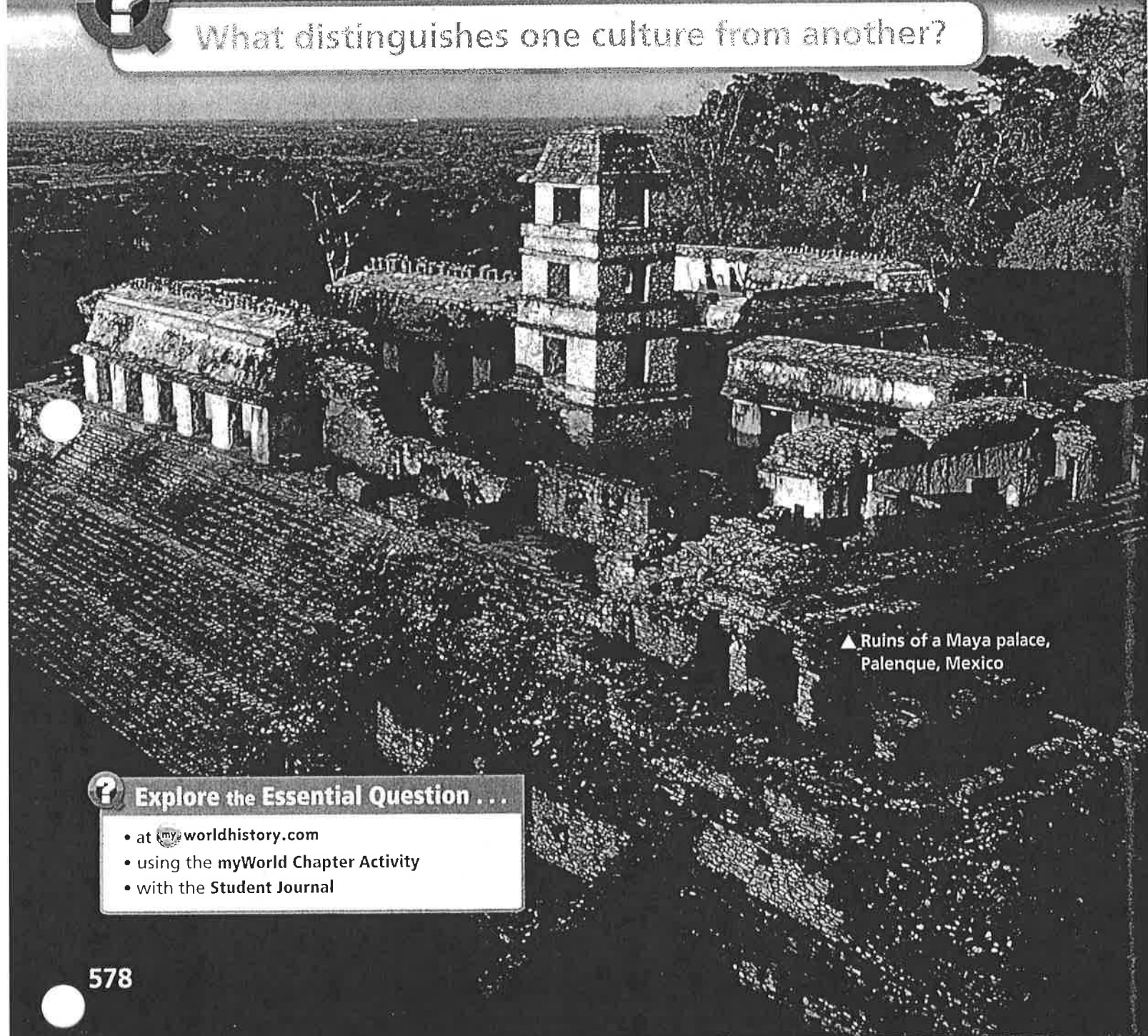


Mesoamerican Civilizations



Essential Question

What distinguishes one culture from another?

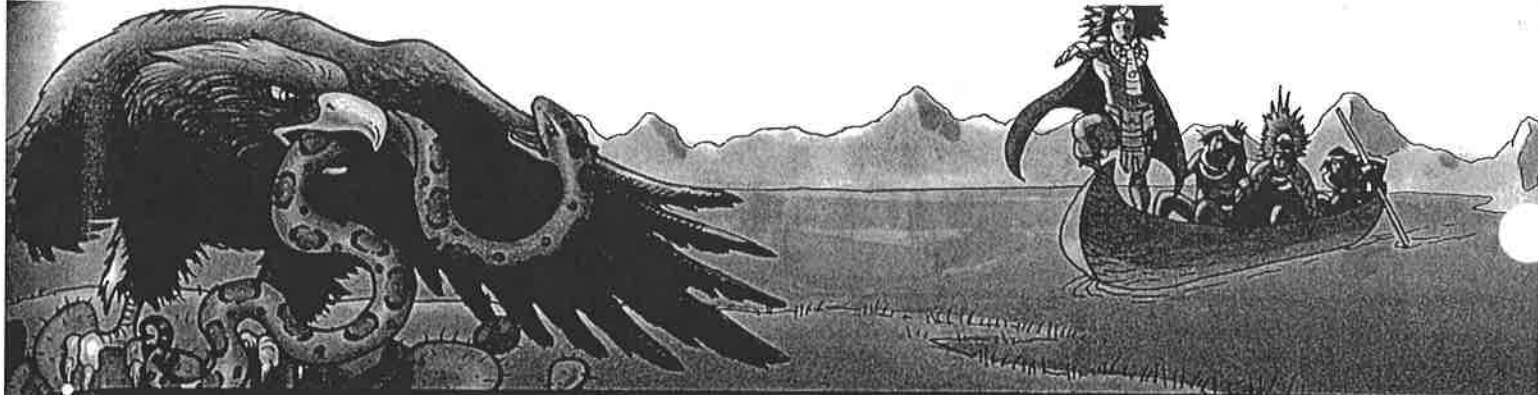


▲ Ruins of a Maya palace, Palenque, Mexico



Explore the Essential Question . . .

- at myworldhistory.com
- using the myWorld Chapter Activity
- with the Student Journal



On a marshy island in Lake Texcoco, Moctezuma's ancestors spotted an eagle holding a snake on a cactus. This was where their god, Huitzilopochtli, had told them to build their city.

As he neared the city gates he wondered if his ancestors would even recognize this magnificent city of Tenochtitlan.

He smiled as one of his warriors exclaimed, "Look at the squash on the chinampas! It is making me hungry for the feast."

Moctezuma turned to his warrior. "Our ancestors have pleased Tlaloc, our god of water." He stretched his arms wide, as if he could embrace the city. "It is because of Tlaloc that we have such plentiful food and clean water."

At sunset, Moctezuma stood with a nobleman and admired the Great Temple in the middle of Tenochtitlan. Moctezuma had ordered that the temple be made larger. "Our empire is growing because Huitzilopochtli and Tlaloc are pleased with us," he had told his engineers. "We must enlarge the temple to keep them happy."

