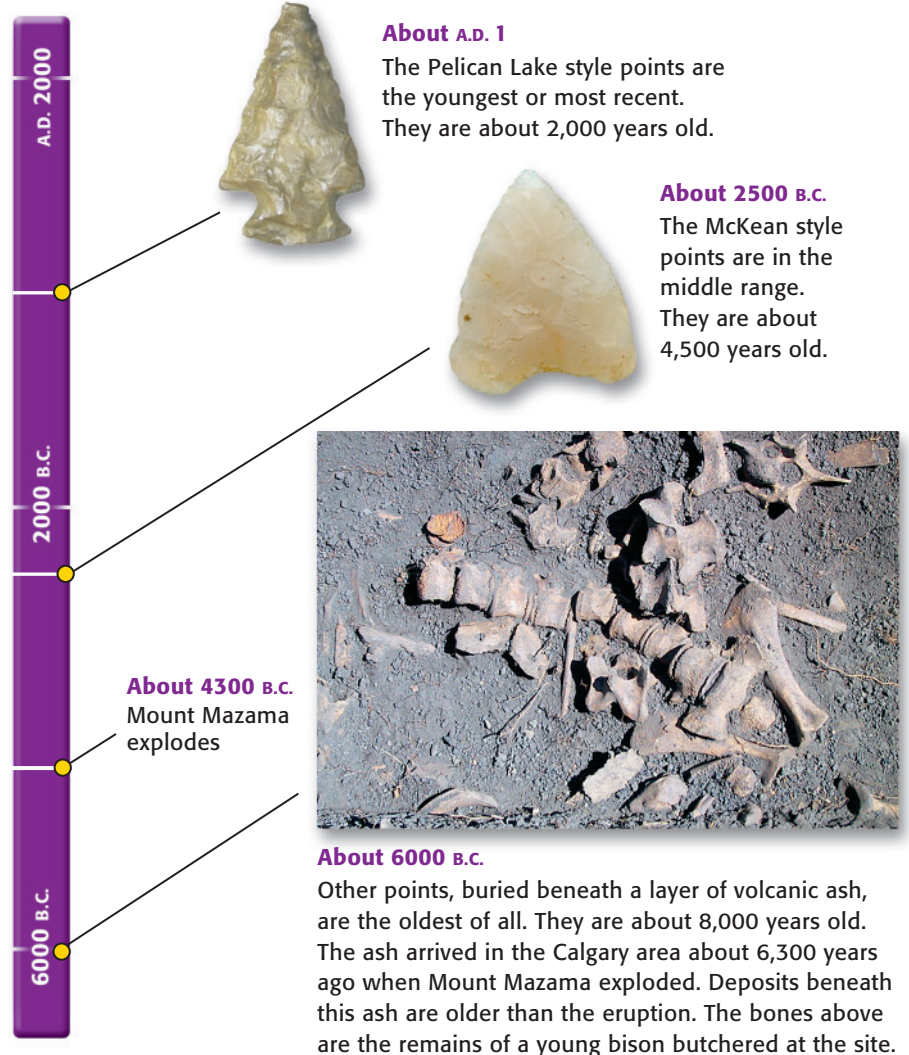
A Bison Kill Site

The first hunters roaming North America hunted mammoths, deer, and bison. Researchers found the bones of bison at a kill site near Calgary, Alberta, in Canada. This kill site is believed to have been in use for more than 8,000 years.

Different layers of remains and artifacts have been found at the kill site, with different kinds of points—spears, arrows, knives, and so forth. The different styles of points can tell archaeologists about the age of a site and its various layers. Weapons and tools such as those shown here were used to kill and butcher animals for the hunters and their families to consume.

SKILLBUILDER: Interpreting Visual Sources

- 1. Drawing Conclusions** *What resources besides food might animals have provided to early hunters and their families?*
- 2. Making Inferences** *What might have been the effect of the weapons and tools of early hunters on the big-game animals of the Americas?*



Agriculture Creates a New Way of Life

Gradually, the earliest Americans became more familiar with plant foods. They began to experiment with simple methods of farming. Their efforts at planting and harvesting led to agriculture. This dramatically changed their way of life.

The Development of Farming Around 7000 B.C., a revolution quietly began in what is now central Mexico. There, people began to rely more on wild edible plants, raising some of them from seeds. By 5000 B.C., many had begun to grow these preferred plants. They included squashes, gourds, beans, avocados, and chilies. By 3400 B.C., these early farmers grew **maize**, or corn. Maize soon became the most important crop. This highly nourishing crop flourished in the tropical climate of Mexico. There, a family of three could raise enough corn in four months to feed themselves for a long time.

Gradually, people settled in permanent villages in the Tehuacan (TAY•wuh•KAHN) Valley, south of present-day Mexico City. These people raised corn and other crops. The techniques of agriculture spread over North and South America. However, it is believed that people in some areas, such as Peru and eastern North America, may have discovered the secrets of cultivating local edible plants independently.

