



Grade 5

Unit 1

Early American Civilizations:
Maya, Aztec, and Inca

Reading
Language Arts

READER

Grade 5

Unit 1

Early American Civilizations

Maya, Aztec, and Inca

Reader

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Early American Civilizations

Maya, Aztec, and Inca

Reader

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Chapter 1

The Rise of Early American Civilizations

THE BIG QUESTION

What were the key geographical features of the regions in which the Maya, Aztec, and Inca civilizations developed?

Our understanding of the history of humans living and working together begins in Africa more than a million years ago. Over time, humans began to migrate and eventually inhabited six continents: Africa, Asia, Europe, Australia, and the two Americas.



For many thousands of years, early hunter-gatherers traveled from place to place. They fished, hunted animals, and gathered wild plants. Between 12,000 and 5000 BCE, some groups of people established more permanent villages. Often, these village-based societies relied on farming, raising their own crops for food. Some learned to **domesticate** animals. Over time, animals were used for more than food in some regions. They helped people plow and fertilize the soil. They supplied milk and provided wool for clothes.

As people settled down to farm, their lives changed. People learned to **irrigate** fields. They developed ways to store food. Populations grew. Between 4000 and 2000 BCE, towns and villages in various places developed into cities. People constructed buildings and worshipped gods. They made pottery and wove cloth. The city-dwellers chose leaders and developed laws. Some people governed and others served. Civilizations were born.



Civilizations Develop from Africa to the Americas

The earliest civilizations arose in fertile river valleys in Africa and Asia. These civilizations **flourished** along the banks of the Nile, the Indus, the Yellow, the Tigris, and the Euphrates Rivers. By 1000 BCE, new civilizations arose in the Americas. These early American civilizations are called pre-Columbian civilizations. This is because they developed long before Christopher Columbus's first voyage to the Americas in 1492. Three of these pre-Columbian civilizations were the Maya, the Aztec, and the Inca.



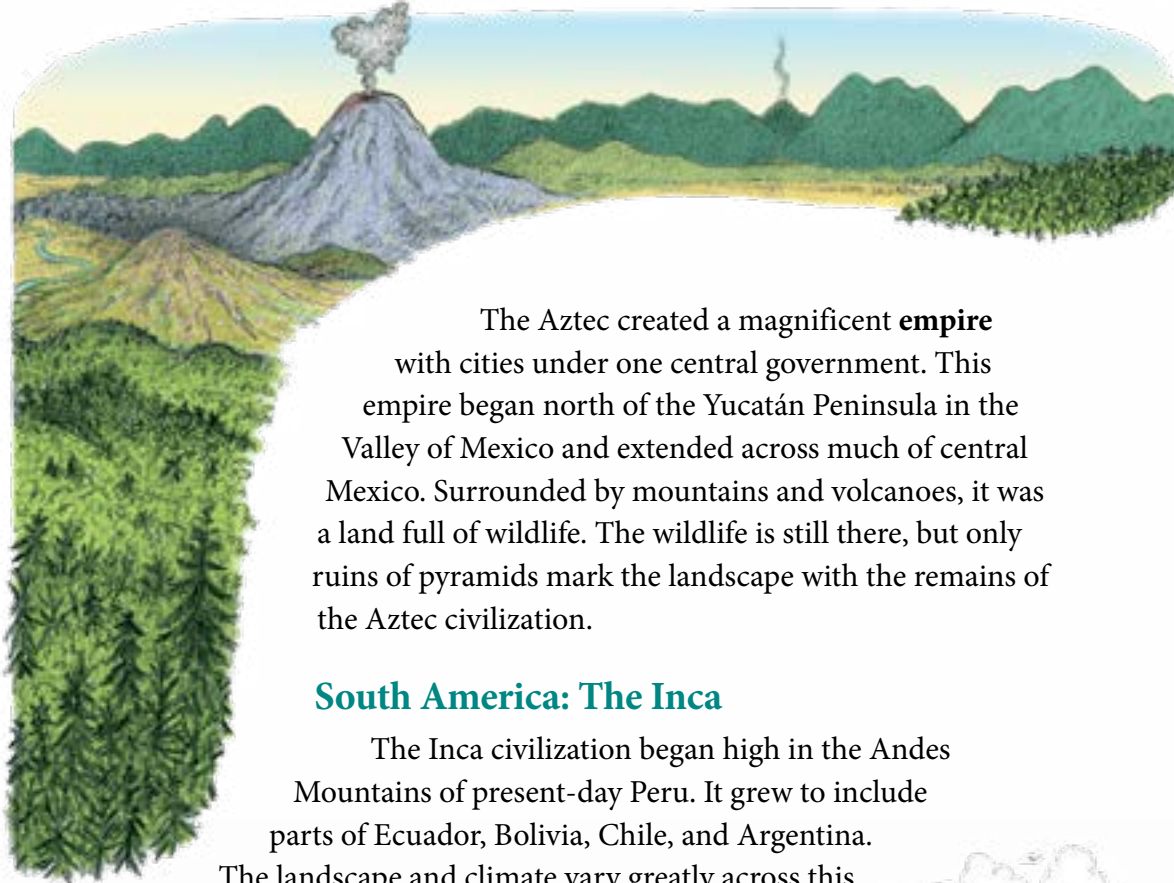
River valleys provided people with water and fertile land.