Moctezuma was pleased to see the conquered Chalco prisoners hauling blocks of stone up the temple steps. The Chalco king was commanding the prisoners, just as Moctezuma had ordered.

"They would not cooperate were it not for your leadership," commented the nobleman standing

with him. "Our Toltec forefathers would be proud of your majesty, O great lord."

Moctezuma looked down at the man. "We are not Toltecs."

The nobleman swallowed nervously. "I only meant that we are great warriors, O lord, just as they were."

Moctezuma nodded, and the nobleman relaxed. "I see your point. But we are more powerful than the Toltecs ever were. Our gods are stronger. We are better farmers. We are better warriors."

In this story, you read a fictionalized account of Moctezuma Ilhuicamina, a real Aztec king. Based on this story, what do you think distinguishes the cultures of Mesoamerica, or makes them different? As you read the chapter ahead, think about what Moctezuma's story tells you about life in the civilizations of Mesoamerica.



myStory Video

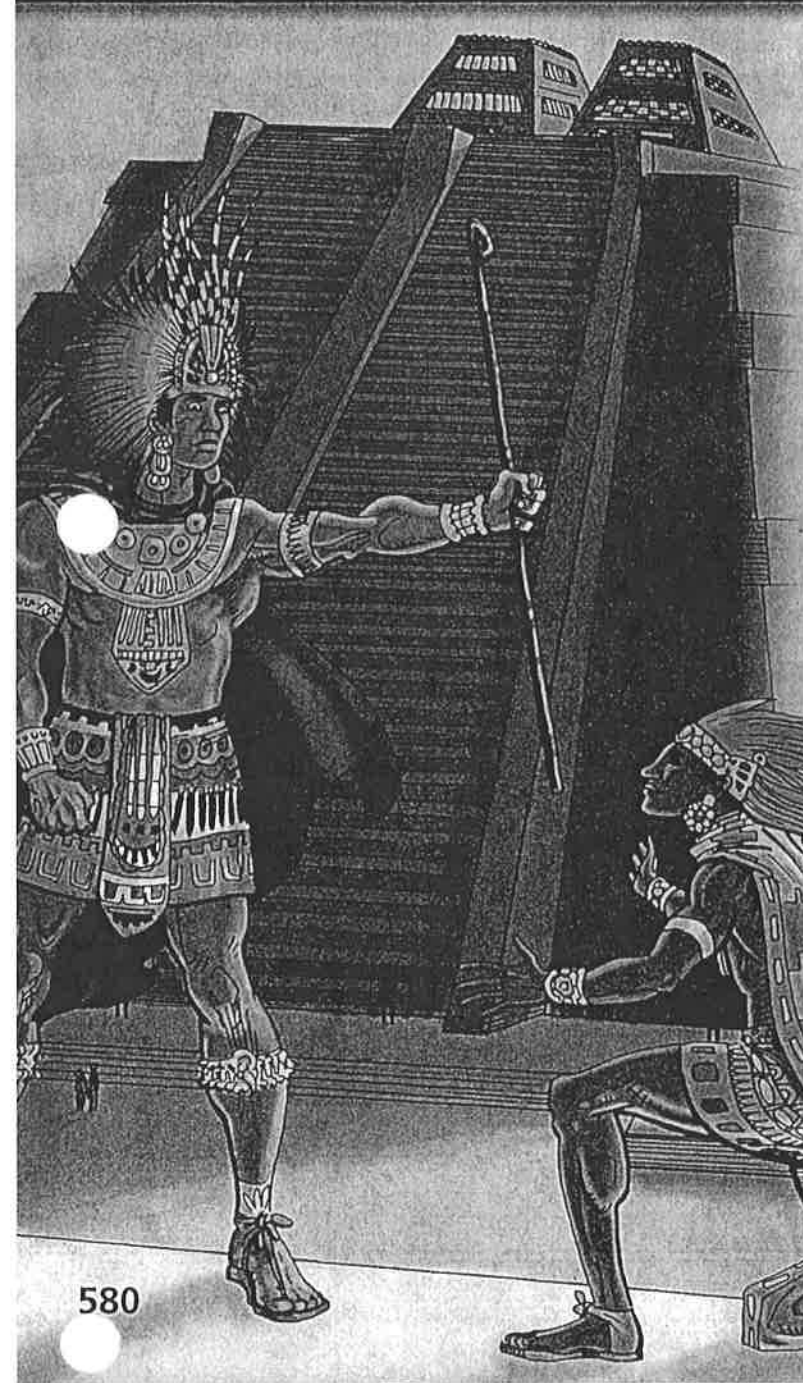
Join Moctezuma Ilhuicamina as he tastes the fruit of victory.



The Aztec warriors attack the Chalco fighters.



The Aztecs tie the Chalco prisoners together and force them to march to Tenochtitlan.



Moctezuma raised his hand. He seemed to hold up the entire sky. The sun itself seemed to rest in his hand. At last he spoke. "We owe our victory over the Chalco to Huitzilopochtli!"

His warriors raised their war clubs to the sky. They roared, "The gods of the Chalco are our prisoners! Huitzilopochtli rules us all!"

Moctezuma thought of his Aztec ancestors. They named their city Tenochtitlan, the place of the prickly pear cactus. They chose this place roughly 150 years before, because Huitzilopochtli had told them to settle where they saw an eagle on a prickly pear cactus holding a snake. They stayed because Tlaloc (TLAH lawk), the god of rain, had provided a lake for protection from enemies and plenty of clean water for growing crops.

Moctezuma tried to imagine Tenochtitlan before the time of his ancestors. It was a group of muddy islands. There were no chinampas—man-made island gardens of flowers, corn, and vegetables. There was no three-mile-long aqueduct, or raised canal, bringing fresh water to the island city.

Section 1

The Maya

Key Ideas

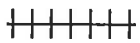
- After people in Mesoamerica learned to farm, civilizations developed in this region of tropical forest and highlands.
- In the Maya civilization, religion and government were closely related.
- The Maya developed a complex writing system and made advances in mathematics, science, and architecture.

Key Terms

- obsidian
- slash-and-burn agriculture
- quetzal
- drought
- hieroglyphic
- observatory