The Effects of Agriculture

Before Agriculture

- People hunted or gathered what they ate.
- Families continually moved in search of big game.
- Groups remained small due to the scarcity of reliable sources of food.
- Humans devoted much of their time to obtaining food.

After Agriculture

- People enjoyed a more reliable and steady source of food.
- Families settled down and formed larger communities.
- Humans concentrated on new skills: arts and crafts, architecture, social organization.
- Complex societies eventually arose.

SKILLBUILDER: Interpreting Charts

1. **Recognizing Effects** *How did life change after the development of agriculture?*
2. **Making Inferences** *How might the establishment of agriculture have helped humans to develop new skills and interests?*

Over the next several centuries, farming methods became more advanced. In central Mexico native farmers created small islands in swamps and shallow lakes by stacking layers of vegetation, dirt, and mud. They then planted crops on top of the island soil. The surrounding water provided irrigation. These floating gardens were very productive, yielding up to three harvests a year.

Farming Brings Great Change In the Americas, as in other regions of the world, agriculture brought great and lasting change to people’s way of life. The cultivation of corn and other crops provided a more reliable and expanding food supply. This encouraged population growth and the establishment of large, settled communities. As the population grew, and as farming became more efficient and productive, more people turned their attention to nonagricultural pursuits. They developed specialized skills in arts and crafts, building trades, and other fields. Differences between social classes—between rich and poor, ruler and subject—began to emerge. With the development of agriculture, society became more complex. The stage was set for the rise of more advanced civilizations. C

MAIN IDEA

Making Inferences

C Why might the development of agriculture be characterized by some as a turning point in human history?

SECTION 1 ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Beringia
- Ice Age
- maize

USING YOUR NOTES

2. Which effect do you think had the most significant impact on the Americas? Explain.

Cause	Effect
1.	1.
2.	2.

MAIN IDEAS

3. How did human beings come to the Americas?
4. How did humans get food before the development of farming?
5. What sorts of changes did farming bring?

CRITICAL THINKING & WRITING

6. **FORMING OPINIONS** Why do you think early Americans, isolated from the rest of the world, developed in ways similar to other early humans?
7. **HYPOTHESIZING** What sailing routes might early humans have traveled to the Americas?
8. **COMPARING** What sorts of problems might the earliest Americans have encountered in their travels?
9. **WRITING ACTIVITY** POWER AND AUTHORITY What type of person might hold power in a hunter-gatherer society? in a settled, agricultural society? Support your opinions in a two-paragraph **essay**.

INTEGRATED TECHNOLOGY INTERNET ACTIVITY

Use the Internet to find information on early archaeological sites in the Americas. Locate these sites on an **outline map** and show the dates that scientists have assigned to these sites.

INTERNET KEYWORD

Clovis, Meadowcroft Rockshelter



Early Mesoamerican Civilizations

MAIN IDEA

CULTURAL INTERACTION The Olmec created the Americas' first civilization, which in turn influenced later civilizations.

WHY IT MATTERS NOW

Later American civilizations relied on the technology and achievements of earlier cultures to make advances.

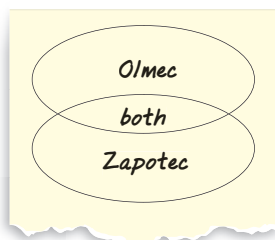
TERMS & NAMES

- Mesoamerica
- Olmec
- Zapotec
- Monte Albán

SETTING THE STAGE The story of developed civilizations in the Americas begins in a region called **Mesoamerica**. (See map on opposite page.) This area stretches south from central Mexico to northern Honduras. It was here, more than 3,000 years ago, that the first complex societies in the Americas arose.

TAKING NOTES

Comparing Use a Venn diagram to compare Olmec and Zapotec cultures.



The Olmec

Mesoamerica's first known civilization builders were a people known as the **Olmec**. They began carving out a society around 1200 B.C. in the jungles of southern Mexico. The Olmec influenced neighboring groups, as well as the later civilizations of the region. They often are called Mesoamerica's "mother culture."

The Rise of Olmec Civilization Around 1860, a worker clearing a field in the hot coastal plain of southeastern Mexico uncovered an extraordinary stone sculpture. It stood five feet tall and weighed an estimated eight tons. The sculpture was of an enormous head, wearing a headpiece. (See *History Through Art*, pages 244–245.) The head was carved in a strikingly realistic style, with thick lips, a flat nose, and large oval eyes. Archaeologists had never seen anything like it in the Americas.

This head, along with others that were discovered later, was a remnant of the Olmec civilization. The Olmec emerged about 1200 B.C. and thrived from approximately 800–400 B.C. They lived along the Gulf Coast of Mexico, in the modern-day Mexican states of Veracruz and Tabasco.

