

## *World Explorer: Western Hemisphere*

### Latin America – Shaped by its History





# Early Civilizations of Middle America

## BEFORE YOU READ

### Reach Into Your Background

What does the word *pyramid* bring to mind? Write down three things you know about pyramids. Then, compare what

you know about pyramids with the pyramids you will read about in this section.

### Questions to Explore

1. What were the chief characteristics and accomplishments of Mayan and Aztec civilizations?
2. How have Latin America's early civilizations affected present-day cultures in Latin America?

### Key Terms

maize  
hieroglyphics

### Key Places

Copán  
Tikal  
Valley of Mexico  
Tenochtitlán

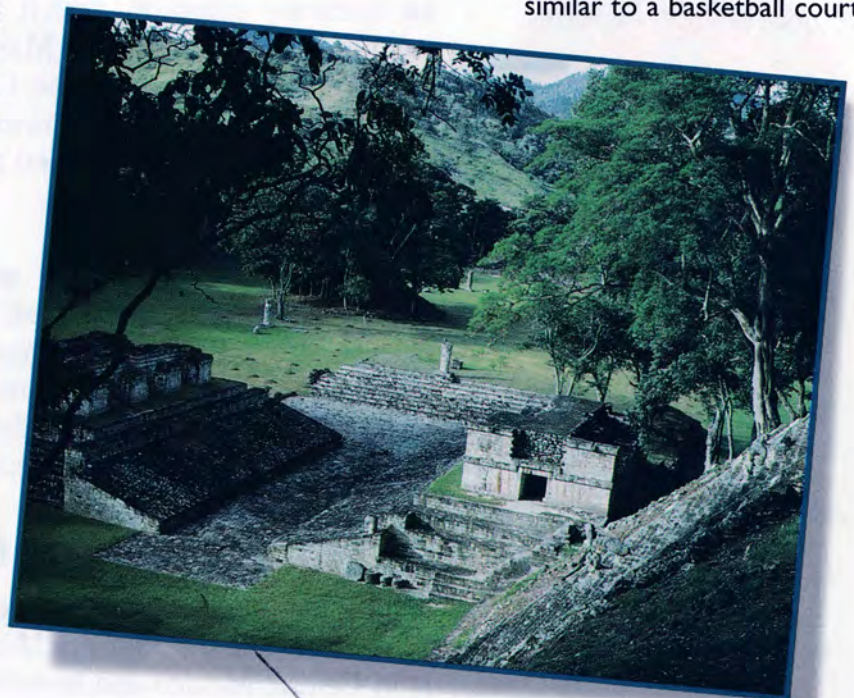
**F**ans cheered as the players brought the ball down the court. Suddenly, the ball flew into the air and sailed through the hoop. Fans and players shouted and screamed. Although this may sound like a championship basketball game, it is actually a moment of a game played over 1,000 years ago. The game was called pok-a-tok.

Pok-a-tok was a game played by the ancient Mayas. Using only their leather-padded hips and elbows, players tried to hit a five-pound (1.9 kg), six-inch (15.2 cm) rubber ball through a stone hoop mounted 30 feet (9.1 m) above the ground.

