



World History Studies Weekly



See Primary-Source
Related Media...

SCAN IMAGE WITH SMARTPHONE, OR VISIT:
s-w.co/WH6-24

Maya and Aztec and Inca, Oh My!

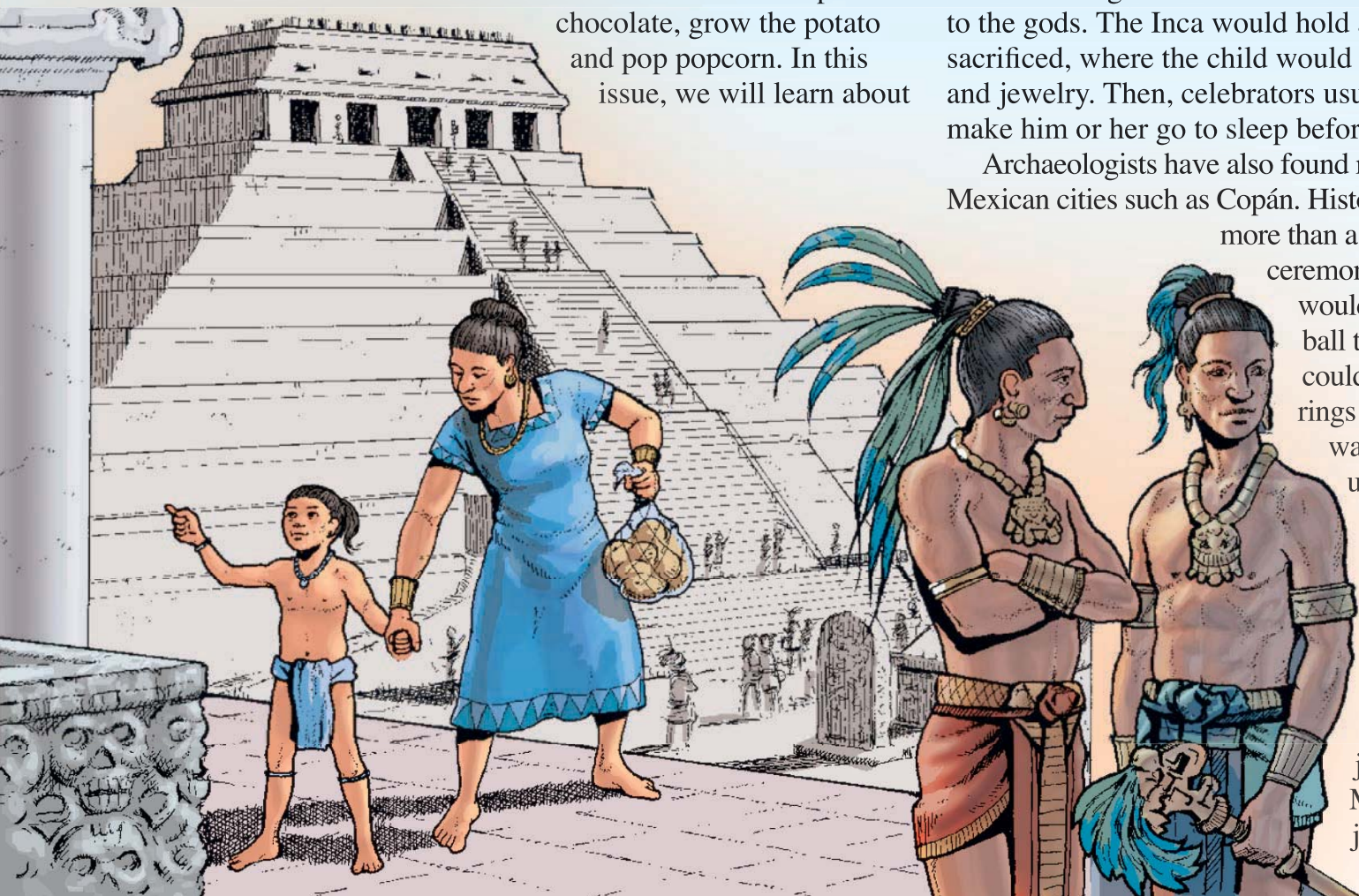
When someone mentions pyramids, you probably think of Egypt. When you think of advances in mathematics and astronomy, you might remember the contributions of ancient India and Mesopotamia. Yet civilizations across the Atlantic Ocean flourished in ancient times, too. Cultures in the Western Hemisphere had writing and number systems, developed accurate solar calendars, studied eclipses, developed a place value for zero and built impressive cities with huge pyramids. Doctors performed brain surgery, cast broken bones, made false teeth from jade and turquoise and filled teeth with iron pyrite. The people of this part of the world were the first to develop chocolate, grow the potato and pop popcorn. In this issue, we will learn about

three such civilizations—the Maya, Aztec and Inca.