Gulf Coast Geography On the surface, the Gulf Coast seemed an unlikely site for a high culture to take root. The region was hot and humid and covered with swamps and jungle. In some places, giant trees formed a thick cover that prevented most sunlight from reaching the ground. Up to 100 inches of rain fell every year. The rainfall swelled rivers and caused severe flooding.

However, the region also had certain advantages. There were abundant deposits of salt and tar, as well as fine clay used in making pottery. There was also wood and rubber from the rain forest. The hills to the north provided hard stone from which the Olmec could make tools and monuments. The rivers that laced the region provided a means of transport. Most important, the flood plains of these rivers provided fertile land for farming.

MAIN IDEA**Making Inferences**

A In what ways did the Olmec's environment help in the creation of its civilization?

The Olmec used their resources to build thriving communities. The oldest site, San Lorenzo, dates back to around 1150 B.C. Here archaeologists uncovered important clues that offered a glimpse into the Olmec world. **A**

Olmec Society At San Lorenzo archaeologists discovered earthen mounds, courtyards, and pyramids. Set among these earthworks were large stone monuments. They included columns, altars, and more colossal, sculpted heads, which may have represented particular Olmec rulers. These giant monuments weigh as much as 44 tons. Some scholars think that Olmec workers may have moved these sculptures over land on rolling logs to the river banks. From there, they may have rafted the monuments along waterways to various sites.

To the east of San Lorenzo, another significant Olmec site, La Venta, rose around 900 B.C. Here, researchers discovered a 100-foot-high mound of earth and clay. This structure may have served as the tomb of a great Olmec ruler. Known as the Great Pyramid, the mound also may have been the center of the Olmec religion. Experts believe the Olmec prayed to a variety of nature gods.

Most of all, they probably worshiped the jaguar spirit. Numerous Olmec sculptures and carvings depict a half-human, half-jaguar creature. Some scholars believe that the jaguar represented a powerful rain god. Others contend that there were several jaguar gods, representing the earth, fertility, and maize.

Trade and Commerce Archaeologists once believed that sites such as La Venta were ceremonial centers where important rituals were performed but few people lived. In recent years, however, experts have begun to revise that view. The Olmec appear to have been a prosperous people who directed a large trading network throughout Mesoamerica. Olmec goods traveled as far as Mexico City to the north and Honduras to the south. In addition, raw materials—including iron ore and various stones—reached San Lorenzo from faraway regions. This trade network helped boost the Olmec economy and spread Olmec influence.

Decline of the Olmec For reasons that are not fully understood, Olmec civilization eventually collapsed. Scholars believe San Lorenzo was destroyed around 900 B.C. La Venta may have fallen sometime around 400 B.C. Some experts speculate that outside invaders caused the destruction. Others believe the Olmec may have destroyed their own monuments upon the death of their rulers. **B**

**MAIN IDEA****Hypothesizing**

B What might lead to the disappearance of an entire civilization?

Zapotec Civilization Arises

By the time Olmec civilization had collapsed, another people—the **Zapotec**—were developing an advanced society to the southwest, in what is now the Mexican state of Oaxaca (wuh•HAH•kah). Though they showed traces of Olmec influence, the Zapotec built a unique civilization.

Peoples of the Oaxaca Valley Oaxaca is a rugged region of mountains and valleys in southern Mexico. In the center of the state, three valleys meet to form a large open area known as the Oaxaca Valley. This valley has fertile soil, a mild climate, and enough rainfall to support agriculture. As a result, various peoples have made the Oaxaca Valley their home, including the ancient Zapotec.

For centuries the Zapotec lived in scattered villages throughout the valley. By 1000 B.C., however, one site—San José Mogote—was emerging as the main power in the region. At this site, the Zapotec constructed stone platforms. They also built temples and began work on monumental sculptures. By 500 B.C. they had developed early forms of writing and a calendar system.

The Zapotec Flourish at Monte Albán Around 500 B.C., Zapotec civilization took a major leap forward. High atop a mountain at the center of the Oaxaca Valley, the Zapotec built the first real urban center in the Americas, **Monte Albán**. This city, with its commanding view of the entire valley, grew and prospered over the next several centuries. By 200 B.C., Monte Albán was home to around 15,000 people. The city eventually would reach a peak population of almost 25,000. **C**

From A.D. 250 to A.D. 700, Monte Albán was truly impressive. At the heart of the city was a giant plaza paved with stones. Towering pyramids, temples, and

MAIN IDEA

Comparing

C How does Monte Albán's population compare to the populations of today's major cities?

Global Patterns

Pyramids

A number of ancient peoples used pyramids for temples, tombs, and observatories. The Egyptians built pyramids as tombs. Their pyramids had smooth sides and came to a point. In contrast, the pyramids built by the Zapotec at Monte Albán (shown below) have stepped sides, with flat tops that served as platforms for temples.

