Chapter 1
The Maya: Rainforest Civilization

The Vanishing Civilization Do you like mysteries? Try this one: More than a thousand years ago, a great civilization of American Indian peoples built cities across Mesoamerica—an area today that is made up of parts of Mexico and Central America. They built stone temples and pyramids that rose far above the forest treetops.

The Maya, one group of native peoples, discovered important mathematical ideas. They also studied the movements of the stars. Using this knowledge, the Maya made a calendar almost as accurate as the one we use today. Then, after hundreds of years of growth, many key elements of Maya civilization disappeared. The people abandoned their once-thriving cities. This great urban society and many of

The Big Question
What do the ruins of the Maya tell you about the importance of religion to their civilization?

Vocabulary
Mesoamerica, n. a historical region that includes what are today the central and southern parts of Mexico and the northern parts of Central America
In the centuries before Europeans came to the Americas, great civilizations thrived in present-day Mexico, Central-America, and South America. These included the Maya, Aztec, and Inca.
its traditions were mysteriously transformed, although Mayan-speaking people continue in this part of Mesoamerica to the present.

This may sound like the plot of a science-fiction movie, but it isn’t. In fact, it is a short history of the Maya (/mah*yuh/), one of the first great civilizations of the Americas that flourished between 200 and 900 CE.

**Ruins in the Rain Forest**

In 1839, two American explorers heard stories of mysterious ruins in the rain forests of Central America. Curious, they set out to see for themselves. The two men first explored the remains of the city of Copán (/koh*pahn/) in the present-day country of Honduras. From the architecture, it was clear the ruins had been left by an ancient and advanced civilization. The two Americans continued their journey, exploring many other ruins. Then, they returned to the United States and wrote a best-selling book.
about their findings. Their tales and drawings inspired worldwide interest in the history of the Maya.

Since the mid-1800s, archaeologists and other experts have continued to study these remarkable people. Recent breakthroughs in research have revealed just how much the Maya accomplished. Let’s take a closer look at what we know about them and what still remains a mystery.

At its peak, the Maya civilization included a large group of city-states that were allied with, fought, and conquered each other. These cities were located on the Yucatán Peninsula in what is today southeastern Mexico and the countries of Guatemala, Honduras, and Belize. Archaeologists believe that Maya civilization reached its greatest extent between about 200 and 900 CE.

The largest buildings in Maya cities were pyramids that also served as temples.

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**Vocabulary**

*archaeologist*, n. an expert in the study of ancient people and the objects from their time period that remain, generally including stones and bones, and pottery

*city-state*, n. a city that is an independent political state with its own ruling government

*temple*, n. a building with a religious use or meaning

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Maya pyramids were grand monuments that reached toward the sky.
These structures served religious purposes. From their size, it is clear that religion was a key part of Maya life. Maya pyramids rose high above the surrounding treetops. Maya pyramids were some of the tallest structures in the Americas until 1902. That year, the twenty-two-story Flatiron Building was constructed in New York City.

Mysterious Writing

Archaeologists found hieroglyphs (/hie*roe*glifs/) carved into Maya buildings and monuments. The Temple of the Hieroglyphic Stairway stands in Copán. A climb up this staircase is a journey back in time. Each of the sixty-three steps has a story to tell. Carved symbols called glyphs name all of the rulers of Copán. The glyphs also explain their military victories. The American explorers who visited this site in 1839 marveled over these carvings. They could not, however, figure out what the symbols meant. For a long time, neither could any other experts.

Hieroglyphs are like a code. You must crack the code to read the messages. Mayan hieroglyphs are complicated and include

Vocabulary

hieroglyph, n. a picture or symbol representing an idea, an object, a syllable, or a sound
more than eight hundred symbols. It wasn’t until the 1960s that archaeologists began to crack the code with early computers. Since then, we have learned a great deal about the ancient Maya.

**Breath on a Mirror**

We have learned that daily life for the Maya revolved around family, farming, and service to the gods. No person or group took any important action without consulting the gods. Priests decided which days were best for planting a field, starting a war, or building a hut. The Maya believed the gods were much wiser than humans.

According to Maya legend, the first people could see everything. The creator gods decided that this gave people too much power. So the gods decided to limit human sight and power. The Maya sacred book, the *Popol Vuh*, explains that the gods purposely clouded human understanding. As a result, a human’s view of the world is unclear. The *Popol Vuh* explains that human understanding is “like breath on a mirror.”