Mesoamerica: The Maya and the Aztec

Mesoamerica, or Middle America, was home to the Maya and the Aztec civilizations. This region lies north of the Equator in an area called the tropics. It includes a portion of present-day Mexico in North America and parts of Central America. It occupies much of the **isthmus** that joins the continents of North and South America. The present Central American countries of Guatemala, Belize, Honduras, El Salvador, Nicaragua, and northern Costa Rica are all part of Mesoamerica. Mesoamerica has very **diverse** landscapes, including dry coastal deserts and wet inland rainforests.

The Yucatán Peninsula is surrounded by water on three sides. It lies between the Gulf of Mexico and the Caribbean Sea, and was home to many Maya. Warm, humid rainforests cover the southern part of the peninsula. Its **lush** vegetation supports animals as varied as jaguars, snakes, bats, monkeys, toucans, and quetzal birds. The northern part of the Yucatán is drier and has no rivers, only lakes and swamps. The Yucatán's thousands of deep **cenotes** supply fresh water to the area—water needed in order for settlements to develop. Maya **descendants** are still there, living alongside the ruins of the ancient civilization.

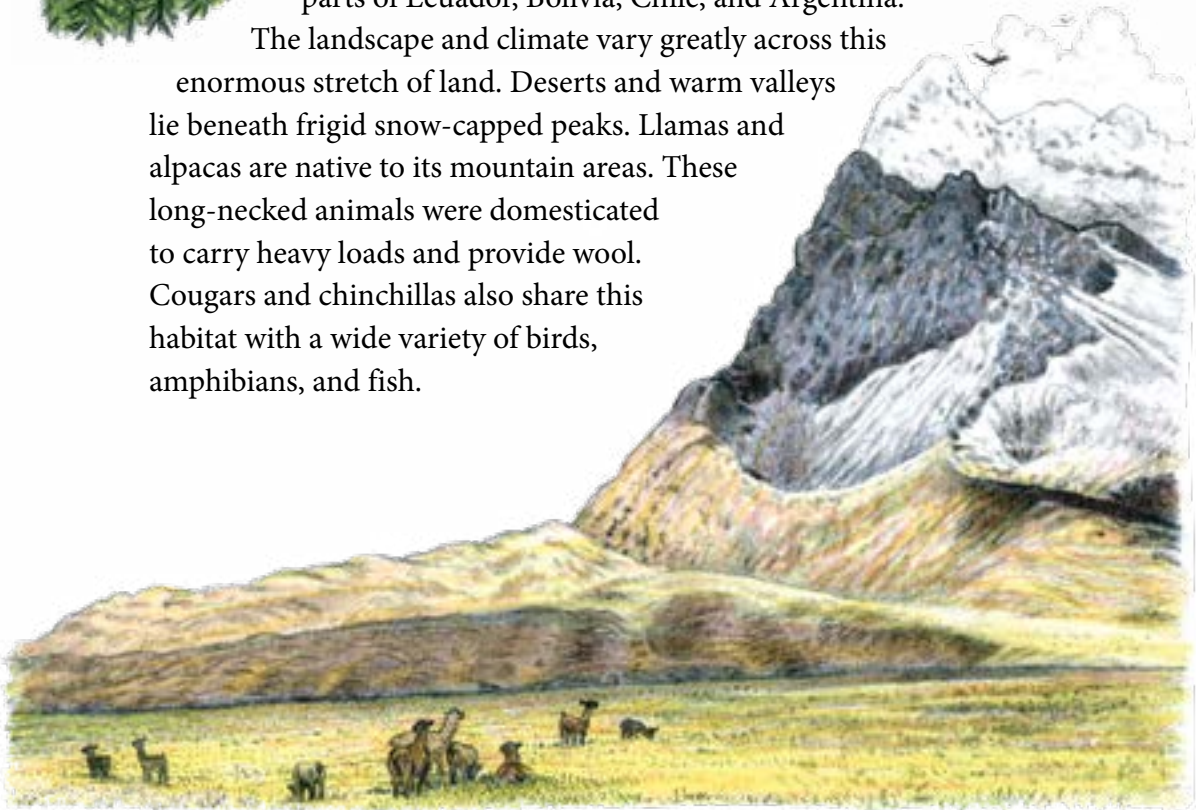
An illustration of a Mexican landscape. In the background, a large volcano with a plume of smoke rises above a range of green mountains. In the foreground, there are rolling green hills and a dense forest of tall evergreen trees on the left. A small pyramid is visible in the distance to the right.

The Aztec created a magnificent **empire** with cities under one central government. This empire began north of the Yucatán Peninsula in the Valley of Mexico and extended across much of central Mexico. Surrounded by mountains and volcanoes, it was a land full of wildlife. The wildlife is still there, but only ruins of pyramids mark the landscape with the remains of the Aztec civilization.

South America: The Inca

The Inca civilization began high in the Andes Mountains of present-day Peru. It grew to include parts of Ecuador, Bolivia, Chile, and Argentina.

The landscape and climate vary greatly across this enormous stretch of land. Deserts and warm valleys lie beneath frigid snow-capped peaks. Llamas and alpacas are native to its mountain areas. These long-necked animals were domesticated to carry heavy loads and provide wool. Cougars and chinchillas also share this habitat with a wide variety of birds, amphibians, and fish.