INTEGRATED TECHNOLOGY

INTERNET ACTIVITY Make a poster about the different kinds of pyramids in Egypt and Mesoamerica. Go to classzone.com for your research.



palaces, all made out of stone, surrounded this plaza. There was even an observatory for observing the stars to establish a calendar. Nearby was a series of stone carvings of corpses. Their facial features show an Olmec influence.

For more than a thousand years the Zapotec controlled the Oaxaca Valley and the surrounding region. Sometime after A.D. 600, the Zapotec began to decline. Some scholars believe they may have suffered a loss of trade or other economic difficulties. As with the Olmec, the fall of Zapotec civilization remains a puzzle.

The Early Mesoamericans' Legacy

Although both the Zapotec and Olmec civilizations eventually collapsed, each culture influenced the Mesoamerican civilizations that followed.

The Olmec Leave Their Mark The Olmec contributed much to later Mesoamerican civilizations. They influenced the powerful Maya, who will be discussed in Chapter 16. Olmec art styles, especially the use of the jaguar motif, can be seen in the pottery and sculpture of later peoples in the region. In addition, future Mesoamerican societies copied the Olmec pattern of urban design.

The Olmec also left behind the notions of planned ceremonial centers, ritual ball games, and an elite ruling class. And while there is no clear evidence that the Olmec used a written language, their descendants or a related people carved out stone symbols that may have influenced later glyph writing. **D**

Zapotec Contributions The Zapotec left behind their own legacy. It included a hieroglyphic writing system and a calendar system based on the movement of the sun. In addition, the Zapotec are noted as the Americas' first city builders. Monte Albán combined ceremonial grandeur with residential living space. This style influenced the development of future urban centers and became a hallmark of Mesoamerican civilizations.

As the Zapotec and Olmec flourished and then declined, civilizations were also taking shape in South America. Along the rough and mountainous terrain in what is now Peru, ancient peoples came together. There, they created more advanced and complex societies.

MAIN IDEA

Forming Opinions

D What do you consider to be the Olmec's most important contributions to later cultures?

SECTION

2

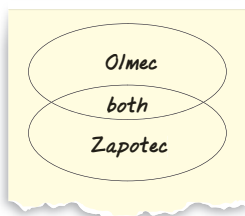
ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Mesoamerica
- Olmec
- Zapotec
- Monte Albán

USING YOUR NOTES

2. What was one characteristic unique to Olmec culture?



MAIN IDEAS

3. Why did Olmec civilization collapse?
4. What was the role of trade in Olmec civilization?
5. What were some important Zapotec contributions to later cultures?

CRITICAL THINKING & WRITING

6. **DRAWING CONCLUSIONS** Why do you think the Olmec are called Mesoamerica's "mother culture"?
7. **ANALYZING CAUSES** What factors made the Oaxaca Valley a likely place for civilization to develop?
8. **COMPARING** What were some similarities between the Olmec and Zapotec cultures?
9. **WRITING ACTIVITY** **CULTURAL INTERACTION** As a trader from a small Mesoamerican village, you have just returned from your first visit to the Olmec site at La Venta. Write a **description** of what you might tell your family about the things you saw at the site.

CONNECT TO TODAY DRAWING A MASK

What are some events or holidays in North America where participants wear masks? Draw a picture of a jaguar **mask** that you would like to wear for such a festival.

Olmec Sculpture

Around 1200 B.C., the Olmec civilization appeared in southeastern Mexico. Over the next several hundred years, its culture spread into the Valley of Mexico and into parts of Central America. The Olmec are especially known for their huge sculptures of heads and their small, finely crafted stone carvings. Much of their art reflects a fascination with the jaguar.

INTEGRATED TECHNOLOGY

RESEARCH LINKS For more on Olmec art, go to classzone.com

Olmec Head ▶

The Olmec Center at San Lorenzo, Honduras, contains several huge carved heads. Some of them are 9 feet high and weigh about 40 tons. The heads may be portraits of Olmec leaders or of players in a sacred ball game. The stone used for the sculptures came from a site more than 250 miles away. The Olmec transported this stone over mountain ranges, rivers, and swamps.



◀ Jaguar Figure

The Olmec created many carvings of beings that were part human, part jaguar. Peter Furst, in "New Light on the Olmec" in *National Geographic*, explains why: "You can almost call the Olmec the people of the jaguar. In tropical America, jaguars were the shamans [medicine men] of the animal world, the alter ego [other identity] of the shaman." Olmec jaguar art greatly influenced later Mesoamerican cultures.



▲ Olmec Altar


This Olmec altar has a carved figure at the base situated at the mouth of a cave. This figure's elaborate headdress shows that he is a ruler. The ruler holds a rope that winds around the base of the altar and binds a carved figure at the back. Scholars believe that the altar was used as a throne.



