



KIDS
DISCOVER

The Maya

**8-YEAR-OLD
CRACKS
MAYA
CODE**



**SEE BIRD
JAGUAR
CAPTURE
JEWELLED
SKULL**



**CHICHÉN
ITZÁ OR
CHICKEN
EATS YA?**



Thousands of years ago, not a single human being lived in all of North or South America. Then, around 23,000 B.C., the first people arrived from Asia. Slowly, they roamed south, and some settled in parts of Mexico, Central America, and South America. Later, they became known as the Maya.

From these humble beginnings, the Maya created one of the most splendid civilizations of all time. They erected magnificent palaces, developed an elaborate system of writing and an accurate calendar, and were able to predict eclipses.

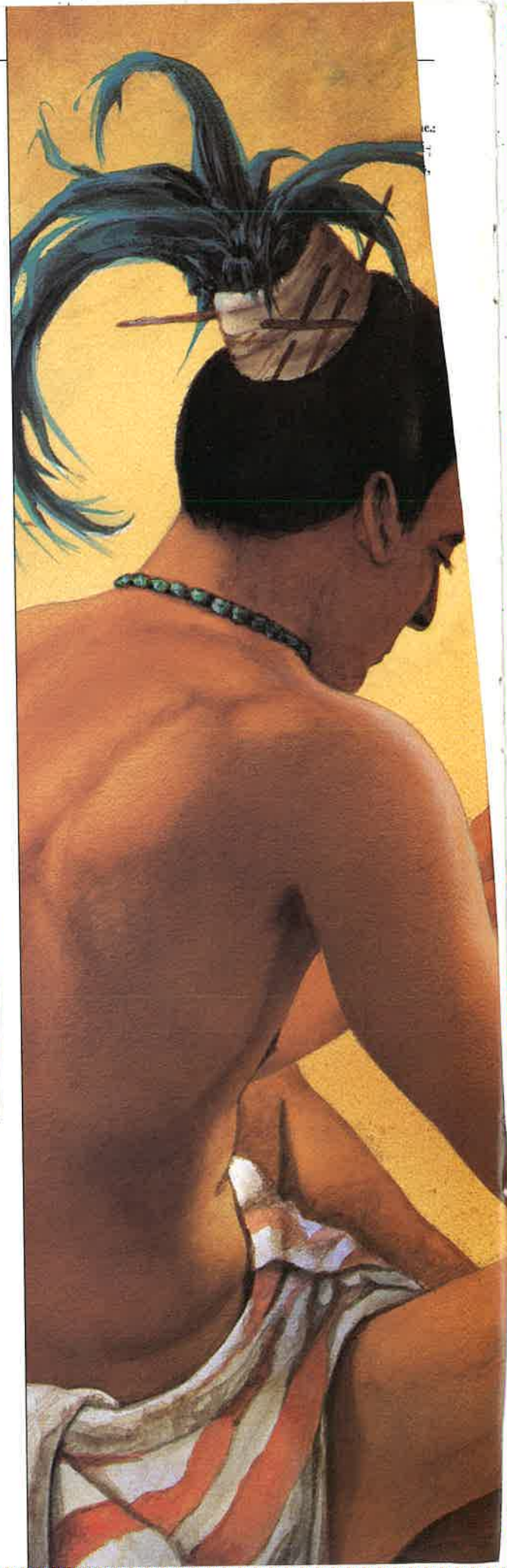
Then, around A.D. 800, something terrible must have occurred. During the next century, many Maya cities became deserted. In time, the jungle once again claimed this Maya land.

Who were the Maya? What did they achieve? Journey back in time and witness one of the most fascinating—and puzzling—civilizations of all times.

▲ **THE MAYA LIVED** in an area of about 120,000 square miles. The heart of their civilization was the tropical rain forests in what are now the lowlands of northern Guatemala.



▲ **BLACK HOWLER** monkeys were considered sacred by the Maya. They served as gods of writing.



CHECK IT OUT!