Clues to Past Civilizations

Archaeologists have discovered much of what we know about the Maya, the Aztec, and the Inca. Archaeologists study the remains of past civilizations. They survey the land where ancient people lived, test the soil, and take photographs. They also map out areas to excavate, or dig, for artifacts. Archaeologists use shovels, scoops, brushes, and **sieves** to search for evidence of past human activity. Flaked stone, ceramic shards, bones, and **textiles** all tell a story.

Spanish letters and records also provide information about early American civilizations. Why were the Spanish in the Americas? Starting about 500 years ago, they came in search of riches. They were looking for gold and silver, spices and silk, adventure and conquest.



Archaeologists use various methods and tools to study past civilizations.





Hernán Cortés



Francisco Pizarro

Spanish Conquests in the Americas

Hernán Cortés and Francisco Pizarro—distant cousins—were two early Spanish explorers. They sailed on separate expeditions from Spain to the Americas in the early 1500s. These Spanish conquistadors, or conquerors, were both interested in more than riches. They wanted to establish colonies for the Spanish king. They brought with them advanced weapons, new animals, and, unfortunately, devastating European diseases. Cortés conquered, or took control of, the Aztec Empire in present-day Mexico. Pizarro conquered the Inca in present-day Peru. The Spaniards imposed their language and religion on the native people. The Spanish wrote about their early experiences in the Americas.

As you explore these chapters, you will learn about the history of these three pre-Columbian civilizations: the Maya, the Aztec, and the Inca.



Spanish conquistadors sought riches such as the gold that was used to make this Aztec pendant.

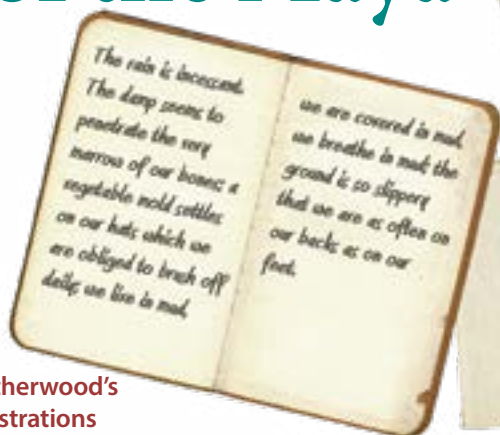
Chapter 2

Golden Age of the Maya

THE BIG QUESTION

How did Maya society adapt and thrive in such a large and diverse region?

Catherwood's
illustrations



Désiré Charnay was a French archaeologist who visited the jungles of Central America in the 1800s. He wrote the words below in his journal.

*“The rain is **incessant**. The damp seems to **penetrate** the very marrow of our bones; a vegetable mold settles on our hats which we are obliged to brush off daily; we live in mud, we are covered in mud, we breathe in mud; the ground is so slippery that we are as often on our backs as on our feet.”*

Imagine slipping and sliding through mud all day long. Imagine constantly swatting at mosquitoes. Imagine pit vipers and tarantulas resting in trees overhead. Imagine constant heat and humidity. Mud, poisonous creatures, and muggy weather were all part of Charnay’s experiences in the rainforest.

Charnay visited Central America after reading a travel book written by John Lloyd Stephens and illustrated by Frederick Catherwood. He was fascinated by the book’s illustrations of ancient Maya ruins. Catherwood drew pictures of vine-choked **temples** poking through clouds. His drawings of carved masks looked like real people. Stephens and Catherwood portrayed abandoned cities, swallowed up by dense forest. Their book captured the imaginations of people from all around the world. “Who were these Maya?” people wondered.

A Culture Flourishes

The Maya were one of many groups of people who settled in Mesoamerica. They formed agricultural villages at least as early as 1800 BCE. Over time, they established a civilization. As many as five million people inhabited an area that stretched from the highlands of Guatemala to the plains of Yucatán. Between 250 and 900 CE, writing, religion, and art flourished. In certain respects, this era was the golden age for the Maya **culture**.

The Maya were not ruled by a single ruler. The Maya lived in **city-states** scattered across considerable distances. Some of these city-states were larger than others. Each had a powerful lord who governed his own city and surrounding areas. The city-states both **traded** and fought with one another.

Maya society was divided into classes with lords in the highest class. Well-educated priests were also among the noble, or highest, classes. Both kings and priests lived in palaces close to city centers. Powerful nobles usually lived in the largest houses. Craftsmen lived in smaller homes that were often farther away from the city center. Farmers lived next to their fields that were even farther away.



Temples and pyramids dominated the center of Maya city-states.



Religious rituals, festivals, and ceremonies took place in the pyramid-temple complex.

Pyramids, Temples, and Gods

Maya city-states were centers of both government and religion. Each center had some unique architectural designs. However, all centers had stone pyramids and temples. Some of the pyramids served as burial monuments to honor dead kings. Temples occupied the top level of the pyramids, purposefully close to the heavens and the gods. These temples were reserved for rulers and priests. Pyramid-temple complexes often surrounded a central plaza where public ceremonies and festivals took place.