## Mayan Civilization

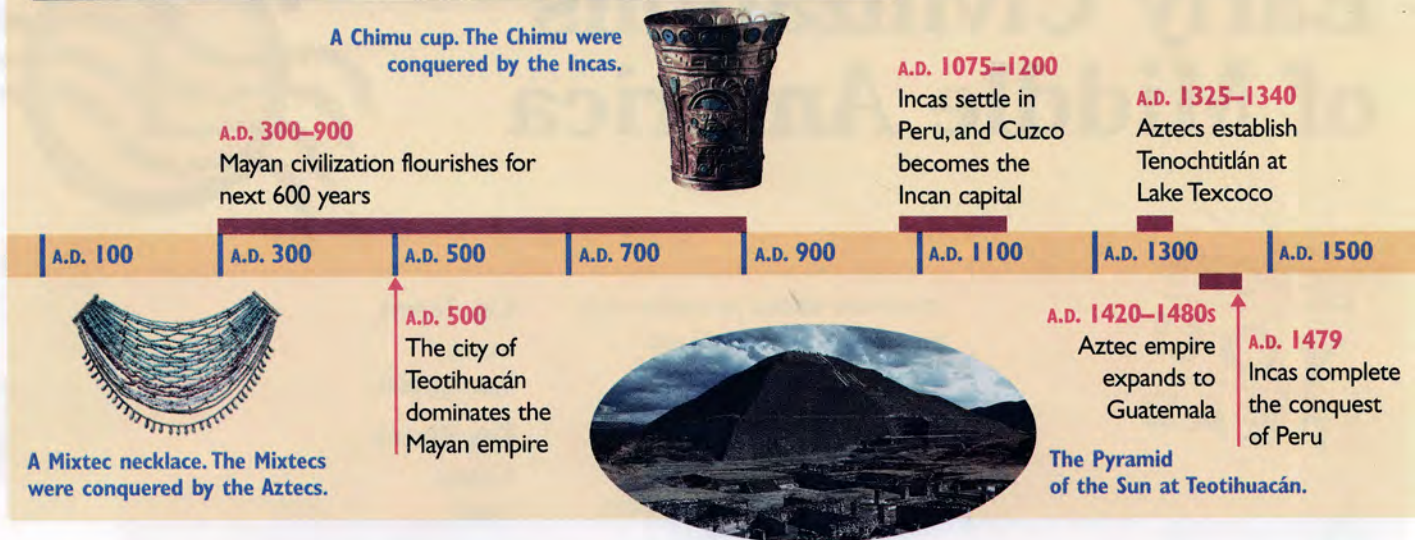
How do we know about this ancient game? Crumbling ruins of pok-a-tok courts and ancient clay statues of players have been found at sites in Central America and southern Mexico. In these areas, Mayan civilization thrived from about A.D. 300 to A.D. 900. By studying ruins, scientists have learned much about Mayan civilization.

▼ This pok-a-tok court is in Copán, Honduras. How is it similar to a basketball court?





## Mayan, Aztec, and Incan Civilizations, A.D. 300–1466



The Mayas built great cities. One such city was Copán (ko PAHN) in the present-day country of Honduras. Another was Tikal (tee KAHL) in present-day Guatemala. Mayan cities were religious centers. A large pyramid-shaped temple stood in the center of the city. The Mayas worshipped their gods there. Farmers worked in fields surrounding the cities. Past the fields lay the dense tropical rain forest.

**Mayan Farming and Science** The Mayan farmers' most important crop was **maize**, or corn. Maize was the main food of the Mayas. They also grew beans, squash, peppers, avocados, and papayas. Mayan priests studied the stars and planets. They designed an accurate calendar, which they used to decide when to hold religious ceremonies. The Mayan calendar was more accurate than any used in Europe until the 1700s. The Mayas developed a system of writing using signs and symbols called **hieroglyphics** (hy ur oh GLIF icks). They also developed a number system that is similar to the present-day decimal system.

**The Great Mystery of the Mayas** About A.D. 900, the Mayas suddenly left their cities. No one knows why. Crop failures, war, disease, drought, or famine may have killed many Mayas. Or perhaps people rebelled against the control of the priests and nobles. The Mayas left their cities, but stayed in the region. Millions of Mayas still live in the countries of Mexico, Belize, Guatemala, Honduras, and El Salvador.

## Aztec Civilization

Another ancient civilization of Middle America is that of the Aztecs. They arrived in the Valley of Mexico in the 1100s. The Valley of Mexico is in Central Mexico and includes the site of present-day Mexico City.