▲ Jade Figure

Many Olmec figurines, such as this adult holding a baby, are made of this beautiful blue-green stone, a fact that puzzled scientists for decades because they believed that no jade deposits existed in the Americas. However, in May 2002, a scientist discovered what he believes to be an ancient Olmec jade mine in Guatemala.

Connect *to* Today

- 1. Hypothesizing** The Olmec probably did not use the wheel. How do you think the Olmec transported the stone for the huge head sculptures?
 See Skillbuilder Handbook, Page R15.
- 2. Comparing and Contrasting** Mount Rushmore in the United States also shows giant stone heads of leaders. Find out how it was made by using an encyclopedia or the Internet. What are similarities and differences between the way Mount Rushmore was made and the way the Olmec heads were made?



3

Early Civilizations of the Andes

MAIN IDEA

INTERACTION WITH ENVIRONMENT In the Andes Mountains, various groups created flourishing civilizations.

WHY IT MATTERS NOW

Like the early Andean civilizations, people today must adapt to their environment in order to survive.

TERMS & NAMES

- Chavín
- Moche
- Nazca

SETTING THE STAGE While civilizations were emerging in Mesoamerica, advanced societies were independently developing in South America. The early cultures of South America arose in a difficult environment, the rugged terrain of the Andes Mountains.

TAKING NOTES
Determining Main Ideas
 Use a chart to record important information about early Andean civilizations.

Culture	Time Span	Location	Achievements
Chavín			
Nazca			
Moche			

Societies Arise in the Andes

The Andes Mountains stretch about 4,500 miles down the western edge of South America, from Colombia in the north to Chile in the south. After the Himalayas in southern Asia, the Andes is the next highest mountain range in the world. The Andes has a number of peaks over 20,000 feet in elevation. South America’s first civilizations emerged in the northern Andes region, in Peru.

Settlements on the Coastal Plain Peru was a harsh place to develop a civilization. The Andes are steep and rocky, with generally poor soil. Ice and snow cover the highest elevations year-round. Overland travel often is difficult. The climate is also severe: hot and dry during the day, and often freezing at night.

Between the mountains and the Pacific Ocean lies a narrow coastal plain. Most of this plain is harsh desert where rain seldom falls. In some places, however, rivers cross the desert on their path from the mountains to the sea. It was in these river valleys that the first settlements occurred.

Between 3600 and 2500 B.C., people began to establish villages along the Pacific coast. These first inhabitants were hunter-gatherers who relied on seafood and small game for their survival. Around 3000 B.C., these people began to farm. By 1800 B.C., a number of thriving communities existed along the coast.

The Chavín Period The first influential civilization in South America arose not on the coast, however, but in the mountains. This culture, known as the **Chavín** (sha•VEEN), flourished from around 900 B.C. to 200 B.C. Archaeologists named the culture after a major ruin, Chavín de Huántar, in the northern highlands of Peru. This site features pyramids, plazas, and massive earthen mounds.

Chavín culture spread quickly across much of northern and central Peru. Archaeologists have found no evidence of political or economic organization within the culture. Thus, they conclude that the Chavín were primarily a religious civilization. Nevertheless, the spread of Chavín art styles and religious images—as seen in stone carving, pottery, and textiles—shows the powerful influence of

this culture. Ancient Peruvians may have visited Chavín temples to pay their respects. They then carried ideas back to their communities. The Chavín are believed to have established certain patterns that helped unify Andean culture and lay the foundation for later civilizations in Peru. Thus, like the Olmec in Mesoamerica, the Chavín may have acted as a “mother culture” in South America.

Other Andean Civilizations Flourish

Around the time Chavín culture declined, other civilizations were emerging in Peru. First the Nazca and then the Moche (MO•chay) built societies that flourished in the Andes.

Nazca Achievements The **Nazca** culture flourished along the southern coast of Peru from around 200 B.C. to A.D. 600. This area is extremely dry. The Nazca developed extensive irrigation systems, including underground canals, that allowed them to farm the land. The Nazca are known for their beautiful textiles and pottery. Both feature images of animals and mythological beings. They are even more famous, however, for an extraordinary but puzzling set of creations known as the Nazca Lines. (See History in Depth on the next page.)


Moche Culture Meanwhile, on the northern coast of Peru, another civilization was reaching great heights. This was the **Moche** culture, which lasted from about A.D. 100 to A.D. 700.

MAIN IDEA

Contrasting

A How did the environment of the Andes region differ from that of much of Mesoamerica?

History *in* Depth



Headhunters

The striking images on their pottery indicate that the Nazca may have been headhunters. In numerous ceramic and textile designs, Nazca artisans depict the taking of human heads, probably from enemies in combat. Shown above is a shrunken head. Taking and displaying the head of an enemy was considered a way of increasing the strength and well-being of a community.