Religion was important to most aspects of Maya life. The Maya's belief in gods and goddesses helped them explain the mystery of life itself. They believed that gods controlled everything. The gods were responsible for the rising and setting of the sun and the phases of the moon. They were certainly responsible for floods and droughts as well as sickness and health. The Maya gave thanks for a bountiful harvest, a cured disease, or a victory in battle. They offered sacrifices, or precious gifts, to the gods. Kings, sometimes called holy lords, were in charge of hosting sacrificial rituals and ceremonies.

Toward the end of the Maya's golden age, the city-state Chichén Itzá served as an important Maya center. Chichén Itzá is located in an **arid** region of the northern Yucatán Peninsula. The Maya believed that Chichén Itzá's Well of Sacrifice was the home of gods who controlled the rain. The Maya offered sacrifices to the rain gods. They did so because they believed that their fields would be watered. This well continued to serve as a sacrificial site for centuries after Chichén Itzá's decline as a major Maya center.

Trading from Highlands to Lowlands

Trade routes followed rivers, seas, and roads across the Maya region, connecting these **indigenous** people to one another. Cities were hubs of **commerce** where people shared ideas and traded goods. The Maya used a barter system for exchanging daily necessities. People in the lowlands traded food, cotton, and jaguar skins for coastal salt and dried fish. People across Mesoamerica used obsidian, a volcanic glass from the highlands, for both jewelry and tools. Wealthy Maya valued precious gemstones and the brightly colored feathers of the rainforest's quetzal bird.



Feeding City-States: Wetlands, Mountains, and Rainforests

Maya farmers worked hard to supply food to the city-states. Rainfall and soil quality varied throughout Mesoamerica. The Maya found clever ways to meet the challenges of their diverse landscapes.



Maya canals and wetlands

Some lowland areas received heavy rains from May through December, followed by drought from January through April. Because of this inconsistent rainfall, the Maya developed ways of redirecting and reusing rainwater. They created canals in the lowlands. They built raised-earth platforms above the canals and created wetlands. Aquatic plants helped keep the water clean and provided shade for the fish in the canals. The fish, in turn, provided both food and fertilizer for the fields.

In highland areas, the Maya cut terraces into the slopes of mountains. They practiced multicropping on this flat land, planting and harvesting the land multiple times throughout the year. Their crops included beans, tomatoes, squash, chili peppers, and pumpkins. Maize, or corn, was the main food throughout Mesoamerica.



Crops grown by Maya

In forested areas, the Maya used a technique known as slash and burn. They slashed, or cut down, trees and then burned the area. Then they planted new crops. Ashes left from the fire added nutrients to the soil. After several years, the crops used up the nutrients in the soil. The Maya then repeated the process in another area.

The Maya also gathered tree crops. Fruit trees thrived in the rainforest. The Maya enjoyed the bountiful fruit of the breadnut tree. Similar to apricots in appearance, breadnut fruit has highly nutritious seeds. The Maya ate these seeds or ground them into flour. The Maya also used many rainforest plants for medicine.



Breadnut fruits

Some Maya hunted **game** in the forests, including deer, rabbits, and other small mammals. They raised turkeys and dogs for food. They raised stingless bees for honey, which they used to sweeten foods and drinks. In coastal communities, the Maya ate fish and turtles as well.



Male wild turkey

It is important to remember that the Maya were not the first civilization to live in Mesoamerica. The way they lived was often very similar to the way others in the area lived. The Maya did not invent the pyramid, nor were they the first to practice writing. Instead, the Maya often improved upon practices originally borrowed from other cultures.



An Important Ball Game

The Maya played a ball game called pok-a-tok that had religious significance. Nearly every Maya city had at least one ball court. Enclosed by parallel walls, the rectangular courts varied in size. Some were nearly as large as a modern-day football field. The game of pok-a-tok was played with a solid rubber ball that weighed as much as eight pounds. Players kept the ball in the air with their knees, hips, shoulders, and forearms. Thick, heavy padding protected them in this fast-paced game. Rules varied among the city-states. At Chichén Itzá's court, the object was to pass the ball through stone hoops. It's possible that the game **symbolized** the passage of the sun across the sky. This was believed to be an important daily task performed by the gods.

Painted Mural at Bonampak

Life in a Royal Court

This mural was painted on a temple wall at Bonampak in southern Mexico. It shows that members of the king's royal court lived lives of luxury. Rulers grew wealthy from trade among city-states. The mural depicts how members of the royal court lived and dressed. Loose-fitting clothing was typical of all social classes. Noble women wore beads, pendants, and earrings made of precious jade. Noble men covered their heads with feathered headdresses made of quetzal plumes. Only the rich and powerful wore fancy clothes and jewels.



Chapter 3

Hidden Secrets in the Rainforest

THE BIG QUESTION

What factors led to the development and decline of the ancient Maya civilization?



David Stuart, shown here (middle) at age 10

Do you like to solve puzzles and break codes? A boy named David Stuart did. The son of archaeologists, David often accompanied his parents to the ancient Maya ruins where they worked. There, he saw sights that he had never seen before. He was particularly fascinated by the sculpted stone monuments called stelae. Often located in the central plazas of Maya cities, these giant pillars featured carvings of images and symbols. David began sketching the carvings when he was only eight years old. One symbol looked like the head of a jaguar. Another resembled an open book. What did these glyphs, or combinations of symbols, mean?



Stelae featured detailed carvings like these. There could be many different symbols in various combinations.