**Serious Play**

Breaking the hieroglyph code also helped archaeologists understand how the Maya spent some of their time. A specific kind of ball court can be found in many Maya cities. Archaeologists were puzzled about these courts, which varied in size. Some were the size of volleyball courts. Others were larger than football fields.

Archaeologists now think the Maya played a game called *pok-ta-pok* in these courts. They believe the goal of *pok-ta-pok* was to drive a solid rubber ball to a specific place on the opponents’ side.
of the court. The balls were heavy. Also, players were not allowed to use their hands or feet! Experts think players may have had to use hips, elbows, knees, or other body parts to score a goal.

The court at the Maya site of Chichén Itzá (/chee*chen/eet*sah/) is still visible today. This court had stone rings, and a team could win the game by driving the hard rubber ball through the ring on the other team’s side of the court. If you use your imagination, you can picture what a *pok-ta-pok* game might have looked like.

Imagine big, strong *pok-ta-pok* players stepping out onto the court. They wear leather helmets and pads to protect themselves. You can also see that they are worried. They know that the stakes are high. *Pok-ta-pok* is a game with religious meaning. The Maya think of it as a battle between good and evil. The only way to find out who’s good and who’s evil is to see who wins the game.

Hundreds of spectators have gathered. They see the game as meaningful for their world and as a way of honoring the gods.

When the game begins, the sound of the bouncing ball is added to the cheers. *Pok, pok, pok!* goes the hard rubber ball as it hits the ground and bounces off the walls of the court.

One player begins driving the ball up the court with his elbows, knees, and chest. Then, *whack!* Another player slams into him and knocks him to the ground. There is no whistle for a foul. In fact, there are very few rules in *pok-ta-pok*! The game continues until someone finally scores. The side that scores wins the game.

The winners of *pok-ta-pok* games were considered to be the “good” ones. Sometimes they were rewarded with clothing and jewelry.
Nearly every Maya city had at least one ball court.

But what do you think happened to the losers? Experts believe that at least in certain situations, some of them were offered as sacrifices to the gods.

Human sacrifice was a part of the Maya religion. Maya priests sought to please the gods by offering sacrifices atop the pyramids. No wonder the *pok-ta-pok* players looked worried as they walked onto the court!

*Pok-ta-pok* and human sacrifice are two parts of Maya life that we have learned about from Maya hieroglyphs. In the next chapter, you will learn more about the scientific achievements and daily life of the ancient Maya.
Wisdom in the Sky The Maya believed that their gods gave them an unclear view of the world that was “like breath on a mirror.” But we also know that the Maya understood some things very well.

The Big Question
Why is the 365-day solar calendar employed by the Maya particularly impressive?
Their knowledge of **astronomy**, for example, was impressive. The Maya, of course, did not have telescopes, computers, or satellites. They didn’t even have the wheel. All they had were their own eyes. Yet they were able to make very precise observations of the stars.

**Maya Calendars**

We all know that there are 365 days in a year, plus an extra day every fourth year, or **leap year**. These numbers are the result of years of study of the sun and the seasons. The Maya, working without scientific tools, calculated...
that there were 365.2420 days in a year. Modern astronomers used modern technology to measure the year at 365.2422 days!

The Maya created a solar calendar, or calendar based on the movement of the sun. This calendar is similar to our calendar, but there are some differences. We divide our year into twelve months. The Maya divided their year into eighteen months with names like Pop and Zip. A special five-day “month” completed the 365-day year.

Besides their 365-day solar calendar, Maya astronomers created another calendar called the Sacred Round. This calendar was 260 days long and was used to keep track of religious holidays and other important events.

Because the Maya had two calendars, each day had two names. One name came from the Sacred Round and the other from the solar calendar. This also meant that all Maya people had two birthdays.

One Maya calendar had eighteen months of twenty days, plus a special five-day month.
Astronomy at Work

We can see the results of Maya astronomy in the placement of their temples and pyramids. These structures were built so the sun would shine directly on key areas on certain days. In Chichén Itzá, for example, the sun of the spring and fall equinoxes casts the shadow of a serpent statue onto the pyramid steps. As the sun rises, the shadow slithers down the stairs.