### LINKS TO MATH

**The Concept of Zero** The Mayas created a numbering system that included the idea of zero. Zero is important in math because it is a symbol that shows that there is none of something. For example, to write the number 308, you need a symbol to show that there are no tens. Mathematicians consider the idea of zero to be one of the world's greatest inventions.

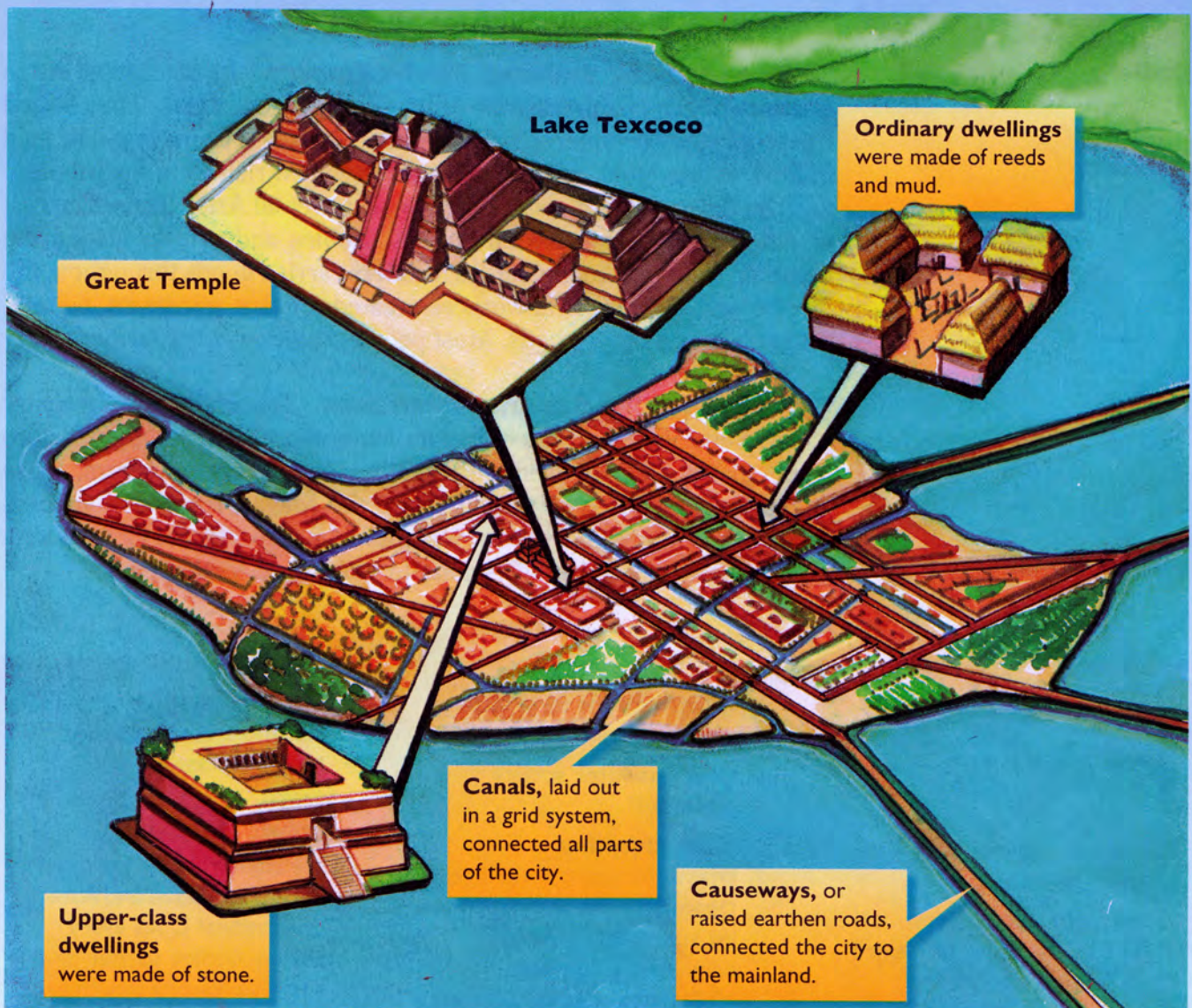


The Aztecs wandered about the valley looking for a permanent home until 1325. They finally settled on an island in Lake Texcoco. They changed the swampy lake into a magnificent city, which they called Tenochtitlán (tay nawch tee TLAHN). Tenochtitlán stood on the site of present-day Mexico City.