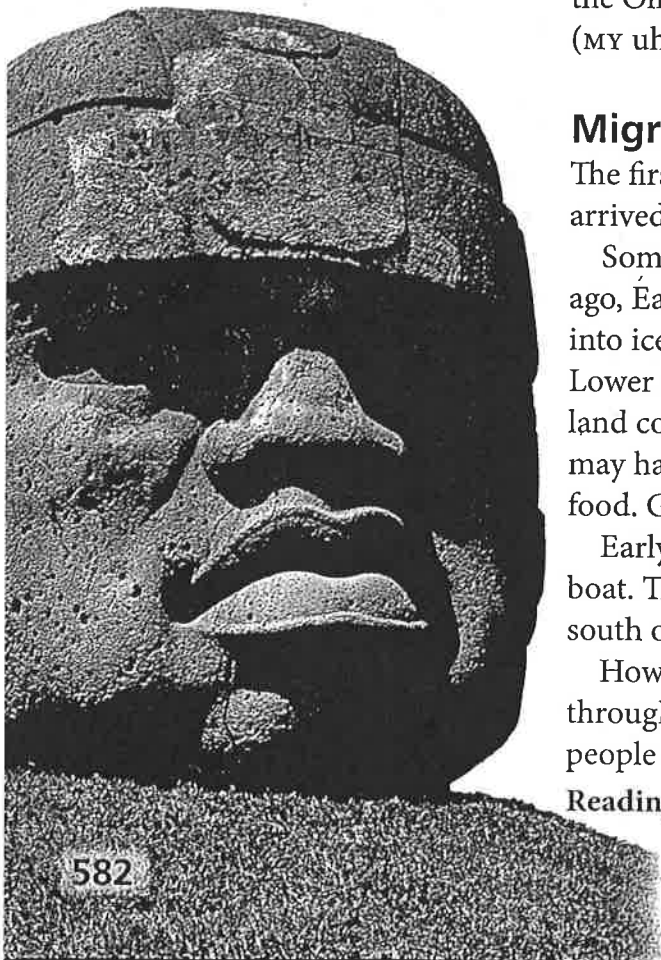


Visual Glossary



Reading Skill Sequence Take notes using the graphic organizer in your journal.

A massive Olmec sculpture, possibly the head of a ruler or god ▼



The oldest civilizations in the Americas formed in an area called Mesoamerica. Mesoamerica extends south from central Mexico into northern Central America. Several advanced cultures, including the Olmec (OHL mek), the Zapotec (ZAH poh tek), and the Maya (MY uh), developed there.

Migration to the Americas

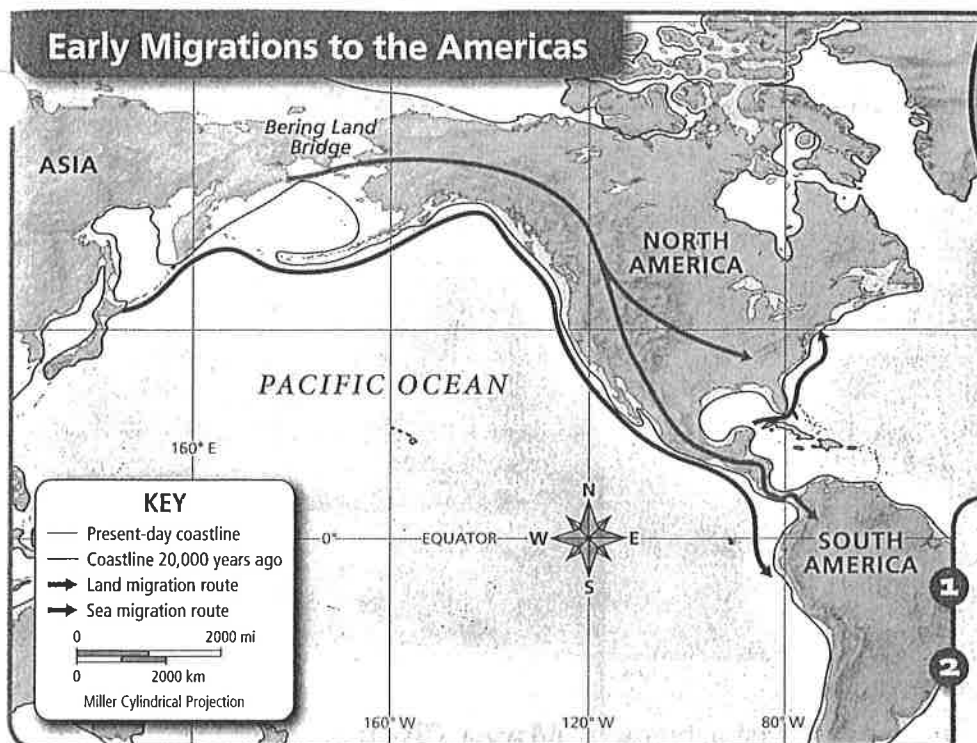
The first people to settle in the Americas came from Asia. They arrived between about 40,000 and 15,000 years ago.

Some of these people probably came by land. Thousands of years ago, Earth's climate was very cold. Much of Earth's water was frozen into ice on land. As a result, sea levels were lower than they are now. Lower sea levels exposed the Bering Land Bridge. This was a strip of land connecting Asia to North America where Alaska is today. People may have crossed that land bridge into the Americas in search of food. Gaps in the ice sheets let them travel south.

Early settlers of the Americas may also have come from Asia by boat. These people would have paddled or sailed from place to place south of the ice sheets along the Pacific coast of the Americas.

However the first people arrived, their descendants spread throughout the Americas. Thousands of years ago, some of these people settled in Mesoamerica.

Reading Check When did people first arrive in the Americas?



Map Skills

- Place** How were coastlines different 20,000 years ago?
- Movement** How might that difference have helped ancient peoples migrate, or move, to the Americas?

Geography of Mesoamerica

Highlands cover the south of Mesoamerica, and lowlands lie to the north. The highlands have warm temperatures year-round and rain from April to October. The lowlands have a hot, wet climate.

Ash from volcanoes in the highlands has produced rich soils. Volcanoes have also produced **obsidian**, or natural volcanic glass, a rock used in the past to make very sharp blades for spears and arrows.

Heavy rainfall in parts of the hot lowlands supports a dense rain forest. The soil in the rain forest is poor. However, the forest produced valuable resources, including plant foods and animals hunted for their meat, skin, or feathers.

Reading Check What resources are found in the highlands?

The Olmecs and Zapotecs

The Olmec people lived in the rain forest. Because the forest has poor soil, they used **slash-and-burn agriculture**, a farming method in which trees and other plants on a plot of land are cut down and burned. The ash fertilizes the soil.

After a few years, the soil would wear out. When that happened, farmers moved to a new plot and cleared it. They let the old fields rest and grow trees before clearing them again.

Olmec farmers grew corn and beans. They also planted tomatoes, squash, sweet potatoes, cotton, and peppers. As Olmec farmers learned to produce more food, the population grew. Over time, the Olmecs built cities. They set a pattern for future civilizations in Mesoamerica.

dense, *adj.*, thickly clustered

Maya Cities

At the center of Maya cities were impressive temple complexes with stepped pyramids and plazas where people could gather. Surrounding the temple complex were the palaces of nobles. Farther away were the houses and fields of the commoners.