The first Americans came from Asia to North America via a land bridge over the Bering Strait. That land bridge no longer exists. What do you think happened to it?
(answer on back cover)



ARCHAEOLOGISTS

(experts who study the remains of past cultures) often divide time into periods to make it easier to discuss history. Maya history is divided into three periods.

Archaic Period

7000 B.C. to
2000 B.C.

Most Maya lived a hunting-and-gathering existence.

Preclassic Period

2000 B.C. to
A.D. 250

Many Maya lived in settled communities.



▲ **THE EARLIEST MAYA** lived in densely inhabited villages of high-pitched, thatched-roof houses.



▲ **WILD ANIMALS**, such as deer, peccaries, tapirs, and monkeys, were hunted for food. Maize, beans, manioc, and squash, along

with other crops, were cultivated outside the village. There were plenty of nuts, seeds, and wild fruits for the taking.



◀ **STATUES AND** carvings in many classic Maya cities show what the people looked like—or the looks they admired: straight black hair, high cheekbones, Oriental eyes, aquiline noses, and elongated skulls.

Early, Earlier, Earliest

There's a saying: "Rome was not built in one day." It means that it takes a long time to create something significant and lasting. This saying applies to the Maya.

The earliest Maya hunted animals, fished, and gathered wild

berries, nuts, and seeds for food. By around 7000 B.C., these roving bands of Maya began making homes for themselves—in caves, rock shelters, and open camps. Slowly, over the next several thousand years, they began living a



Classic Period

A.D. 250 to 900
The Maya reached great heights in intellectual, artistic, and cultural areas. A class system existed, in which there were some rich and some poor people, some craftspeople and some farmers, and some religious leaders and some political leaders.



► **TWELVE-YEAR-OLD** Pacal came to the throne in the town of Palenque in A.D. 615. He reigned for 68 years. During his time the city became large and powerful. When Lord Pacal died, he had a royal burial in the Temple of the Inscriptions. The sarcophagus (coffin) lid shows Lord Pacal resting on a throne.



► **THE TALLEST STELA** (stone slab) in the Maya area—more than 30 feet high—is Stela F at Quiriguá, Guatemala. On it is a portrait of Cauac Sky, an important ruler in A.D. 724. Stelae were erected to honor the important events in leaders' lives.



▲ **IMPORTANT PEOPLE** were buried in a seated position, along with pottery and other items. Platforms enclosed the tomb. Later



burials and their platforms were placed over previous ones. This jade mask, found in a tomb, depicted a nobleman.

more settled village life. They wore animal-skin clothing and used flint-tipped spears.

As time went on, cities appeared, some containing as many as 75,000 people. The Maya reached great heights in the arts,

scientific learning, architecture, and writing. Their economy flourished. Huge palaces, plazas, courtyards, and ball courts were erected. Towering temple-pyramids dotted the area.