Early Civilizations, 1200 B.C.–A.D. 700



The region in which the Olmec arose included lush forests. Numerous rivers in the region provided fertile farming land.



The environment of the Andes region was harsh. Its dry terrain made farming difficult, which the Nazca overcame through irrigation.



GEOGRAPHY SKILLBUILDER: Interpreting Maps

- Place** Along what mountain range did the early South American civilizations arise?
- Human-Environment Interaction** What advantages did the Olmec have over the early civilizations of the Andes?

Nazca Lines

Etched on the plains of southeastern Peru are more than 1,000 drawings of animals, plants, humans, and geometric shapes. Most of them are so large that they can be recognized only from the air. Scientists believe that the Nazca people made the drawings between 200 B.C. and A.D. 600. Since the lines were discovered in 1927, people have proposed many theories about their purpose, including the following:

- The Nazca people worshiped mountain or sky gods and created the drawings to please them.
- The lines indicated where surface water entered the plain and marked elevated land between ancient riverbeds.
- The lines are a huge map that marks the course of underground aquifers, or water sources. (This is the most recent theory.)

Size of the Nazca Lines

Many of the Nazca drawings are huge. Some of the wedges (below) are more than 2,500 feet long. The hummingbird (right) is 165 feet long. The Nazca people probably created small model drawings and used math to reproduce them at such a vast scale.



Durability of the Nazca Lines

This spider was created more than 1,000 years ago. It survived because the region has little erosion. The plains are one of the driest regions on earth with only 20 minutes of rain a year. Also, the ground is flat and stony, so wind rarely carries away the soil.



Nazca Water Cult

Some scholars think the lines were linked to a Nazca water cult, or religion. The straight lines may have led to ceremonial sites. The animals may have been symbols. For example, according to traditional beliefs, the hummingbird (above) represents the mountain gods. The mountains were a main source of water.

SKILLBUILDER: Interpreting Visual Sources

- 1. Forming and Supporting Opinions** *Do you think the purpose of the Nazca lines had something to do with water? Why or why not?*
- 2. Evaluating Courses of Action** *What might be the next step for researchers who wish to prove or disprove the aquifer theory? What are potential positive and negative consequences of such an action?*

The Moche took advantage of the rivers that flowed from the Andes Mountains. They built impressive irrigation systems to water their wide range of crops, which included corn, beans, potatoes, squash, and peanuts. According to Peruvian archaeologist Walter Alva, the Moche enjoyed a variety of foods. These included both fish and game:

PRIMARY SOURCE

The Moche enjoyed a diet rich in protein and probably better balanced than that of many modern Peruvians. Fish from the nearby Pacific were eaten fresh or sun dried. They ate Muscovy ducks and guinea pigs. To drink, there was potent *chicha*, a cloudy beverage fermented from corn that had been ground and boiled. Deer, now rare, were abundant. . . . Crayfish in irrigation ditches supplemented seafood from the coast.

WALTER ALVA, "Richest Unlooted Tomb of a Moche Lord," *National Geographic*

Moche tombs uncovered in the recent past have revealed a civilization with enormous wealth. Archaeologists have found beautiful jewelry crafted from gold, silver, and semiprecious stones. The Moche were also brilliant ceramic artists. They created pottery that depicted scenes from everyday life. Moche pots show doctors healing patients, women weaving cloth, and musicians playing instruments. They also show fierce soldiers armed with spears, leading enemy captives. Although the Moche never developed a written language, their pottery provides a wealth of detail about Moche life. **B**

Nevertheless, many questions about the Moche remain. Experts still do not fully understand Moche religious beliefs. Nor do they know why the Moche fell. Like many early cultures of the Americas, the Moche remain something of a mystery awaiting further archaeological discoveries.

Unlike the lands you will read about in the next chapter—which were unified by the spread of Islam—the Americas would remain a patchwork of separate civilizations until the early 16th century. Around that time, as you will read in Chapter 20, the Europeans would begin to arrive and bring dramatic and lasting changes to the American continents.

MAIN IDEA

Analyzing Issues

B How were archaeologists able to gain so much information about the Moche without the help of a written language?

SECTION 3 ASSESSMENT

TERMS & NAMES 1. For each term or name, write a sentence explaining its significance.

- Chavín
- Nazca
- Moche

USING YOUR NOTES

2. What achievements, if any, did all three cultures share? Explain.

Culture	Time Span	Location	Achievements
Chavín			
Nazca			
Moche			

MAIN IDEAS

3. Why was Peru a difficult place for a civilization to develop?
4. How was the Chavín culture like the Olmec culture?
5. How did the Nazca deal with their dry environment?