## Tenochtitlán

Tenochtitlán, the Aztec capital, was built in the center of a lake. The Aztecs built floating islands by piling rich earth from the bottom of the lake onto rafts made of wood. After a while, the roots

of plants and trees grew down to the lake bottom, anchoring the rafts. Some islands were the size of football fields. What do you think it would be like to live on a lake?





## Aztec Astronomy

The Aztecs observed the stars and planets carefully. They named them after their gods, like Quetzalcoatl, shown at right. The Aztecs used their knowledge of astronomy to make calendars like the one below.



**The Aztecs Expand Their Empire** In the 1400s, Aztec warriors began conquering the other people in the region. They forced the people they conquered to pay tribute, or taxes. Tribute could be paid in food, cotton, gold, or slaves. The Aztecs grew rich from the tribute.

The Aztecs had an emperor who ruled over all Aztec lands. The rest of Aztec society had several classes. Nobles and priests helped the emperor. Warriors fought battles. Traders carried goods throughout the empire and beyond. Craftworkers created jewelry, garments, pottery, sculptures, and other goods. Most people, however, were farmers.

**Other Aztec Accomplishments** Tenochtitlán was a center of trade and learning. Aztec doctors made more than 1,000 medicines from plants. They used the medicines to lower fevers, cure stomachaches, and heal wounds. Like the Mayas, Aztec astronomers predicted eclipses and the movements of planets. Aztec priests kept records using hieroglyphics similar to those used by the Mayas.



# The Incas

## BEFORE YOU READ

### Reach Into Your Background

The United States has roads that run from state to state. These roads are called inter-

state highways. Think about some ways that interstate highways are useful. Then, compare what you know about interstate highways with the roads you will read about in this section.

### Questions to Explore

1. What was Incan civilization like?

2. How did the Incas interact with and change their environment to increase farmland and farm production?

### Key Terms

aqueduct      quipu

### Key People and Places

Pachacuti      Cuzco  
Topa Inca

**T**he runner sped along the mountain road. He lifted a horn made from a shell to his lips and blew. A second runner appeared and began running beside him. Without stopping, the first runner relayed to the second runner the message he carried. The second runner took off like the wind. He would not stop until he reached the next runner.

The Incas used runners to spread news from one place in their empire to another. Incan messengers carried news at a rate of 250 miles (402 km) a day. Without these runners, controlling the vast empire would have been very difficult.

## The Rise of the Incas

This great and powerful empire had small beginnings. In about 1200, the Incas settled in Cuzco (KOOS koh), a village in the Andes that is now a city in the country of Peru. Most Incas were farmers. They grew maize and other crops. Through wars and conquest, the Incas won control of the entire Cuzco valley, one of many valleys that extend from the Andes to the Pacific Ocean.

In 1438, Pachacuti (PAHTCH an koo tee) became ruler of the Incas. The name Pachacuti means “he who shakes the earth.” Pachacuti conquered the people who lived near the Pacific Ocean, from Lake Titicaca north to the city of Quito.

▼ The Incas shaped their stones so well that they did not need cement to hold a wall together.





Pachacuti demanded loyalty from the people he conquered. If they proved disloyal, he forced them off their land. He replaced them with people loyal to the Incas.

Pachacuti's son, Topa Inca, expanded the empire. In time, it stretched some 2,500 miles (4,023 km) from what is now Ecuador south along the Pacific coast through Peru, Bolivia, Chile, and Argentina. The 12 million people ruled by the Incas lived mostly in small villages.