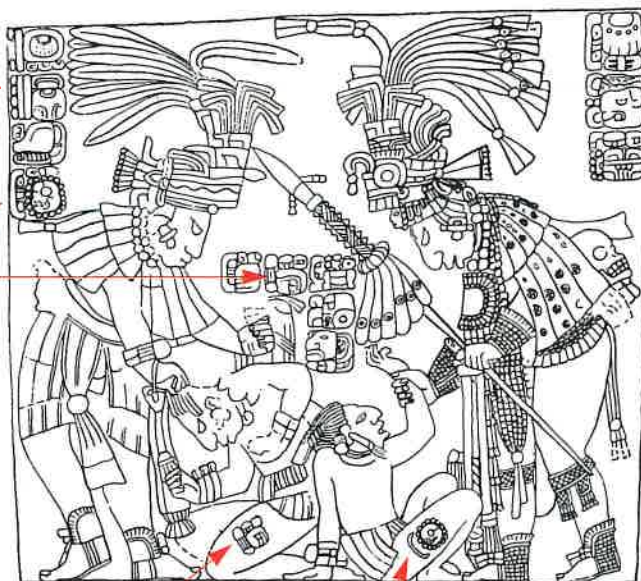
THE INVENTIVE MAYA

MAY 9,
755

HE
CAPTURED

JEWEL
SKULL

2ND
CAPTIVE



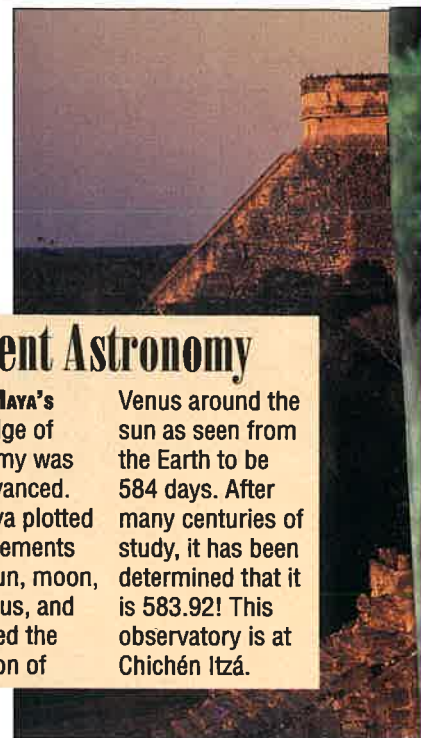
2ND CAPTIVE

JEWEL SKULL

HIS
CAPTIVE

BIRD
JAGUAR

AT THE
PLACE OF
YAXCHILAN



Ancient Astronomy

► **THE MAYA'S** knowledge of astronomy was very advanced. The Maya plotted the movements of the sun, moon, and Venus, and calculated the revolution of

Venus around the sun as seen from the Earth to be 584 days. After many centuries of study, it has been determined that it is 583.92! This observatory is at Chichén Itzá.



▲ **A FAVORITE ACTIVITY** for kids was *pok-ol-pok*. This ball game was both a competitive sport and a sacred ceremony. The players tried to knock a solid rubber ball through a stone ring. The ball had to be bounced off the hips, shoulders, and forearms. The winners were entitled to the clothing and jewelry of the losing team!



▲ **THE LONGEST** single inscription in the Maya area is contained on the risers of these steps in the Hieroglyphic Stairway

at Copán. More than 2,500 stones were used in constructing the risers, which tell the history of the ruling family.

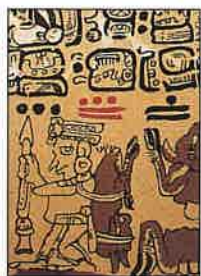
▲ **THE MAYA LEFT** permanent records about their lives in hieroglyphs—pictures or symbols used to represent words, syllables, or sounds. Glyphs in books, on pots, carved in stone, and painted in murals show many aspects of Maya life, although most focus on important events in rulers' lives. Above is a record with the date of A.D. 755 on it, showing Bird Jaguar and a companion capturing Jeweled Skull and another enemy. Of all the people in the pre-Columbian Americas, only the Maya could write down anything they chose to in their own language.

▼ **THE MAYA PAINTED** and adorned their buildings with carved friezes, facades, and roof combs (extensions to make a build-

ing taller). Colorful murals adorned many interior walls. This structure is in Tikal, the largest of all classic sites.



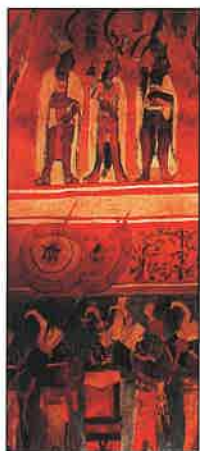
▲ **THE MOST REMARKABLE ASPECT** of the carvings is that they were done with stone tools—no metal was used in classic Maya times.



▲ **MAYA BOOKS**, called codices, were long strips of paper made from the bark of the wild fig tree. The strips of bark were then folded back to back, forming pages, which may have been enclosed in covers of jaguar skin or wood.



▼ **THE LONG COUNT** is the Maya system of recording time. It is considered the most accurate calendar of the ancient world. Long Count calculations appear on most stelae from the classic period, helping archaeologists know when they were erected. One sign of Maya genius was their calculation of the true length of the year as 365.2420 days. The figure used today, after over 1,000 years of study, is 365.2422 days!