CRITICAL THINKING & WRITING

6. **HYPOTHESIZING** Would the Chavín culture have been more influential if it had arisen along the Peruvian coast?
7. **COMPARING** In which civilization did religion seem to play the most central role? Explain.
8. **DRAWING CONCLUSIONS** How did the Nazca and the Moche adapt to their environment in order to build flourishing societies? Give evidence.
9. **WRITING ACTIVITY** **INTERACTION WITH ENVIRONMENT** How did the Nazca change their environment to make it suitable for agriculture? Write an **expository essay** explaining their methods.

CONNECT TO TODAY MAKING A POSTER

Research recent findings on one of the three Andean cultures discussed in this section: Chavín, Nazca, or Moche. Then present your findings in a **poster** that will be displayed in the classroom.

Lasting Achievements

A classical age usually has two important characteristics:

- The society reaches a high level of cultural achievement, with advances in technology and science and the creation of impressive works of art.
- The society leaves a strong legacy for future ages, not only in the region where it is located but also in other parts of the world.

In this feature, you will study similarities and differences among five classical ages that you learned about in Unit 2.



◀ **Greece**

Pericles, shown at left, led the city-state of Athens during its golden age. The ancient Greeks of Athens and other cities created art, literature, philosophy, and political institutions that have influenced the world for thousands of years.

Greece
750–300 B.C.

Rome
500 B.C.–A.D. 476

1200 B.C.

1000

800

600

400

200

Olmec
1200–400 B.C.

Olmec ▶

Some scholars theorize that the sculpture at right shows the face of an **Olmec ruler**. The Olmec people left no written records. Even so, their civilization influenced the art, religion, architecture, and political structure of peoples who followed them in Mesoamerica.



Han China ▶

Liu Bang, shown at right, seized control of China and founded the Han Dynasty. He and his successors ruled a vast empire, which saw the growth and spread of Chinese culture. Even today, many Chinese call themselves “the people of Han,” a tribute to the lasting cultural impact of this period.



Han China
202 B.C.–A.D. 220



Territory Controlled by Classical Societies



◀ Rome

The emperor **Augustus**, whose statue is shown at left, ruled for about 40 years during Rome's 200-year golden age. First a republic and then an empire, Rome controlled the Mediterranean region and a large part of Europe. Roman government, law, society, art, literature, and language still influence much of the world, as does the Christian religion Rome eventually adopted.

A.D. 200

400

600

Gupta India
A.D. 320–550



◀ Gupta India

Chandragupta II, shown on this coin, was one of the rulers of India's Gupta Empire. They oversaw an age of peace, prosperity, and artistic creativity. During this time, Hinduism and Buddhism took full form in India and spread through trade to other regions.







Comparing & Contrasting



1. Which of these societies controlled the most territory? the least? Explain how the size of a society's territory might affect its ability to leave a legacy.
2. Which classical ages had religion as an important part of their legacy? Why does religion have such an impact on societies?



Cultural Achievements

These five classical ages had impressive cultural achievements. Their beliefs are still studied—and in some cases followed—today. Their art and architecture are counted among the world’s treasures. Their advances in science and technology paved the way for later discoveries.

	Greece	Rome	Gupta India
Beliefs	<ul style="list-style-type: none"> • The Greeks worshiped many gods who behaved in very human ways. • Philosophers used reason to understand the world. 	<ul style="list-style-type: none"> • Rome adopted many of the Greek gods, but usually changed and added to them. • Later, Rome adopted Christianity and helped spread it. 	<ul style="list-style-type: none"> • Hinduism became a more personal religion and gained followers. • A more popular form of Buddhism developed and spread.
Art	<ul style="list-style-type: none"> • Sculpture portrayed ideal human beauty, such as this statue of a boxer. (This is a Roman copy.) 	<ul style="list-style-type: none"> • Romans modeled sculpture after Greek statues and developed more realistic sculpture. They also made beautiful mosaics. 	<ul style="list-style-type: none"> • Gupta statues were of Hindu gods and the Buddha, such as this figure. 
Science and Technology	<ul style="list-style-type: none"> • Scientists made advances in astronomy and mathematics. 	<ul style="list-style-type: none"> • Engineers developed domes and arches and built superb roads. 	<ul style="list-style-type: none"> • Scholars made discoveries in astronomy, mathematics, and medicine.
Architecture	<ul style="list-style-type: none"> • Greek buildings show balance and symmetry; columns and pedestals were often used. 	<ul style="list-style-type: none"> • Roman advances include domes and arches, such as those in the Colosseum. 	<ul style="list-style-type: none"> • Hindu temples like this temple of Vishnu at Deogarh began to have pyramidal roofs. 