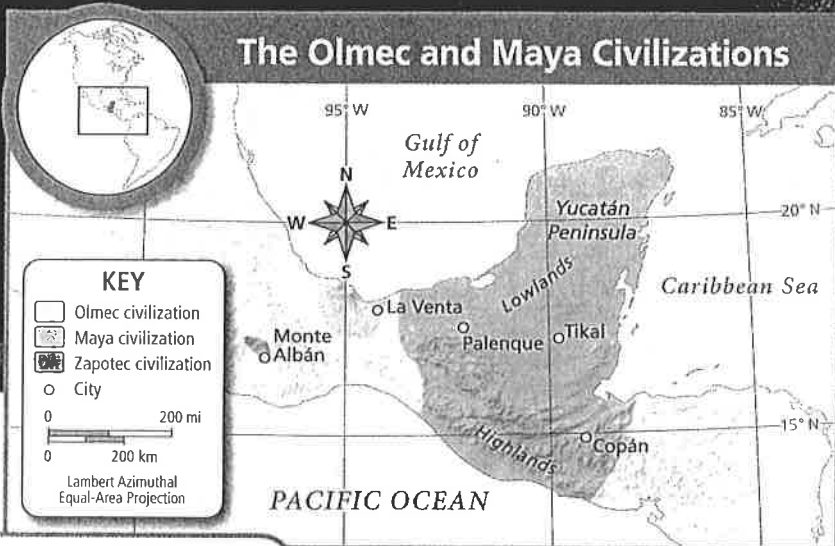
▲ Commoners' houses

▶ Noble's palace

▲ Fields of corn and other vegetables filled the land between clusters of commoners' houses.

 Culture Close-Up

The Olmec and Maya Civilizations



Map Skills

- 1 **Region** Which Maya city was in the highlands?
- 2 **Location** Using the scale bar, find how far this city lay from the Caribbean coast.
- 3 **Places to Know!** Label the following places on the outline map in your Student Journal: Yucatán Peninsula, Gulf of Mexico, Caribbean Sea

21st Century Learning

The Olmecs are known for their art, including the huge heads they carved out of stone. These heads may portray Olmec rulers.

Olmec civilization lasted from about 1200 B.C. to about 400 B.C. Although their civilization ended, Olmec beliefs and practices helped shape the cultures of other Mesoamerican peoples.

One of those groups was the Zapotecs. They lived in the highlands southwest of the Olmecs. They built a beautiful hilltop city known today as Monte Albán (MAWN tay ahl BAHN). The Zapotecs developed what may have been the first system of writing in the Americas around 600 B.C.

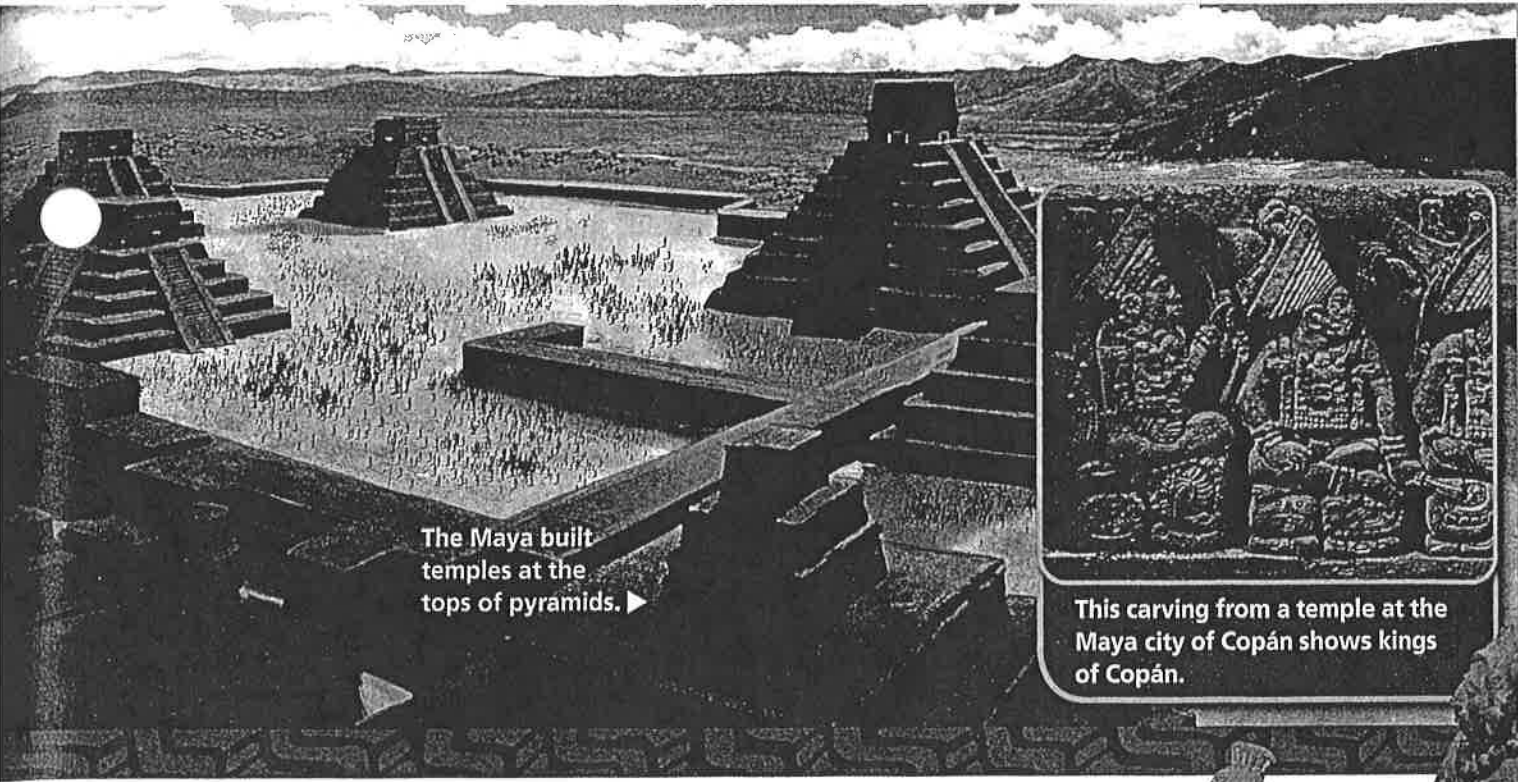
Reading Check How did the Olmecs influence future civilizations?

Maya Civilization


The Maya lived in what are today Honduras, Guatemala, Belize, and the Yucatán Peninsula in Mexico. Like the Zapotecs, the Maya learned from the Olmecs. The earliest Maya cities developed at the time of the Olmecs. Between about A.D. 250 and 850, the Maya built great cities and made advances in science and art.

Maya Cities Archaeologists have learned much about the Maya by studying Maya cities such as Tikal (tee KAHL), Palenque (pah LENK ay), and Copán (koh PAHN). These cities had hundreds of buildings, including stone pyramids, temples, and palaces. In Maya cities, large, paved plazas were gathering places. Causeways, or raised roads, connected these plazas.

Most Maya people, however, did not live in the center of a city, near the major temples and palaces. Instead, most lived in farming villages surrounding a city.



The Maya built temples at the tops of pyramids. ▶



This carving from a temple at the Maya city of Copán shows kings of Copán.

Maya Society The Maya had complex societies. The three main groups were nobles, a middle class, and commoners.

The nobles were people born into powerful families. They included the king, high officials, and priests. Historians think that the nobles controlled the best land and the farmers who worked on it.

Most Maya were commoners who raised crops. Men worked in the fields and on the village buildings. Women raised children, tended gardens and farm animals, and cooked food. They also wove cloth and made pottery.