## Incan Accomplishments

The Incas were excellent farmers, builders, and managers. Their capital, Cuzco, was the center of government, trade, learning, and religion. In the 1500s, one of the first Spaniards to visit Cuzco described it as "large enough and handsome enough to compare to any Spanish city."

The emperor, and the nobles who helped him run the empire, lived in the city near the central plaza. They wore special headbands and earrings that showed their high rank. Most of the farmers and workers outside Cuzco lived in mud huts.

**Roads and Aqueducts** The Incas built more than 19,000 miles (30,577 km) of roads. The roads went over some of the most mountainous land in the world. The road system helped the Incas to govern their vast empire. Not only did runners use the roads to deliver messages, but Incan armies and trade caravans also used the roads for speedy travel.



**Connect** How do your family and community depend on roads?

▼ Pachacuti built many cities. The most famous one is the "lost city" of Machu Picchu. It lies high in the Andes Mountains, 54 miles (87 km) northwest of Cuzco.

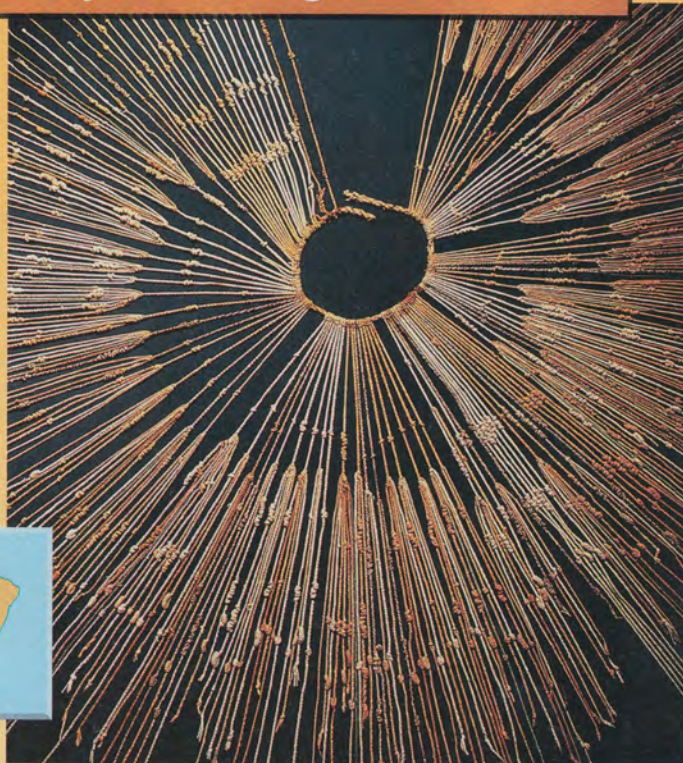
**Interaction** Look closely at the picture. How did the Incas adapt their city to the mountains?





## History on a String

The Incas used quipus to record information about births, deaths, trade, and taxes. **Critical Thinking** Think of some other ways to communicate information without using spoken or written words.



The Incas also built canals and aqueducts to carry water to dry areas. An **aqueduct** is a pipe or channel designed to carry water from a distant source. One stone aqueduct carried water from a mountain lake almost 500 miles (805 km) to its destination. The system of canals and aqueducts allowed the Incas to irrigate land that was otherwise too dry to grow crops.

**Government and Records** The Incas organized their government carefully. The emperor chose nobles to govern each province. Each noble conducted a census to count people so they could be taxed. Local officials collected some of each village's crops as a tax. The villagers also had to work on government building projects. However, the government took care of the poor, the sick, and the elderly.

The Incas did not have a written language. Incan government officials and traders recorded information on knotted strings called **quipus** (KEE poos). Every quipu had a main cord with several colored strings attached to it. Each color represented a different item, and knots of different sizes at certain intervals stood for numbers.