Decoding an Ancient Language

David soon learned that archaeologists were often puzzled by these carved symbols. Many of the carvings had survived despite thousands of years of erosion by humidity, heat, and tropical storms. Still, nobody knew what these sequences of symbols meant. Some scholars suspected that the symbols were largely decorative. Others were convinced that the symbols were a form of writing. Among these scholars was a young Russian named Yuri Knorosov, who began to decode, or translate, the hieroglyphics. His translations uncovered the true nature of the Maya writing system. Some glyphs were syllables, or parts of words, while others represented whole words. They were far from being just pretty pictures!

Knorosov published the results of his research in 1952. Some epigraphers, people who decode and **interpret** ancient writing systems, were doubtful of his work. Others, including David Stuart, were eager to decode more. Today, approximately 85 percent of the Maya glyphs have been decoded. These glyphs help bring the ancient Maya world to life. They provide records of important dates and events, including the reigns of kings and the movement of the stars.

The Maya developed a system of writing that used around 800 **distinct** glyphs. Scribes patiently painted symbols onto the folded bark paper of a codex. They created many of these ancient books, or codices. Many codices were destroyed or have disappeared. Hieroglyphics carved in stone, however, continue to tell stories from ancient Maya city-states even today.



Scribe painting glyphs on a codex

Buried Treasure in the Temple of Inscriptions

Palenque, in present-day Mexico, contains one of the longest carved hieroglyphic texts yet found. Elements of Palenque's history are carved on panels that form the walls of its Temple of Inscriptions. This temple was built to honor one of Palenque's kings, King Pakal.

K'inich Janaab' Pakal rose to power when he was only 12 years old. He ruled Palenque for nearly 70 years. Pakal, like other Maya rulers, spent many years planning his own burial tomb. The tomb inside Palenque's famous Temple of Inscriptions lay hidden for many years. In 1948, a Mexican archaeologist named Alberto Ruz Lhuillier discovered a trap door that led to the tomb.



Death mask of K'inich Janaab' Pakal

It took four years for Alberto Ruz Lhuillier and his team to carefully clear rubble from the opening beneath the trap door. There, they discovered a stairway leading down to the king's sarcophagus, or coffin. When archaeologists opened the coffin's ornate lid, they found what is presumed to be Pakal's skeletal remains. He was buried with an abundance of jade, the Maya's most precious stone. Jade necklaces, earrings, rings, and bracelets filled the coffin. The most magnificent of all the pieces was the mosaic death mask. It was common practice in Maya culture to place masks over rulers' faces to protect them in the afterlife. Pakal's mask is spectacular. Made from hundreds of pieces of green jade, the mask features decorative pieces of shell and dark obsidian.

From Numbers to Calendars and the Great Beyond

We know that the Maya had a written language. They also developed a number system. They used three symbols: a dot, a line, and a picture. The dot represented 1. The bar stood for 5. The pictorial symbol, often an oval shell, stood for 0. The Maya were among the first people to use the concept of 0. Without it, they could not have made calculations into the millions as they did. Their system of counting was used by people from different classes of society. Traders used this early form of mathematics for business. Architects used it to build pyramids. Farmers used it to plant their fields. Astronomers used mathematics to plot the heavens.

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

Symbols for 0, 1, and 5 combine to form larger numbers.



Stone stela

Symbols Carved on Stelae

Sculpted stelae stood in Maya ceremonial centers for hundreds of years. Over time, the stones had various uses and the styles changed. Archaeologists have determined that the main purpose of the stelae was to glorify kings. These stone monuments boldly portrayed a king's wealth and important deeds.

Combinations of glyphs also recorded important events. The Maya used a complicated system for recording dates using the symbols for numbers. The position of a number on a stela determined how it was interpreted. The Maya symbols for numbers appear on many stelae.

Priests served as astronomers and charted the skies. Ceremonial centers housed observatory buildings where astronomers could watch the stars' movements over the course of a year. The Maya thought of time as moving in cycles rather than in a straight line. Cycles in nature were important to the Maya understanding of time. They accurately predicted solar eclipses. They mapped out the orbital cycle of the planet Venus. They studied the phases of the moon.

Based on their observations and their knowledge of mathematics, the Maya used two calendars. The solar, or sun, calendar contained 365.2420 days in a year. Compare that to modern-day calculations of 365.2422 days in a calendar year. Can you tell how far off the mark they were? Scientists agree that centuries-old Maya calculations are remarkably precise, or accurate. Their lunar, or moon, calendar contained 260 days. The Maya consulted it for favorable days to plant and harvest. It was also their key to deciding the best dates for ceremonies and celebrations.



Early Engineers and Doctors

The Maya's many pyramids are proof of their advanced mathematical and engineering skills. Imagine building such structures without the use of wheels, **pulleys**, or metal tools. The Maya constructed four-sided platforms from earth and rubble to form the base of a pyramid. Then, they covered the rubble with limestone from local quarries. The plentiful limestone was ground into a fine powder and mixed with gravel and water. The Maya used this mixture for both **mortar** and **stucco** finishing. The Maya had no pack animals, so they carried materials on their backs. Without the use of metal tools, they cut stone with stone.