Like other ancient civilizations we have previously studied, the Maya, Aztec and Inca were polytheistic (believing in many gods). They believed that happy gods rewarded their cultures by preventing floods, droughts and disease. To ensure that the gods looked down on people with good fortune, these civilizations practiced human sacrifices. Archaeologists continue to find Inca mummies in the frozen areas of the Andes Mountains in Peru. Many of the mummies are of children, who archaeologists believe the Inca often sacrificed to the gods. Historians believe Inca families thought it a tremendous honor to offer their child as a gift to the gods. The Inca would hold a feast in honor of the child to be sacrificed, where the child would be dressed in the finest clothing and jewelry. Then, celebrators usually gave the child a drink to make him or her go to sleep before the actual sacrifice.

Archaeologists have also found remains of stone ball courts in Mexican cities such as Copán. Historians believe the ball game was more than a sport—it was also a religious ceremony. Teams of two to three players would attempt to get a very hard rubber ball through a stone ring, and they couldn't use their hands or feet. With the rings 27 feet above the ground, scoring was difficult. The losing team was usually sacrificed to the gods.

Machu Picchu, Tenochtitlan, Copán and Tikal were important cities for these cultures. Montezuma and Pachacuti were important leaders. What do you already know about these civilizations? Let's begin our journey to learn more about the Maya, Aztec and Inca. It's easy—just turn the page.



Connections

Ancient Temple Discovered in Guatemala

Imagine yourself in ancient Guatemala, 1,600 years ago, walking through the jungle. As you climb a hill, you see it: a huge temple, glowing red in the setting sun. Archaeologists from Brown University recently discovered this temple near El Zotz, Guatemala. The Temple of the Night Sun celebrates the sun god, who was very important in the Maya civilization.

During the first part of the excavation, archaeologists discovered a palace and tomb

on Diablo Pyramid. Archaeologists were working on the tomb when they discovered some carvings behind that area. When they looked closely, they realized they were looking at a structure used for worship.

To decorate this temple, the Maya carved five-foot masks in stucco, a plaster-like substance. The masks show the different faces of the sun god as he moves through the day. He is portrayed as a shark and a jaguar. It is thought that the Maya carved gods near

the tombs of their royalty to show the high power that their kings had. The structure was painted bright red and could be seen from 15 miles away. The Maya eventually built other structures over the temple, but the sun god faces are well preserved.

Researchers don't know why this temple was abandoned, but it wasn't used for very long. Archaeologists have just begun excavating the temple, so we'll learn a lot more about this amazing discovery.



Cultures of the Americas

Maya

The Maya civilization flourished between A.D. 300 and 900. Influenced by an earlier group of people called the Olmec, the Maya culture peaked around A.D. 400 to 500. They became quite skilled in astronomy and created an accurate solar calendar based on 365 days. The Maya were mathematicians who developed a counting system based on the number 20. They also developed a place value for zero, using it long before the Arabs shared this concept with the Europeans. Most Maya were farmers who developed irrigation ditches to help raise crops such as corn (maize). The Maya developed a picture writing system. Sadly, the Spanish burned most of the Maya books, so much of their knowledge has been lost. And, like the ancient Egyptians, the Maya built wonderful pyramids as temples.

Many pyramids were in their largest city, Tikal (in Guatemala). Another important city was Copán (in Honduras), the cultural capital of the Maya Empire. Although many Maya cities were overgrown by jungles, roads connected the Maya cities where people traded items such as maize, feathers and cocoa beans.

The decline of the Maya civilization is a mystery. Was it drought, war or rebellion of the poor? Some Maya culture remains in parts of Mexico, such as the Yucatan Peninsula and much of Central America, where people still speak the Maya language.