Lower-ranking lords and higher-ranking commoners formed a kind of middle class. Some were minor officials, soldiers, and scribes. Others were skilled craftworkers who served the nobles.

The basic social unit in Maya society was the extended family. Extended families often included an older couple, their children, and their grandchildren.

Extended families often lived in a group of simple houses around a central patio.

On days of major ceremonies, people gathered in cities for religious festivals. There, they saw great stone pyramids and temples and the palaces of the nobles.

Farming Nobles controlled large plots where corn was grown. Most families also had small plots of their own, where they grew fruit, beans, and other vegetables, and raised turkeys and ducks. The production of food on farms was at the center of the Maya economy.

Like the Olmecs, the Maya used slash-and-burn agriculture in the heavily forested lowlands. Near their cities, they also fertilized fields so that they could use them year after year. On the Yucatán Peninsula, there are few rivers, so the Maya got their water from sinkholes, or deep pits in the ground. They also built cisterns, or tanks, to hold rainwater.



▲ This sculpture shows a Maya woman weaving cloth.

economy, n. the system by which a country's people make a living

Trade Traveling merchants linked Maya cities together in a large trade network. Merchants traveled on footpaths or by canoe along the coast.

Merchants traded the natural resources of different Maya regions. Traders from farming villages traded food, cotton, and cacao beans, used to make chocolate. Those from the highlands traded obsidian, jade, and feathers from the **quetzal**, a colorful tropical bird. Traders from the coast brought salt, dried fish, and pearls. In fact, salt was used as currency, like money, in Tikal and other Maya cities.

Maya Government The Maya region contained dozens of independent city-states. Each Maya city-state had its own king. Usually, the kingship passed from a father to his son. Nobles helped run the government. Maya kings increased their power through warfare. Maya cities went to war to take captives. They also fought over control of trade routes and land.

Maya Religion The Maya were a deeply religious people who worshiped many gods. Most of these gods represented forces of nature, such as rain and lightning. Forces of nature often play a part in Maya myths, such as this creation myth:

“First the earth was formed, the mountains and the valleys; the currents of water were divided, the rivulets [streams] were running freely between the hills, and the water was separated when the mountains appeared.”

—From *Popol Vuh: Sacred Book of the Ancient Quiché Maya*, translated by Delia Goetz and Sylvanus G. Morley

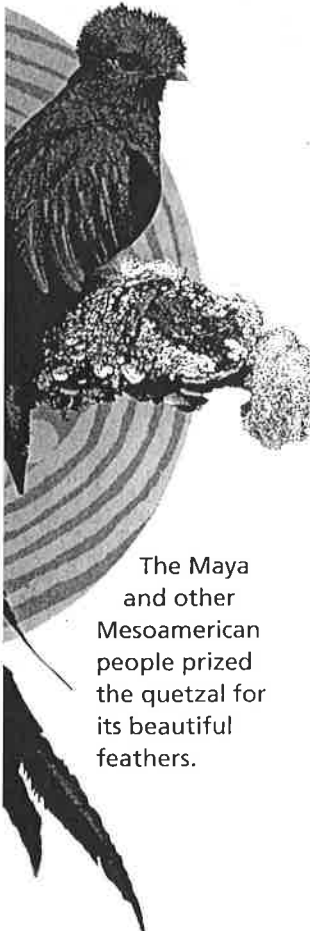
The Maya believed that their priests and kings could communicate with the gods through religious rituals. Priests and kings performed many of these rituals in temples atop pyramids. Temples were built on pyramids so that they could be closer to the gods in heaven. Also, the towering pyramids were meant to show the power of the priests and kings.

Many Maya nobles were priests. Only nobles could become priests. Most kings served as priests before becoming king. Maya commoners feared displeasing priests or kings because they believed that their leaders could call on the gods to punish them.

The most startling Maya rituals were human sacrifice and bloodletting. People killed included prisoners of war, slaves, and even children. Priests also cut themselves and sacrificed their own blood. The Maya believed that these sacrifices were part of the natural cycle of death and rebirth. They saw it as a way to keep the gods satisfied and the universe in balance.

The Fall of the Maya Between A.D. 800 and 1000, many great Maya cities fell into ruin. Warfare was one cause. Drought may also have caused food shortages. **Drought** is a prolonged period of little or no rainfall.

Smaller Maya cities lasted another 600 years in the northern Yucatán Peninsula. These Maya traded with peoples such as the Aztecs. The Spanish conquered the Maya in the early 1500s, but the Maya people and language survive to this day. **Reading Check** Why did the Maya build temples atop pyramids?



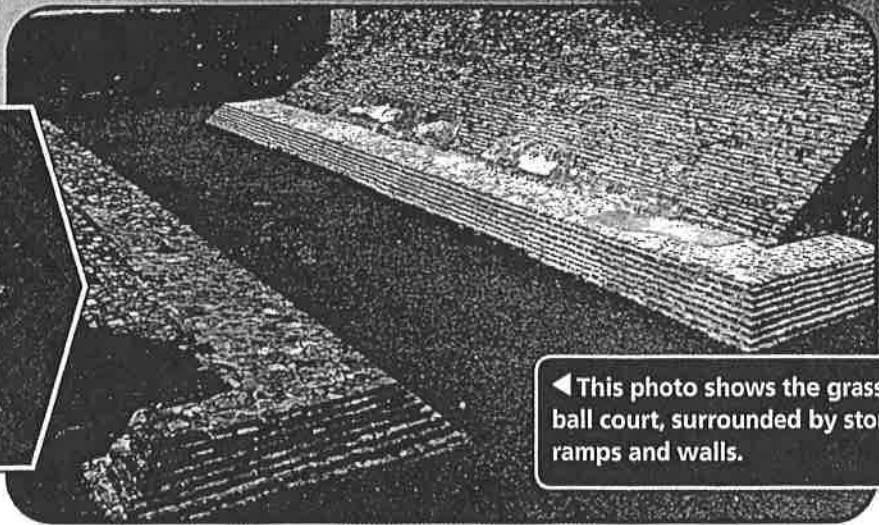
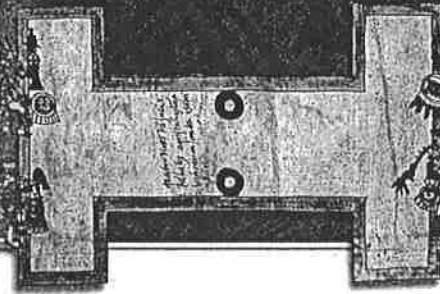
The Maya and other Mesoamerican people prized the quetzal for its beautiful feathers.

A Sacred Ball Game

Teams from Mesoamerican cities played a sacred ball game. The king whose team won was believed to have the gods' favor. The team that lost was sometimes sacrificed.

Players scored points by hitting balls through a stone hoop with their hips, thighs, and upper arms. ▶

The ball court was shaped like a short, wide letter H, with a hoop for each team in the middle. ▼



◀ This photo shows the grassy ball court, surrounded by stone ramps and walls.

Maya Achievements

At their height, the Maya made many important achievements. They developed a complex writing system, created impressive works of art, and made important discoveries in astronomy and mathematics. Many of these achievements influenced other civilizations of Mesoamerica. Maya culture has also had a lasting influence on the cultures of Mexico and Central America.