**Religion** Like the Mayas and the Aztecs, the Incas worshipped many gods. The sun god, Inti, was an important god of the Incas. They believed Inti was their parent. They referred to themselves as "children of the sun." Another important Incan god was Viracocha (vee ra KOCH ah), the creator of all the people of the Andes.



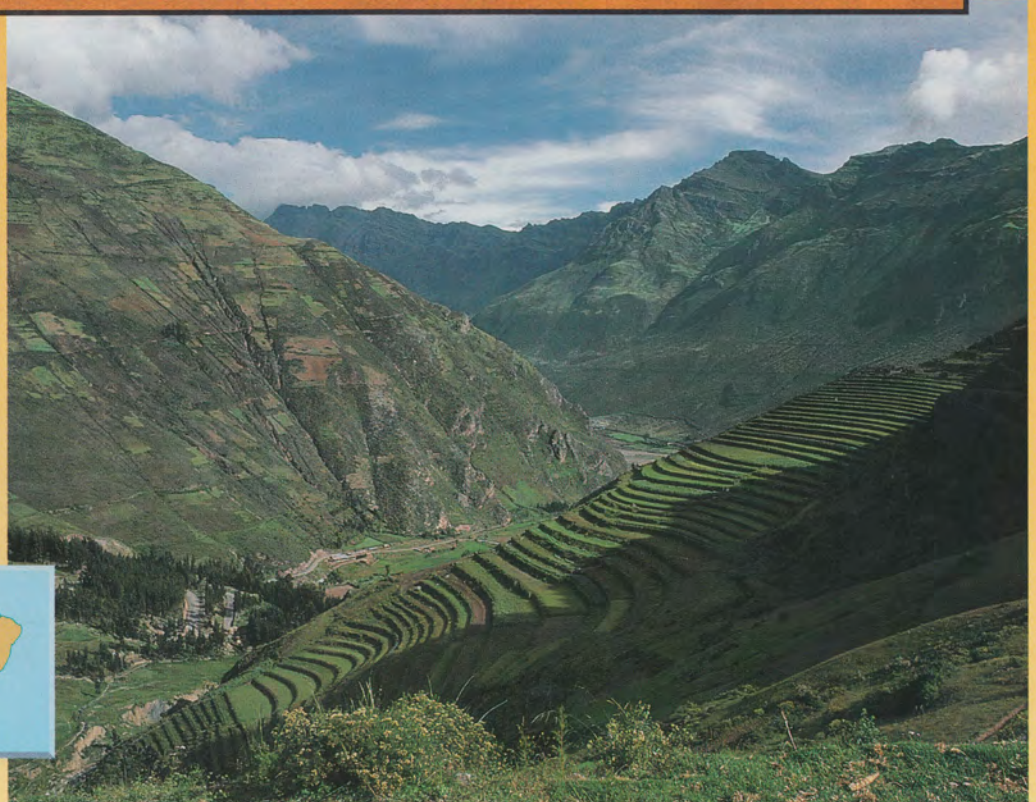
### Earthquake-proof

**Buildings** Incan stone walls were so firmly constructed that even violent earthquakes could not knock them down. The walls swayed but did not crumble the way some modern buildings do. Engineers today are learning to make buildings that can resist an earthquake.



## Farming in the Mountains

The Incas increased the amount of farmland in hilly areas by building terraces into the sides of steep slopes. The terraces helped keep soil from washing down the mountain. These terraces are at Pasaq, an ancient Incan fortress in Peru. **Interaction** Think of some other reasons why farming in the mountains might be hard.



**Quechua Descendants of the Incas** The Spanish conquered the Incan empire in the 1500s. However, descendants of the Incas still live in present-day Peru, Ecuador, Bolivia, Chile, and Colombia. They speak Quechua (KECH wah), the Incan language.

They use farming methods that are like those of the ancient Incas. The Incan culture also survives in the poncho and in other clothing styles, as well as in cloth woven into brightly colored complex patterns.