▲ **BONAMPAK IN** Chiapas, Mexico, was discovered in 1946. It contains many murals with scenes of 1,100 years ago. One room celebrates an heir to the throne. Glyphic captions explain the event and identify the people. Dancers in feather robes are moving to musicians' music. The second room shows war and a beheaded victim.

MAYA MATH MASTERY

Dad, I'll *never* understand how to count!

It's not *that* tough, son. Just listen closely. We Maya were among the first to invent a way to count into really big numbers. We can count as high as we want because we know how important **nothing** is.



Nothing!?!?

Zero, son. Only three peoples in all of history discovered it. Zero allows us to count until the iguana come home.

How, Dad?

The first thing you need to understand is that we use just three symbols for our numbers—a **shell** for zero, a **dot** for one, and a **bar** for five.



| | | |
|---|---|---|
| | | |
| 0 | 1 | 5 |

We can count all the way to **nineteen** with those same symbols.

That makes sense.



| | | | | |
|----|----|----|----|----|
| | | | | |
| 0 | 1 | 2 | 3 | 4 |
| | | | | |
| 5 | 6 | 7 | 8 | 9 |
| | | | | |
| 10 | 11 | 12 | 13 | 14 |
| | | | | |
| 15 | 16 | 17 | 18 | 19 |

Now, we Maya count in **steps**, as if walking down a stairway. On the lowest step are the numbers 1 through 19. To show numbers from 20 to 399, we go to the next step. A number on that step is 20 times what you think it is.



| | |
|--|-------|
| | = 120 |
| | = 14 |
| | 134 |

We add the two steps to get the number and read the number from **top to bottom**, right?

| | |
|--|-------|
| | = 800 |
| | = 120 |
| | = 14 |
| | 934 |



You're a chip off the old block! Now, we stay on this step until we get as high as the number **399**. Then we have to step up again. The same process works for this step, except that you must figure 20 times 20 times the number, or 400 times the number you see.

I get it! Just keep stepping!

Step on! This step is good until you get to **7,999**.

So why is the **zero** so important, Dad?

Sometimes, son, it's important that there be **nothing** on a step. How could we write the number **403** without a zero?