Writing The Maya developed the most advanced writing system in the ancient Americas. This system used hieroglyphics. A **hieroglyphic**—also known as a **glyph**—is a symbol that stands for a word, idea, or sound. The Maya could combine 800 individual glyphs to form any word in their language. Writing enabled the Maya to preserve information that would otherwise be lost.

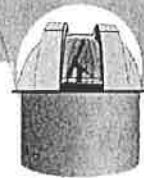
Maya books recorded Maya learning and beliefs. The Spanish destroyed most of them, but scholars have learned much from the few that survive. Carved glyphs have also been preserved on stone monuments called **stelae**. These carvings celebrate rulers and their deeds. Unfortunately, they reveal little about daily life.

Astronomy The Maya were excellent astronomers. Although they had no telescopes, they plotted the movements of the sun, moon, and planets. They used this information to predict events such as eclipses of the sun and moon.

Maya astronomers developed a complex system of calendars. They used a 260-day religious calendar and a 365-day solar calendar. The Maya used these calendars to plan religious festivals and seasonal farming tasks. They also used a 394-year calendar for historical dates.

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CONNECTIONS



Like the Maya, U.S. astronomers use observatories, such as the one at Mount Graham, Arizona.



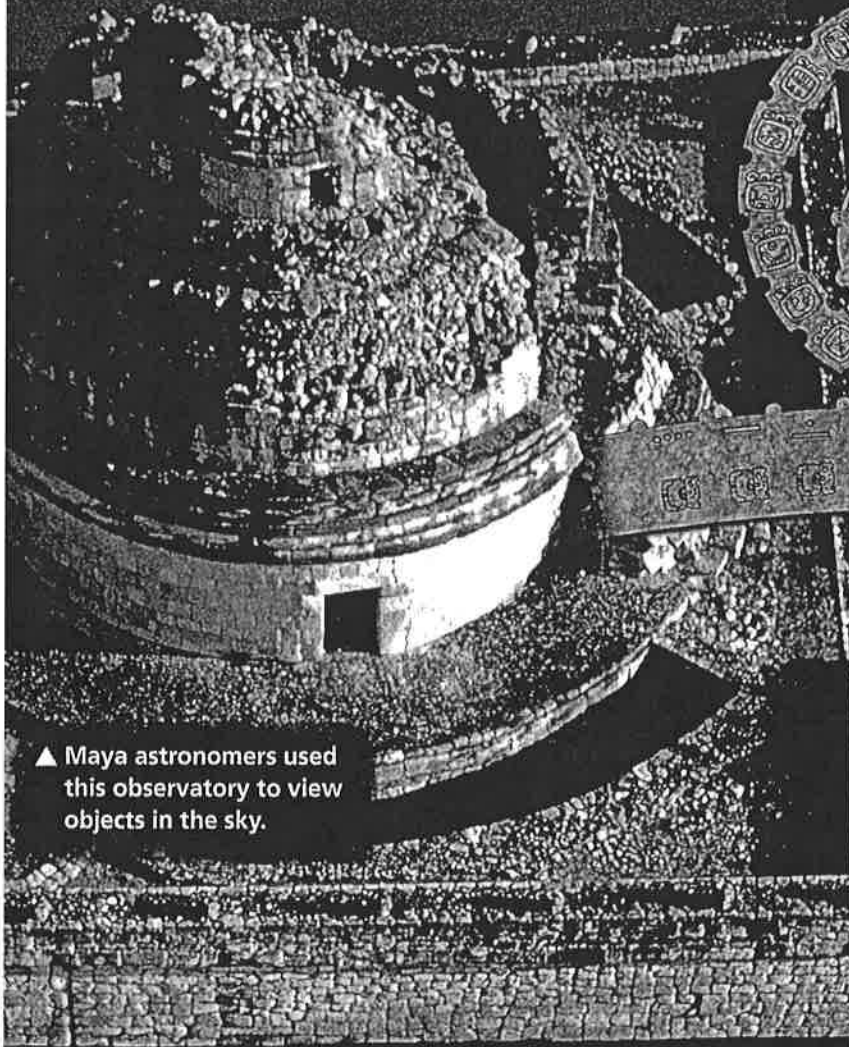
Maya Learning

Maya astronomers made careful observations of the movements of the sun and moon. Their observations were more accurate than those of European astronomers at that time. Maya mathematicians used these observations to develop a complex system of three calendars.

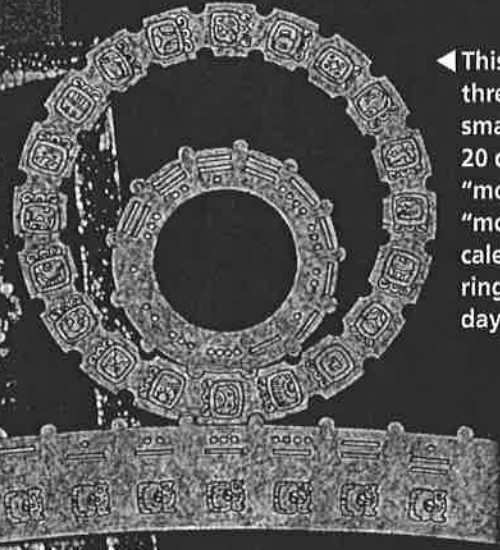
THINK CRITICALLY Why might astronomers need a good knowledge of mathematics?

 0	• 1	•• 2	••• 3	•••• 4
— 5	• — 6	•• — 7	••• — 8	•••• — 9
— — 10	• — — 11	•• — — 12	— — — 15	•  20

▲ Maya mathematicians used a numeral for zero long before Europeans did.



▲ Maya astronomers used this observatory to view objects in the sky.



◀ This Maya calendar has three rings. The two small rings show the 20 days of each ritual "month" and the the 13 "months" of the ritual calendar. The larger ring shows the 365 days of the solar year.

Ritual Year	Solar Year	Long Count Cycle
260 days long	365 days long	394.3 solar years long
Most common way to specify date	Specifies date within 52-solar-year calendar cycle	Specifies historic date
Close to length of human pregnancy	Close to sun's movement and cycle of seasons	Mathematical cycle not linked to nature
Used to time rituals and farming activity	Used to time farming activity	Used on monuments for historic dates
73 ritual years in a calendar cycle	52 solar years in a calendar cycle	7.6 calendar cycles in each long-count cycle

The Maya calculated dates using three calendars. ▶



Mathematics The Maya also developed an advanced system of numerals. This system, unlike that of Europeans at the time, included a numeral for zero. Zeros made calculation easier.

Architecture and Art The Maya created impressive architecture and art. All Maya cities contained pyramids, temples, and palaces. Pyramids, the largest buildings, rose hundreds of feet into the air. All had temples at the top. The Maya also built **observatories**, or buildings for observing the sky. Maya astronomers used observatories to follow the paths of the sun, moon, and other objects in the sky.