Aztec

About 200 years after the Maya, the Aztec people came into the Valley of Mexico. In fact, they called themselves the Mexica, and Mexico got its name from them. They learned many of their ways from another group of people, the Toltec, who had also lived in the area.

Because other tribes had claimed the better farming land, the Aztec were forced to move to swampy areas near the shores of Lake Texcoco. Because they lived near water, they fished, built canoes for transportation and hunted wildlife in the area. Aztec also created floating gardens and built dams. They used irrigation systems and fertilizer to produce enough food to feed the large populations in their cities.

Their capital city of Tenochtitlan became the site of present-day Mexico City. The Aztec built a pyramid 135 feet high in the center of the city. Like the Maya and the Inca, the Aztec practiced human sacrifice, often at the top of the Tenochtitlan pyramid. They believed that sacrificing captured warriors to the main god, Huitzilopochtli (god of war and sun), would bring them good fortune.

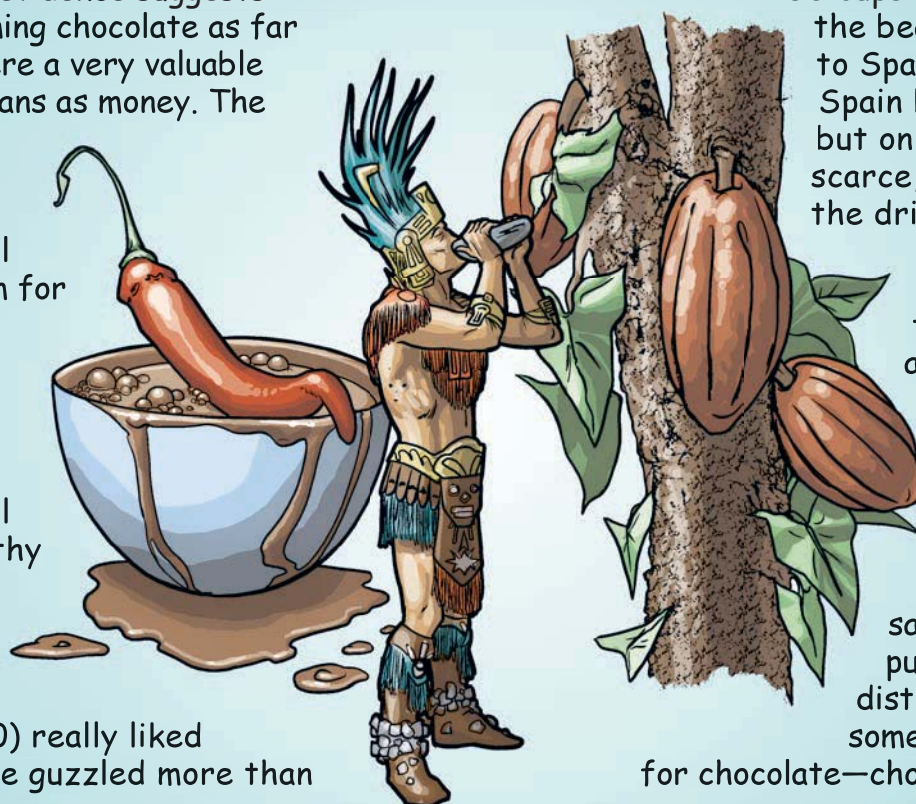
The Aztec developed a calendar that revolved around their planting and harvesting seasons. They invented a game called Volador in which athletes dressed in colorful beaks and feathers and “flew” to the ground from the top of a long pole more than 60 feet high. That was like



Cocoa

Do you like chocolate? Recent evidence suggests that Mesoamericans were consuming chocolate as far back as 1400 B.C. Cocoa beans were a very valuable gift, and people even used the beans as money. The Maya people called the beans xocoatl. The Aztec loved cocoa beans but were unable to grow the beans themselves. So, xocoatl became an important trading item for the Maya.

Eventually, the Aztec used the paste from the roasted cocoa beans and added vanilla, cinnamon and chili pepper to make a cold drink (called xocoatl or chocolatl) that only the wealthy could afford. They also added crushed flower petals and achiote seeds to make the drink red like blood. Aztec Emperor Montezuma (1480-1520) really liked his xocoatl. Many people think he guzzled more than



Trades & Technology

50 cups a day. Hernando Cortés took the beans and the xocoatl recipe back to Spain in 1519. Wealthy people in Spain began to sip the new concoction, but only in secret. Cocoa beans were scarce, and they didn't want to share the drink with others.