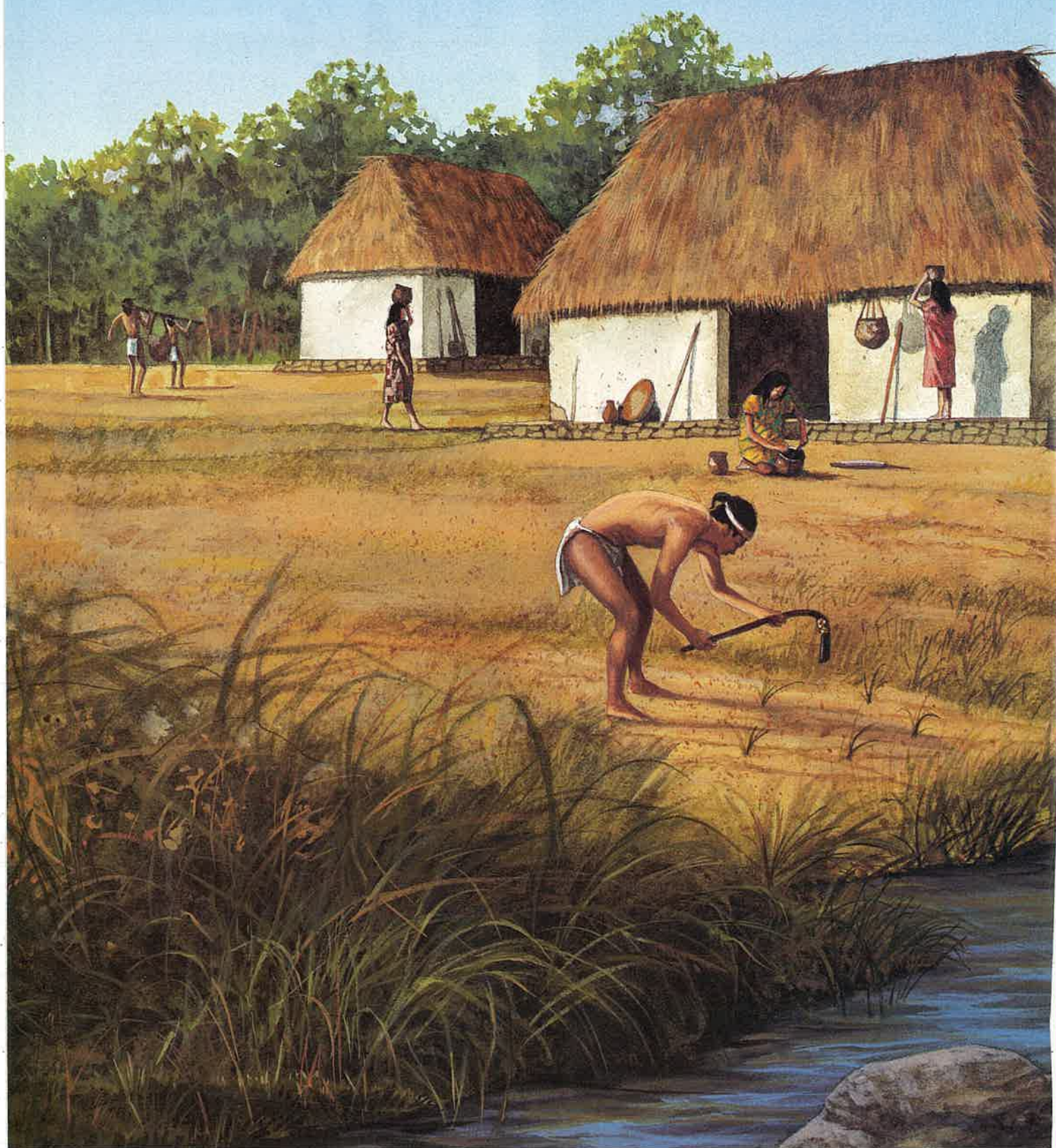


| | |
|--|-------|
| | = 400 |
| | = 0 |
| | = 3 |
| | 403 |

Maya Way of Life

Would you like to live in a house with your parents and grandparents—and never have to go to school? How about wearing head-dresses with brightly colored