Priests had many different roles in Maya society. In addition to conducting religious ceremonies and practicing astronomy, priests served as doctors. Maya medicine was a combination of science and religion. The Maya used natural remedies, or treatments. They gathered plants to relieve headaches and settle upset stomachs. They combined herbal concoctions with various animal parts to cure ailments. When wounds required stitching, priests used sharp pieces of obsidian, a volcanic stone, and strands of human hair. Priests even served as dentists, filling teeth with minerals from the earth.



The End of a Golden Age

The golden age of the Maya came to an end between 800 and 900 CE. City-states were mostly abandoned. No more stone statues were raised to kings. Populations decreased and farmers **dispersed**. People of the inland rainforests left for the drier Yucatán Peninsula. One of the most advanced pre-Columbian civilizations in the Americas crumbled. Why?

The change was gradual and probably resulted from a combination of things. It is possible that a lack of rainfall led to serious drought conditions. The Maya chopped down trees for additional fields and housing. This could have destroyed the ecological balance of the region. An **epidemic** or changing trade routes may have been partially responsible for the decline. Or, some theorize, the reason may rest with the Maya themselves. Was there a war between city-states? Did people revolt? Had the rulers become too controlling? Nobody knows for sure.

Maya Blue

A Long-Lasting Color

The Maya were skilled **artisans**.

They gathered clay to create

beautiful ceramic vessels.

Like the stone stelae, these decorative vases often told stories on their elaborately painted surfaces. Artists made a distinctive blue paint known as Maya Blue.

It comes from a beautiful indigo dye produced from the leaves of a native plant. Many other colors made with natural pigments fade over time. Maya Blue is remarkable for the fact that it fades very little.



Flowers from the indigo plant



Mural background painted with Maya Blue

Maya Cloth of Today

Many modern Maya women wear colored **tunics** that are similar to the ones worn by their ancestors. Each community has its own distinct designs. As they did long ago, many women today still weave cloth. Some even use thread that is colored with natural dyes. Traditional tunics are sold in modern-day marketplaces.



Maya designs



Maya woman weaving

At the close of the golden age, the remaining Maya scattered and their great civilization **dwindled**. Today, their descendants live in the ancestral homelands of modern-day Mexico, Belize, Guatemala, Honduras, and El Salvador. With the exception of Belize, where English is spoken, Spanish is the official language of the region. However, more than 21 Maya dialects are still spoken in Guatemala alone. If you visit Mesoamerica, your guide through the muggy rainforests to ancient ruins may be a descendant of the Maya.

The ancient Maya were once thought to be peaceful worshippers of the stars, gods, and time. However, their decorated vessels and translated glyphs provide clues to suggest otherwise. We are still learning about these people who populated south-central Mexico and parts of Central America.