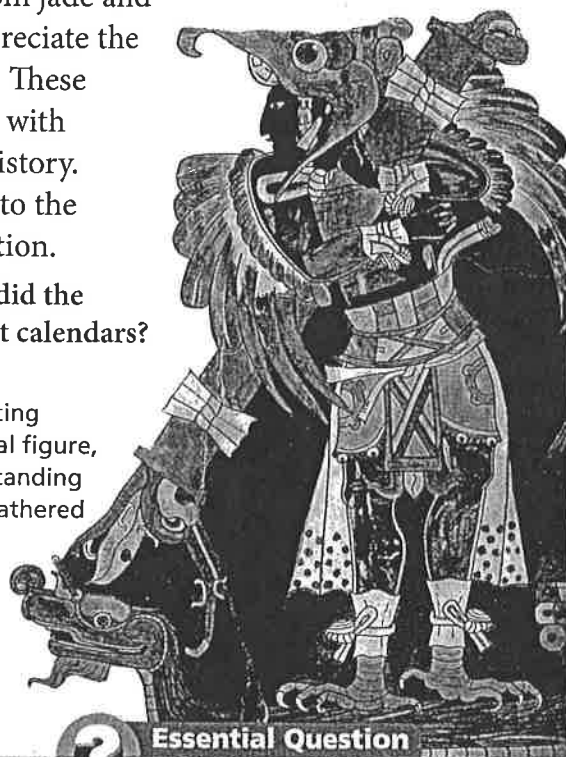
Maya temples, palaces, observatories, and plazas were made of large stone blocks. To build with such heavy material must have been extremely difficult. The Maya had no horses or oxen and no wheeled vehicles to help them haul the stone. They also lacked metal tools. So they had to cut the blocks using stone tools. Laborers then used their own strength to move the blocks into place.

Today, most Maya buildings are just plain, gray stone structures. But when they were built, they had elaborate decorations. Sculptures of kings, gods, jaguars, and other figures lined the walls. The buildings were also painted bright blue, green, yellow, and red.

Maya artists painted colorful murals on the walls of temples and palaces. Artists also created fine pottery. They crafted jewelry and masks from jade and pearls. Historians appreciate the art of the Maya stelae. These stone slabs are carved with writing about Maya history. They are monuments to the glory of Maya civilization.

Reading Check How did the Maya use their different calendars?

This Maya painting shows a mythical figure, the bird man, standing on a quetzal-feathered snake. ▶



Essential Question

Section 1 Assessment

Key Terms

1. Describe slash-and-burn agriculture.
2. How might drought have affected the Maya?
3. What are observatories, and how did the Maya use them?

Key Ideas

4. How did ancient farmers in the tropical lowlands of Mesoamerica cope with poor soils and thick forests?
5. How were Maya religion and government connected?
6. Describe some of the major accomplishments of the Maya.

Think Critically

7. **Summarize** How did the environment of the Maya affect their culture?
8. **Draw Inferences** How did Maya architecture reflect Maya religious beliefs?

What distinguishes one culture from another?

9. How were the Olmec, Zapotec, and Maya cultures similar and different? Go to your Student Journal to record your answer.

Section 2

The Aztecs

Key Ideas

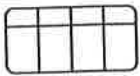
- The Aztecs built a powerful empire through conquest.
- Aztec kings led a strong government and ruled a society organized into clearly defined social classes.
- The Aztec capital city, Tenochtitlan, featured advanced engineering and impressive architecture.

Key Terms

- basin
- chinampa
- dike
- absolute monarchy
- aqueduct



Visual Glossary



Reading Skill Summarize Take notes using the graphic organizer in your journal.

A few hundred years after Maya civilization flourished, a new power emerged in central Mexico. In this section, you will learn about the Aztec empire and its civilization.

The Land of the Aztecs

The Aztec empire developed in the highlands of central Mexico. The highlands' geography was different from that of the Maya lowlands.

The Valley of Mexico A broad, high plateau stretches across the central highlands. Because of its high elevation, this plateau has cooler temperatures than the hot Maya lowlands. Volcanoes rise above the plateau. Some of the best farmland in this plateau is located in highland basins below volcanoes. A **basin** is a bowl-shaped area.

One of these basins—the Valley of Mexico—was the center of the Aztec empire. Fertile volcanic soils and water flowing from the mountains around it made the valley a good place to settle. At the center of the Valley of Mexico was a large lake, Lake Texcoco (tays koh koh).

Building a City The Aztecs came to the Valley of Mexico from the north during the 1200s. They first settled on a hill called Chapultepec but later moved to a small island in Lake Texcoco. There they built the city of Tenochtitlan. They built causeways to connect the island city to the lake shore.

This setting had several advantages. Although other city-states surrounded the island, the Aztecs could easily defend it from attack.



▲ A man performs a traditional Aztec dance.

The water in the lake and the canals the Aztecs built made it easy to move goods and people. The lake was rich with fish and ducks. The land around the lake was ideal for farming.

The Aztecs added to their farmland by building **chinampas**, or artificial islands. Farming the chinampas helped the Aztecs feed a growing population.

Because the water of Lake Texcoco was at the bottom of a basin, it had no outlet that drained it. Over hundreds of years, it had become brackish, or partly salty. The Aztecs built a **dike**—a wall to hold back water—across the middle of the lake. Mountain streams brought fresh water to Tenochtitlan's side of the dike, which kept the brackish water away from the city.

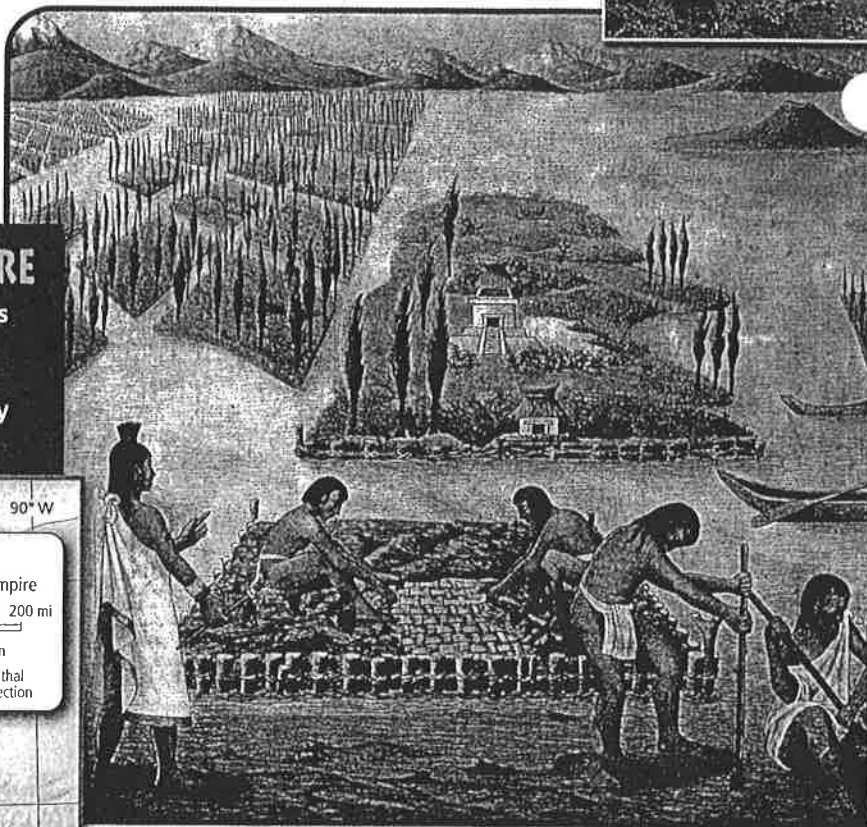
with sharp obsidian blades. By 1440, the Aztecs ruled an empire that extended beyond the Valley of Mexico.