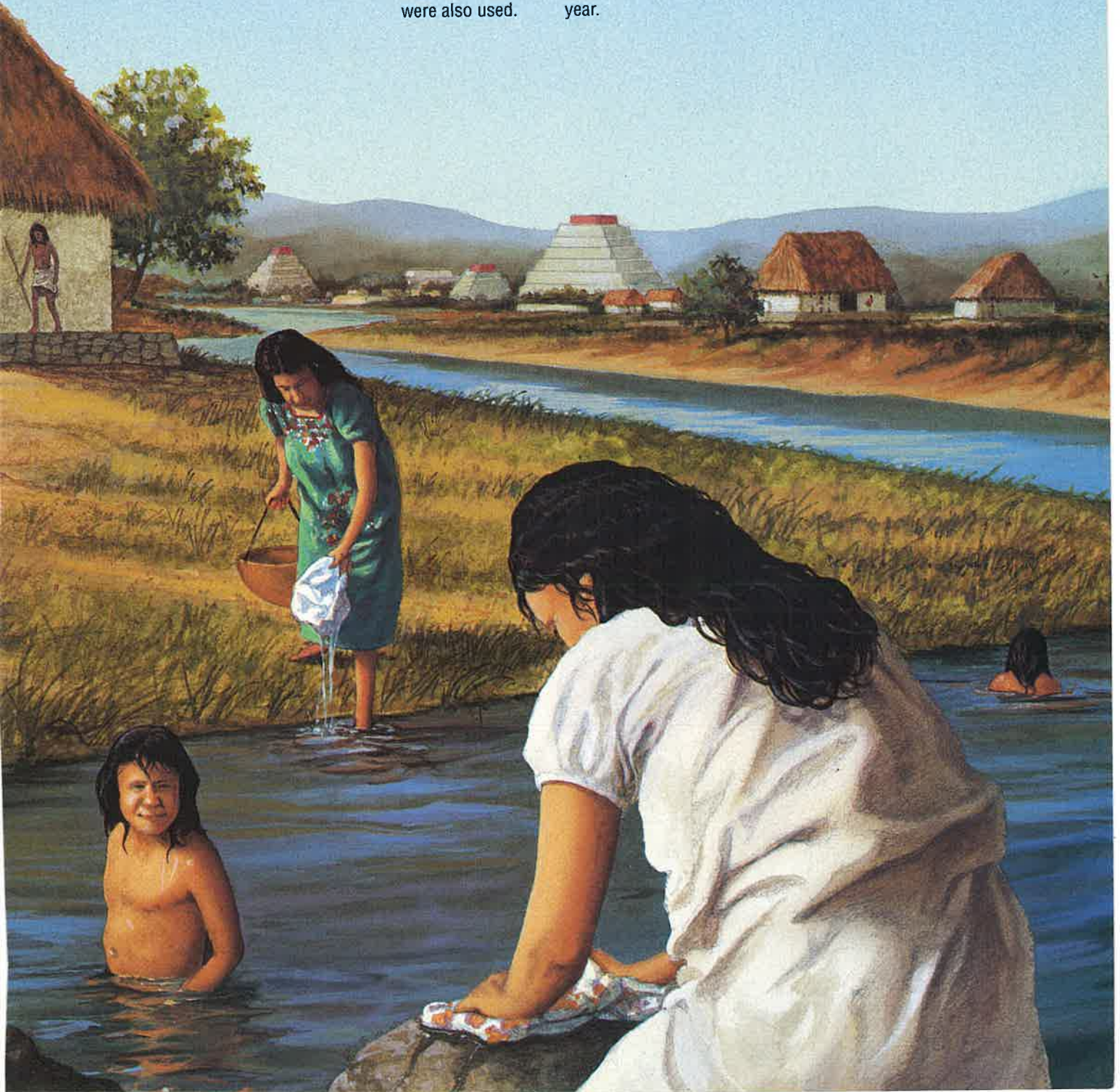
feathers and drinking chocolate-flavored beverages? If these things appeal to you, you may have liked living during the time of Maya splendor—thousands of years ago!





Most MAYA peasants were farmers. They burned dry brush before summer rains. Then, with sticks, they planted seeds in shallow holes (left). Called *milpa*, the slash-and-burn method was used for thousands of years. Other farming techniques were also used.

Raised fields, created by digging canals in a gridlike pattern across a swamp and piling the earth between them, made fertile plots for planting. Some hillsides were terraced with stone walls to create more fields (right). Maya used crop rotation to get more than one harvest each year.







Swimmers in Dzitnup, Mexico, enjoy a dip beneath stalactites in the pure waters of a *cenote*, or well. *Cenotes* provided an essential source of water for the ancient Maya in the river-starved northern Yucatán. Other sacred *cenotes* were used in religious ceremonies.



AFTER HERNANDO Cortés destroyed the Aztec realm in 1519, he and others went on to conquer the Maya. The Maya fought courageously but were finally subdued in the 1800s. The Spanish conquistadors, marching beneath the banner of "God, Glory, and Gold," accomplished their goal of subduing and wiping out the Maya and other cultures. Everyone was forced to take instruction in the Catholic faith. If anyone rebelled, the consequences were terrible.



THE SPANISH made slaves of many of the Indian peoples. They introduced such European diseases as smallpox,

measles, and influenza to the Maya, who had no natural defenses against them. Entire towns were wiped out. Some estimate that up to

ninety percent of the Maya died in the century immediately following the Spanish conquest.

LONG BEFORE THE Spanish arrived, Maya civilization was in decline. Civil unrest, social upheaval, and warfare were common. Few creative endeavors were pursued. In time, Mexican influence prevailed. Chichén Itzá is the place that best shows this. El Castillo, the Temple of the Jaguars and its Ball Court, and the Temple of the Warriors (right) incorporate elements that are totally different from Maya architecture: colonnades, rooms divided by columns, interior courts, and square platforms. It may be that the Toltec peoples of Mexico conquered the city.