Han China	Olmec
<ul style="list-style-type: none"> The Han adopted the ethical system of Confucius as the basis for government. 	<ul style="list-style-type: none"> The Olmec worshiped a jaguar spirit. They built religious centers with pyramids.
<ul style="list-style-type: none"> The Han made intricate bronzes like this figure of a galloping horse. 	<ul style="list-style-type: none"> The Olmec carved giant stone heads and small figurines like this ceremonial object. 
<ul style="list-style-type: none"> The Han invented paper, various farming tools, and watermills. 	<ul style="list-style-type: none"> The Olmec moved heavy stone for monuments without use of the wheel.
<ul style="list-style-type: none"> Han buildings were wooden and none survive. This ceramic model of a three-story wooden tower shows Han styles. 	<ul style="list-style-type: none"> This step pyramid at the Zapotec site in Monte Albán reflects Olmec architectural influence. 

SKILLBUILDER: Interpreting Charts

- Drawing Conclusions** Which of the art pieces shown here are religious in subject and which are not?
- Contrasting** How were the beliefs of Han China different from the other societies that had classical ages?

“... to the glory that was Greece and the grandeur that was Rome”

Edgar Allan Poe, from “To Helen”

“The inhabitants [of the Gupta Empire] are rich and prosperous, and vie with one another in the practice of benevolence and righteousness.”

Fa Xian, from *The Travels of Fa Xian*

Comparing & Contrasting

- Which of the societies seemed to be more interested in mathematical and scientific theories? Which seemed to be more interested in practical technology?
- What functions did monumental buildings fill for these societies? Explain whether the functions were similar or different.



Legacy of Classical Ages

The societies of the classical ages lasted for many centuries. In the end, though, they faded from the world scene. Still, some of their achievements have had an enduring impact on later societies.

Architecture

The Smolny Institute (left) built in the early 1800s in Saint Petersburg, Russia, reflects Greek and Roman architectural ideas. A modern hotel in South Africa (right) recalls Olmec style.



DOCUMENT-BASED QUESTION

Compare these buildings to the Greek, Roman, and Olmec structures on pages 254–255. What similarities do you see?

Religion

Buddhism and Roman Catholicism are still widely practiced today, with millions of followers in countries far from the lands where the religion originated. The Buddhist monks (left) are praying in Seoul, South Korea. Pope John Paul II (right), head of the Catholic Church, greets nuns and other believers who visit Rome from around the world.



DOCUMENT-BASED QUESTION

What similarity do you see in the religious legacies of Rome and Gupta India?

Government

The classical ages studied in Unit 2 laid foundations for government that influenced later times—even today. Read about three examples of their contributions.

PRIMARY SOURCE

Pericles

In a famous speech known as the Funeral Oration, the Athenian leader Pericles described the advantages of democracy.

[Our government] favors the many instead of the few; this is why it is called a democracy. If we look to the laws, they afford equal justice to all; . . . if no social standing, advancement in public life falls to reputation for capacity [ability], class considerations not being allowed to interfere with merit; nor again does poverty bar the way, if a man is able to serve the state, he is not hindered by the obscurity of his condition.

DOCUMENT-BASED QUESTION

According to Pericles, what values did Athens stand for?

INTERACTIVE

SECONDARY SOURCE

INTERACTIVE

Henry C. Boren

In this excerpt from his book *Roman Society*, historian Henry C. Boren discusses the permanent legacy of Roman law.

The most imitated and studied code of law in history is the formulation by a group of lawyers . . . under the eastern Roman emperor Justinian. . . . This code served as a model for many of the nations of western Europe in the modern age and also for South Africa, Japan, and portions of Canada and the United States. Indirectly the principles of the Roman law, though perhaps not the procedures, have also strongly affected the development of the Anglo-Saxon common law, which is the basis of the legal systems in most English-speaking nations.

DOCUMENT-BASED QUESTION

According to this historian, how has Roman law affected the world?

SECONDARY SOURCE

Rhoads Murphey

In this passage from *A History of Asia*, historian Rhoads Murphey examines the lasting impact of the government of Han China.

Confucianism was more firmly established as the official orthodoxy and state ideology, and the famous Chinese imperial civil service system recruited men of talent, schooled in classical Confucian learning, to hold office through competitive examination regardless of their birth. . . . In China, the original Han ideal endured through the rise and fall of successive dynasties and, with all its imperfections, built a long and proud tradition of power combined with service that is still very much alive in China.

DOCUMENT-BASED QUESTION

What qualities of Han government still influence China today?

INTERACTIVE

Comparing & Contrasting

1. How did the idea of merit play a part in the governments of both Athens and Han China?
2. How is the U.S. government similar to each of the governments described in the excerpts?
3. What were some of the different forces that spread the ideas of these classical ages to many regions of the world?

EXTENSION ACTIVITY

Another Mesoamerican society that had a classical age was the Maya, which you will study in Chapter 16. Read about the Classic Age of the Maya either in this textbook or an encyclopedia. Then create a chart or a poster listing Maya beliefs and their achievements in the arts, science, technology, and architecture.