Chapter 4

Myths of the Maya

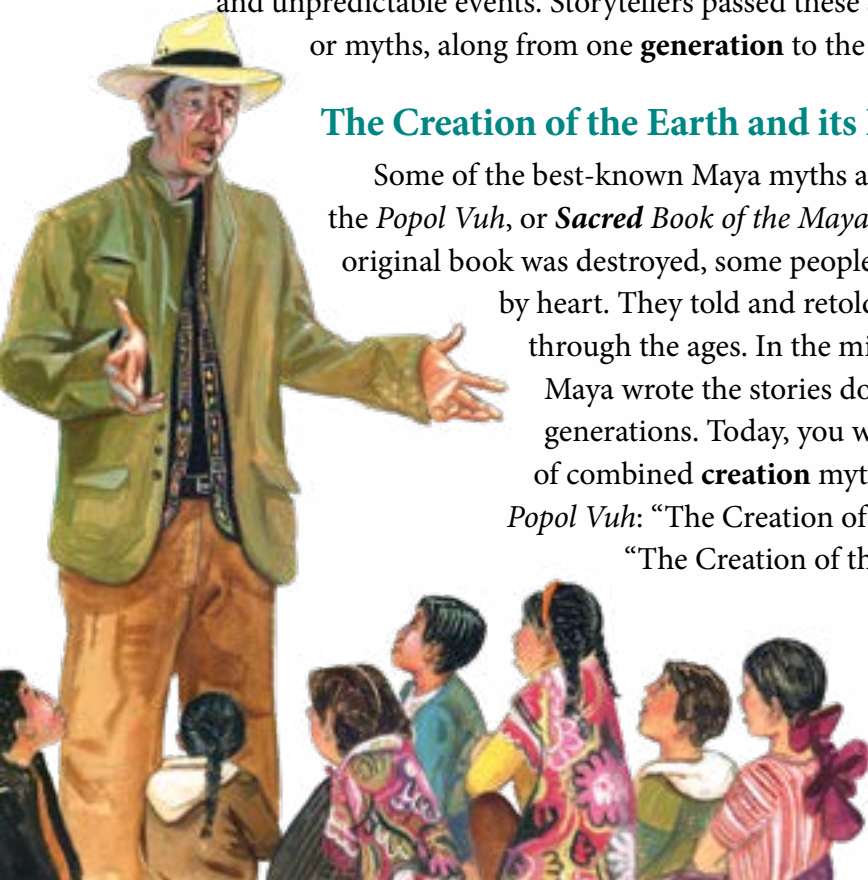
THE BIG QUESTION

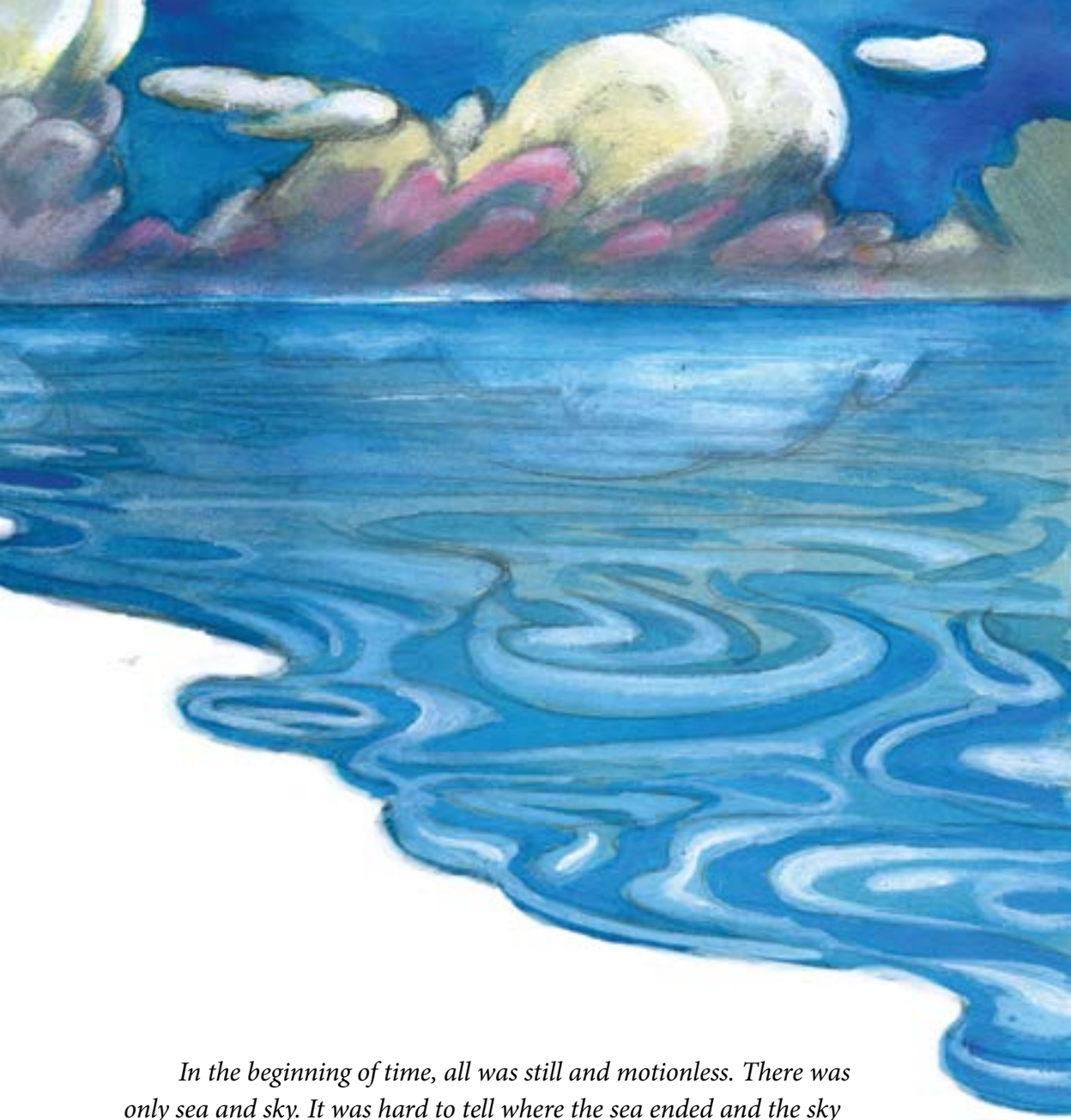
How does this sacred Maya myth explain the creation of the earth and its people?

Thousands of years ago, people all around the world began telling stories to help explain how and why things happen. Some things, like the rising and setting of the sun, are predictable. Others, like floods and earthquakes, are often unpredictable. People created stories to make sense of both predictable and unpredictable events. Storytellers passed these symbolic stories, or myths, along from one **generation** to the next.

The Creation of the Earth and its People

Some of the best-known Maya myths are recorded in the *Popol Vuh*, or **Sacred Book of the Maya**. Even though the original book was destroyed, some people knew the stories by heart. They told and retold the stories through the ages. In the mid-1500s, these Maya wrote the stories down for future generations. Today, you will read a retelling of combined **creation** myths taken from the *Popol Vuh*: “The Creation of the Earth” and “The Creation of the Men of Corn.”





*In the beginning of time, all was still and motionless. There was only sea and sky. It was hard to tell where the sea ended and the sky began. Darkness filled the **vast** emptiness. There was no Earth. There were no mountains or streams. There were no animals or people.*

The god of the heavens asked the gods Tepew and Q'uk'umatz to help create a middle ground between sea and sky. They agreed. Together, the three became known as the Creators and Makers.



Tepew and Q'uk'umatz thought hard about what to create and how to create it. Finally they came up with a plan. Dressed in brilliant green and blue feathers, they shouted out the word earth. In an instant, Earth appeared. Part of the sea dried up and became land. Mountains rose up with valleys between their peaks. Then, the gods added fresh water. Lakes pooled in the foothills of the mountains. Rivers flowed from one end of the land to the other. Trees and plants sprang up along the river banks.