The Spanish Conquest and the Decline of the Maya

Maya civilization flourished for many centuries. But then, from about A.D. 800 to 900, nearly all Maya cities in the southern lowlands were abandoned. Many theories have been proposed to explain this phenomenon: conquering armies of Mexicans, climatic changes, earthquakes, epidemics, economic failure, social disintegration, overpopula-

tion and starvation, uprisings among the masses, or a combination of all these factors. A good guess is that a combination of outside pressures and internal tensions led to the collapse of the Maya.

Although the southern lowlands were nearly deserted, Maya splendor did continue in the Yucatán peninsula. When Spanish explor-



▼ **THE TOLTEC**
Temple of the Warriors at Chichén Itzá, which is copied from a Mexican pyramid, clearly shows Toltec influence and ascendancy over the Yucatán.

◀ **IN THE 16TH** century, Diego de Landa, a Franciscan friar from Spain, arrived in Yucatán, where Maya thrived after the lowland cities were abandoned. De Landa tried to change the ways of the Maya, but they refused to

give up their beliefs. Angered, he had all their manuscripts burned, robbing future generations of valuable information about the Maya. In one terrible moment, de Landa wiped out the literature of an entire culture!

Scribes Were Big Deals

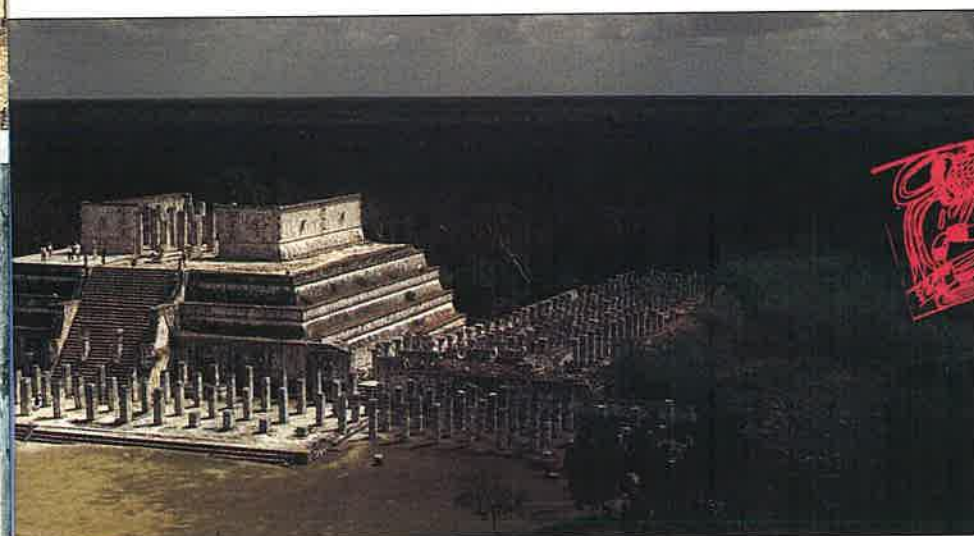
SCRIBES RECORDED DETAILS ABOUT MAYA life on accordion-folded books. The pages of bark were strengthened by a natural gum substance and coated with white stucco. On these pages, scribes drew figures and made hieroglyphic symbols, coloring them with mineral and vegetable paints. Scribes, held in high esteem, also carved limestone, inscribed shells, and engraved jade.



▲ **THE MONKEY-MAN SCRIBES**



▲ **RABBIT GOD WRITING A CODEX**



ers set foot there in the early part of the 16th century, they found cities thronged with people, highly decorated palaces, temples raised on terraced pyramids, paved stone roads, and bustling marketplaces. They met leaders who wore jade and gold jewelry, intricate head-dresses, jaguar-skin skirts, and brightly colored feathered capes. They also found warriors with

bows, arrows, and clubs.

For years, the Spanish had been searching for the legendary El Dorado, where great riches were supposed to be found. The cities of the Maya could have been it. But the desire of the Spanish to convert others to their religion led ultimately to the destruction of the most brilliant civilization in pre-Columbian America.