During the late 1400s, the Aztec empire continued to grow. By the early 1500s, the empire extended from central Mexico to Guatemala. Around ten million people lived within its borders.

By this time, the Valley of Mexico had become a great urban area of about one million people on and around Lake Texcoco. Goods and people from around the empire flowed into the valley. In the center of Lake Texcoco stood the rich island city of Tenochtitlan, with its magnificent pyramids and glittering palaces.

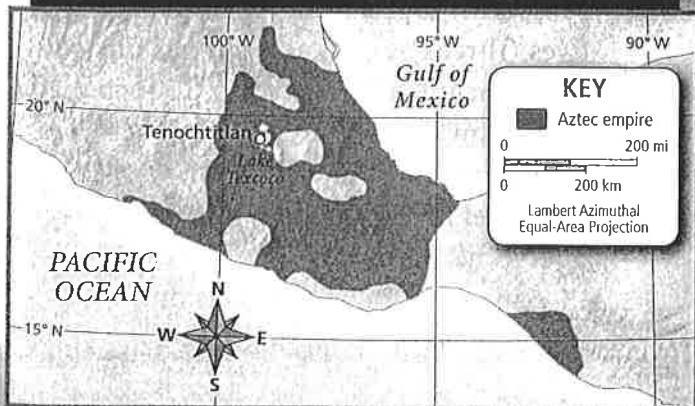
Reading Check What advantages did the Aztecs gain from living on an island?

Conquering an Empire Fierce warriors, the Aztecs began to take on their enemies in the early 1400s. The powerful Aztec army rarely suffered defeat. Soldiers swung heavy wooden clubs spiked



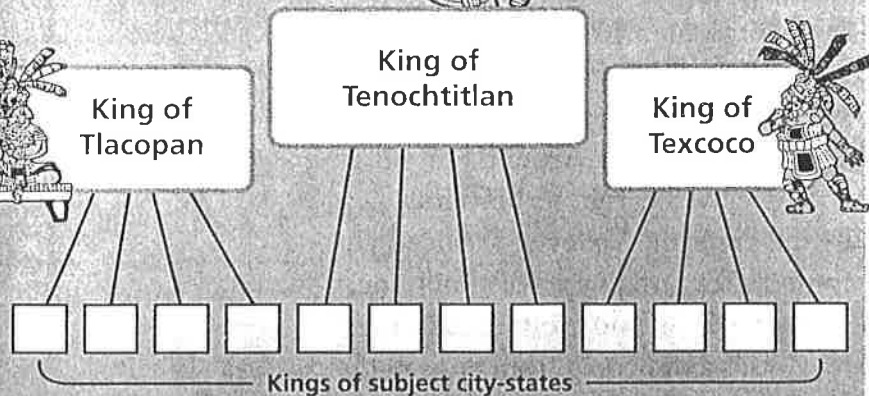
BUILDING ISLANDS AND AN EMPIRE

The Aztecs built artificial islands called chinampas in Lake Texcoco. They farmed these islands to feed their capital, Tenochtitlan. The food from these islands helped them conquer first the valley around this lake, then an empire.



Aztec Government

Triple Alliance



Government of Tenochtitlan

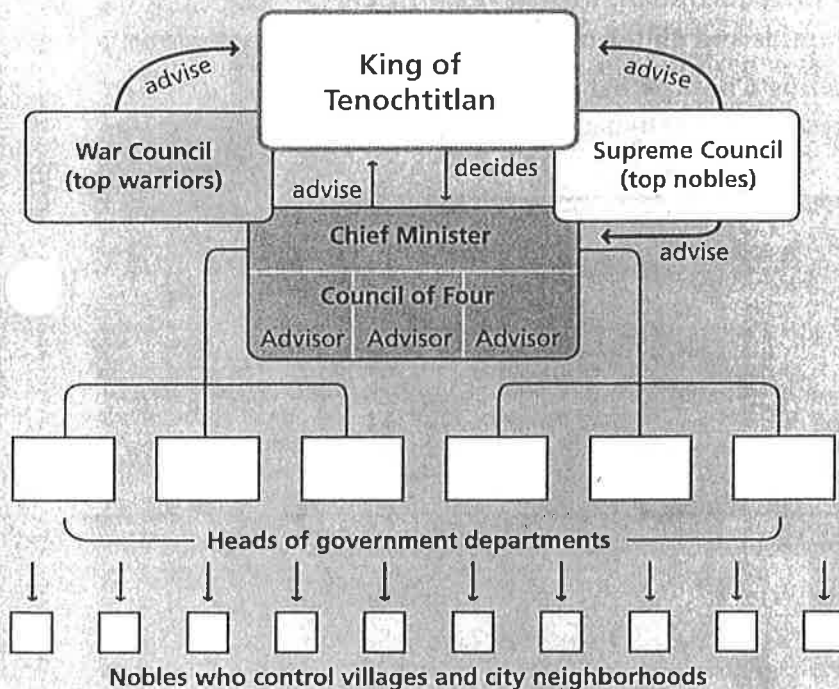


Chart Skills

- 1 How did the Triple Alliance share control of the Aztec empire?
- 2 How might the chief minister make villagers follow the king's orders?

Aztec Government

The Aztec king, or the king of Tenochtitlan, was part of a Triple Alliance that included the the kings of Tlacopan and Texcoco. They agreed to support each other with troops and to share control of the Aztec empire. After 1428, the Aztec king was the most important ruler in the Triple Alliance. The Aztec king made all decisions having to do with war.

The three kings of the Triple Alliance controlled the kings of the city-states they conquered. These city-states had to send tribute, or regular payments of valuable goods, to the Triple Alliance kings.

Tribute goods ranged from clothing, food, and military supplies to jewelry, chocolate, quetzal feathers, and building materials. A Spanish visitor in the early 1500s wrote that "vast quantities" of tribute flowed into Tenochtitlan every day.

The Aztec king had total power over the people of Tenochtitlan. The Aztecs had an **absolute monarchy**, a system in which one person from a ruling family has unlimited powers.

When an Aztec king died, a Supreme Council of nobles chose a member of the ruling family as the new king. Sometimes kingship passed from father to son, but sometimes it passed to other blood relatives. Three councils advised the king. These included the Supreme Council that chose him and a War Council of warriors. The third, the Council of Four, was led by a chief minister who ran the everyday operations of the government. However, the king made all major decisions.

Reading Check Who chose the Aztec king?