The Spanish began serving the beverage hot and without the chili pepper. Later, someone added sugar. It took about 100 years for cocoa beans to reach other countries in Europe. It continued to be something for the very wealthy. By 1657, the drink was served in London “chocolate houses.” People said the chocolate had medicinal purposes, especially for stomach distress. It was not until 1847 that someone discovered another great use for chocolate—chocolate bars.

jumping off the fifth floor of a building. It was a very dangerous game but popular to watch. Another Aztec game was called Tlachtli, a cross between basketball and soccer. Popcorn (which the Inca enjoyed, too) was a popular treat among the Aztec, especially while watching games. The Aztec also used popcorn to decorate their headdresses and in their jewelry. Aztec liked wearing jewelry with gold and turquoise stones, and loved decorating with colorful feathers as well.

In the 1500s, Spanish troops brought horses, guns and dogs to fight the Aztec. They also brought a silent killer—disease. Many Aztec people died of the measles, a disease not native to them and against which they had no immunity. Other tribes who didn’t like the Aztec sided with the Spanish. Eventually, invaders killed the Aztec emperor, Montezuma II, in 1520. The Aztec empire of about 5 million people ended after the Spanish took control, destroying much of Tenochtitlan and leaving it in ruins.

Inca

The Inca Empire, located in the Andes Mountains throughout the South American countries of Peru, Ecuador and Chile, began around A.D. 1430. At its greatest point in the 1520s, the Inca Empire stretched from present-day Chile to Colombia. The Inca called themselves the Children of the Sun.

Although the Inca had llamas, they didn’t ride them but used them for carrying supplies. The Inca also didn’t use the wheel and thus traveled along their many roads by foot. To connect their empire, the Inca built a massive road system where all roads led to the capital city, Cuzco. Everyone was required to speak the common language of Quechua. English words such as lima (as in the bean), llama, puma, vicuna, pampa and condor originate from Quechua. The Inca were polytheistic. To ensure that the gods looked down on them in favor, the Inca practiced human sacrifice, especially of young children. As you read in the cover story, it was considered an honor to sacrifice your child for the good of the community.

The Inca practiced terraced farming, built aqueducts and invented the panpipe, a musical instrument. They developed a way to freeze dry food and used a calendar divided into 12 months, with 10 days in each week. When emperor Huayna Capac died in 1525, his sons Atahualpa and Huascar started a civil war as they fought for control. Atahualpa gained the victory by executing his brother in 1532, but his rule did not last long. Later that same year, the Spanish conquistador Francisco Pizarro and 200 men conquered the Inca Empire, which had been weakened by the civil war.

The Inca didn’t have a written language but kept records using a series of knots, called quipu. They knotted short, differently colored wool onto longer cotton strings. The quipu hung down in a vertical direction. Different colors stood for different things. For example, four knots on yellow yarn might mean the amount of maize or gold. Quipus also recorded the births or deaths in a city, the number of llama, soldiers, etc. People brought along quipus as they traveled the many roads throughout the Inca Empire. Some people, called quipucamayoc, studied to read quipus so they could communicate with those from other cities.

World Biography

Pachacuti (1438–1471)

The founder of the Inca Empire was brave, even as a young man. He proved his bravery when the warriors of his father, King Viracocha, were losing a long battle. To save the royal family, King Viracocha decided to surrender. Viracocha’s son, Pachacuti (whose name means Earth Shaker), knew that most of his father’s people would be killed and refused to surrender. He asked the gods for help and led the soldiers to victory. After the battle, Pachacuti took power from his father, giving himself the title of Sapa Inca, or Emperor. He began his conquest of neighboring villages, offering membership in his Inca Empire to those who surrendered without resistance. He allowed local leaders to stay in power only if they were loyal to him. If people refused, Pachacuti’s soldiers attacked.



Centered in the capital city of Cuzco, Pachacuti’s strong central government directed everyone in his empire to practice the same religion and learn the same language, Quechua. He built one of the greatest road systems in the world in his empire. Information (carried by messengers), goods and people traveled on the roads across deserts and mountains to all parts of the empire. The Inca built bridges over rivers and gorges and dug tunnels through mountains. Their common language, religion and roads all helped to unite the people of Pachacuti’s empire.