Inventing Zero

The Maya were also skilled at mathematics. They developed a system of number symbols. A dot stood for one. A bar stood for five. A shell stood for zero. We all know that zero can stand for “nothing.”

Vocabulary

equinox, n. a day in which daytime and nighttime are about the same length, which happens twice every year
But when it comes to a system of numbers, zero means a lot! Think, for example, of the difference between the numbers twenty and two hundred. The Maya symbol for zero worked the same way ours does. In fact, the Maya were among the first people in the world to develop the concept of zero.

**How They Lived**

Most Maya people made their living as farmers. Their main crop was corn. One of their main foods was something you may have eaten—a flat bread called a *tortilla* (/tor*tee*uh/). Farmers also grew beans, squash, sweet potatoes, tomatoes, and pumpkins.

Maya farmers lived in one-room huts made out of mud and grass. Families lived in walled areas that had several huts. Men and boys did the farming. Women and girls took care of the house, cooked, and made clothing and pottery.

Every culture has practices that seem odd to other people. The Maya did two things that may seem a little strange to you. They considered crossed eyes to be beautiful. So mothers would hang something in front of a baby’s nose to help the baby develop crossed eyes. The Maya also viewed a flat head as a symbol of beauty. They would strap a long board to the backs of newborn babies. As the babies’ heads rested against the board, the board gradually flattened the back of the babies’ soft skulls.

**Coming of Age**

Before age five, Maya children were cared for by parents and other relatives. At age five, they took on new responsibilities, such as
Maya farmers raised food for the people of their large cities. In the lowland areas, farmers created waterways to redirect and save water.
helping with farming and household chores. A boy had a white bead braided to his hair. A girl had a string tied to her waist with a red shell attached.

These symbols remained in place until the children reached the age of fourteen. At this point, an initiation ceremony was performed to mark their passage to adulthood. A priest would pick a day when the stars were favorable. Then the priest would cut the bead from the boy’s hair. A girl’s mother would cut the string from her daughter’s waist. Then the parents would have a celebration with family members and neighbors.

After these ceremonies, boys moved into a house for unmarried men. There they would remain until they got married. Marriages were arranged. In the hard life of Maya farmers, marriages were not romantic affairs. They were more like business deals between families.

As with the initiation ceremonies, priests picked marriage dates. They checked with the stars and the gods to find a day that would bring good fortune. However, no Maya couple expected married life to bring only good fortune. The Maya believed that every aspect of life was controlled by the gods. Because some gods were good and some were bad, they expected life to include both joy and sorrow.
The Maya believed that the gods controlled all aspects of life, and they consulted the stars for guidance.
Where Did Everybody Go?

The ancient Maya were amazing people who built a great civilization. That fact alone is a reason to find them interesting. But one of the most fascinating questions about ancient Maya civilization (200–900 CE) is what happened to cause it to end.

Archaeologists believe that the Maya left their cities sometime between 800 and 900. It’s possible this event happened over just a few decades. Until the 900s, the Maya kept careful historical records. They used their hieroglyphs to carve names and dates on pyramids and temples. Then in the 900s, the writing mysteriously stopped. The temples and pyramids began to fall into disrepair.

So what happened? Archaeologists have theories, but they can’t find clear proof for any one of them.
One theory holds that farmers rose up against the priests and nobles. But this raises another question: what happened to the farmers? There is no evidence of a new group of people replacing the old ones in power.

Some have guessed that disease wiped out the Maya population. But no mass burial grounds have been found. Archaeologists have found signs that some people in this area did die from diseases. Almost all of these deaths, however, seemed to have occurred after 1500, when the Spanish brought new diseases to the Americas. The Maya had been gone for years before that.

Did disaster strike the Maya? Did drought or heavy rainfall bring famine? Was there an earthquake? Did shifting trade routes affect the lowland Maya rulers and their settlements? Could invaders have toppled the civilization?

No one knows for sure. We only know that the once-great Maya cities were abandoned and swallowed up by the rain forest. The Maya scattered. But the people themselves did not disappear. Today, millions still speak languages related to ancient Mayan. These ancestors of the pyramid-builders have lived in villages, towns, and cities in southern Mexico, Guatemala, and Honduras for centuries. They have a rich heritage, one that we are learning more about with each passing year.