Uncovering the Secrets of the Maya

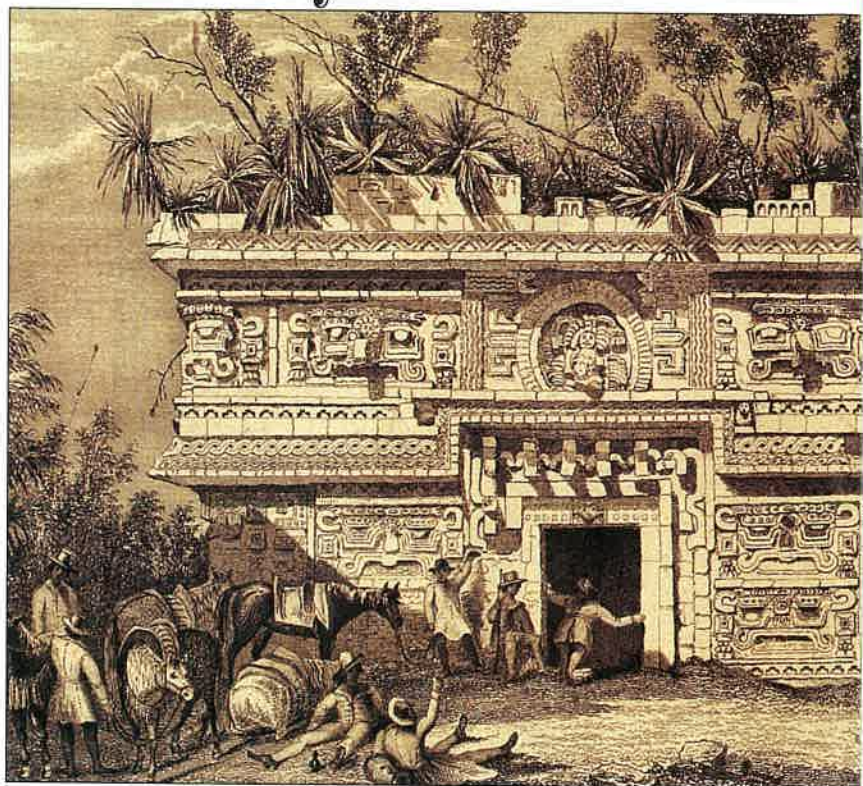
Most of the impressive examples of ancient Maya life—palaces, temples, plazas—were not unearthed until the late 19th century, almost 1,000 years after the Maya civilization flourished. What took archaeologists so long to discover this fascinating civilization? One reason is that much of the Maya land is difficult, if not impossible, to reach because of dense rain forests, mountains, or volcanic peaks. Another reason for the delay in unearthing ruins is that the Spanish royal government forbade foreigners to travel in its colonies.

In spite of overwhelming hardships, many hardworking, dedicated people spent many years of their lives unearthing what had become the lost culture of the Maya. Without their perseverance, an entire civilization could have been wiped off the face of the earth, without a trace.



▲ **IN 1952, DURING** an investigation by Alberto Ruz Lhuillier of Cuba, the Temple of the Inscriptions at Palenque was examined. After years of drilling

and raising enormous stones, Lhuillier found a sarcophagus (coffin), wall drawings, and jade treasures that had not been seen for almost thirteen centuries!



▲ **JOHN LLOYD** Stephens, an American diplomat, and his artist friend, the Englishman Frederick Catherwood, both had a deep interest in the Maya civilization. Between 1839 and 1842, they made two trips to Central America and Mexico, unearthing major ruins that had been overrun for centuries by jungles. The men guessed that Maya monuments depicted rulers and that the glyphs recorded the history of the elite class. They were right, but almost 120 more years passed before anyone paid attention.

► **THE ENGLISHMAN** Alfred P. Maudslay is considered by many to be the most significant person in Maya archaeology. Beginning in 1881, and for the next thirteen years, Maudslay took photographs and made precise illustrations of excavations, major structures, and stone carvings. His work, published in eight volumes, resulted in the most accurate material about the Maya up to that time. Here, Maudslay sits in his field "office" at Palenque in the late 1800s.