Step (terraced) farming, irrigation and fertilizer produced more crops for the Inca. Under Pachacuti’s rule, the people built schools and beautiful palaces. He was also responsible for the building of the famous city Machu Picchu, which means “Old Mountain” or “Old Peak” in the Quechua language. Located high up in the Andes Mountains, Machu Picchu’s white granite stones have no mortar holding them together, yet the structure has stood for 500 years and even survived earthquakes.

This Week’s Question

What are the Nazca lines?

Fly over the southern coast of Peru and you will see amazing artwork usually called the Nazca (or Nasca) lines. There are geometric shapes, spiders, hummingbirds, monkeys, whales, lizards—nearly 300 shapes and figures in all. Ancient artists created these works by removing reddish-colored pebbles to reveal the white earth underneath. The lines, which are ruler straight, make designs that cover about 193 square miles. Historians believed Nazca Indians created the artwork between 200 B.C. and A.D. 600, long before the Inca civilization began. The most amazing thing of all is that you can’t see these pictures from the ground! How did they create these works of art centuries before such inventions as hot air balloons or airplanes? Why would ancient people create art that can’t be seen from the ground? What do you think?

Mesoamerica

Before Christopher Columbus arrived in the New World, the Olmec, Maya, Toltec, Zapotec, Teotihuacán and Aztec civilizations lived in a region called Mesoamerica. The word “meso” is Greek for middle. But just what and where was Mesoamerica? Historians include central Mexico, Belize, Honduras, Nicaragua, Costa Rica, El Salvador and Guatemala in this region.

The main mountain range of Mesoamerica is the Sierra Madre range, with more than 83 volcanoes. The largest peak is a non-active, or dormant, volcano called Pico de Orizaba. It stands well over 18,000 feet tall. The highest active volcano is Popocatepeti, at just under 18,000 feet tall. Both volcanoes are in Mexico.



World Geography

Mesoamerica now includes the second largest rainforest in the Americas, after the Amazon. With a great climate and rich volcanic soil, people started farming around 10,000 years ago. Corn, or maize, was the most abundant crop of Mesoamerica. Other early crops included peppers, squash and pumpkins.

Name _____



- ACROSS
1. word used to describe a non-active volcano

5. main city of the Aztec

6. disease that killed many Aztec

7. knots used by the Inca to keep records

8. culture influenced by the Olmec

9. largest Maya city
- DOWN
2. Aztec Emperor fond of xocoatl

3. Emperor who founded the Inca Empire

4. country whose explorers conquered many Mesoamerican cultures

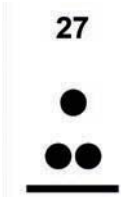
10. pack animal used by the Inca

As you read this week's lesson, circle or highlight all proper nouns with any color pen or highlighter. This will help you find some of the crossword answers and get ready for this week's test.

Maya Math

Pretend you are a Maya student and do some math. The Maya had three symbols for doing their arithmetic: a bar, a dot and a football shape for place value (zero). Based on 20, students wrote equations vertically, not horizontally. For example, to write 20, you'd make a dot over the football shape.

At the top, each dot = 20
In the second part, each dot = 1 and each bar = 5
The following example shows the number 27



Using the number key to help you get started, write the following numbers the Maya way. Be ready for the bigger numbers, though. They're not on the chart, but you can figure them out if you think carefully. Once you get the hang of it, try writing simple math problems, trade them with a friend and write your answers in Maya numerals. Now you're doing Maya math!

28

40

63

86

71

Mapping & Charting

0	1	2	3	4
	●	●●	●●●	●●●●
5	6	7	8	9
—	●	●●	●●●	●●●●
10	11	12	13	14
==	●	●●	●●●	●●●●
15	16	17	18	19
===	●	●●	●●●	●●●●
20	21	22	23	24
● 	● ●	● ●●	● ●●●	● ●●●●
25	26	27	28	29
● —	● ● —	● ●● —	● ●●● —	● ●●●● —



By George, we did it.

LEADERSHIP

Pass It On.

VALUES.COM THE FOUNDATION FOR A BETTER LIFE