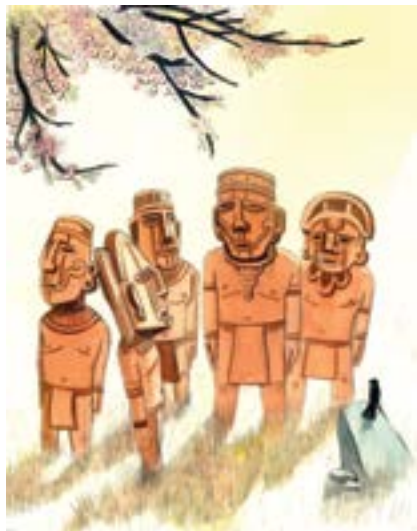
Though beautiful, Earth remained silent. It was too quiet. Tepew and Q'uk'umatz decided to add noisemakers. Suddenly, animals of every description filled the land. Jaguars and pumas crouched in the jungle. Deer and antelope roamed the plains. Snakes slithered along the ground. Eagles and turkey vultures perched high in the trees. The animals' screeching and roaring broke the silence. The gods were pleased. "Praise us for creating you," the gods begged of the animals. The animals just squawked, chattered, and howled in reply.

"Of what use are they?" Tepew and Q'uk'umatz asked. The gods wanted creatures to respect and honor them, to praise them, and to make sacrifices to them. Because the animals were unable to do these things, the gods declared a new purpose for animals. Animals would be food for people in the future. The next task was to create the people who would eat the animals.



First, Tepew and Q'uk'umatz made people from clay. The gods were pleased with how they looked, but the clay people were unable to move. They could not lift their arms or bend their legs to walk. When the sun shone down upon them, the clay people became soft and began to drip in the heat. When it rained, mud rolled off their gooey figures. Their mouths became mushy, and it was difficult to understand their speech. They could not communicate and

had no feelings. The gods decided to destroy these imperfect people.



Next, Tepew and Q'uk'umatz fashioned people out of wood. Surely, wooden people would be much sturdier than clay. They could honor and **nurture** the gods as the gods wished. At first, the wooden people seemed fine. They looked like humans and talked like humans, and they began to have children. Their

sons and daughters spread out into the mountains and valleys. But these **rigid** people did not develop well physically. Their wooden bodies began to **warp**. Without flesh and blood, the people were uncoordinated. Worst of all, they could not think. Without any memory of their creation, they made no effort to honor the gods with gifts of thanks. "What good," the gods wondered, "are these nonthinkers who wander aimlessly about the earth?" Tepew and Q'uk'umatz decided that these wooden people, too, must be destroyed.





The gods unleashed boiling rains and mighty floodwaters to drown the wooden people. They turned everything else on Earth against the wooden people, including their tools, tortilla griddles, and grinding stones. Cooking pots and water jugs rose up to attack them. When they tried to escape, roofs and tree branches collapsed on them. Animals threw them out of caves. With no place to hide, the wooden people were soon defeated. It is said that a few did survive and that they live in the trees today. These creatures, called monkeys, resemble the people who were the first to walk on Earth.

Neither clay nor wooden people served the gods as they intended. So, Tepew and Q'uk'umatz put their heads together once more. It was important to get it right on their third attempt. They asked some of Earth's animals for their help. A wildcat, a coyote, a parrot, and a crow searched for the perfect place for humans to live. The animals found a beautiful setting with lots of fruits and seeds. There, they also discovered an abundance of spectacular yellow and white corn. The animals brought the corn back to Tepew and Q'uk'umatz.



Tepew and Q'uk'umatz decided to create humans from this new food crop. So it was that the first men of corn came to be. Their flesh was made from corn kernels. The grain was ground with water to shape the arms and legs of four men. They fed these men with the same plentiful crop of which they were made.

These corn men seemed powerful indeed. They could hold onto things, move easily, and show feelings for one another. They could think, hear, speak, and see. In fact, their vision far surpassed that of the gods. They could see far into the distant heavens and deep into the oceans' depths. The corn men praised the gods and thanked them for their remarkable gifts. Tepew and Q'uk'umatz's third attempt at creating people was a success. Finally, these earthly creatures were grateful to their makers.



The Powerful Jaguar

As the top predators in the jungle, jaguars symbolized powerful beings. The gods wanted their new creations to be just as powerful, so they named the first corn men after the jaguar.

But all was not well. The corn men's sight was so good that the gods became jealous of them. The gods did not want to share supernatural powers with earthly beings. They wanted to make sure that gods remained more powerful than men on Earth. So, the gods decided to cloud the corn men's vision. They threw a mist over the corn men's eyes. Now, the corn men would only see things nearby. By blocking their distance vision, the gods destroyed some of the corn men's wisdom and knowledge.

When the corn men awoke the next day, they found corn women lying beside them. The gods had given them each a wife. Together with their wives, the corn people multiplied. In time, there were many nations of people. Some were light-skinned; others were dark. The people formed different classes and spoke many different languages. These multicultural people spread out across the land and filled every corner of it with praise for the gods.

Tepew and Q'uk'umatz thought back on their creation of Earth. They thought about the clay people. They thought about the wooden people. They thought about the corn people. On their third try, they had succeeded. They had created a world of thinking people who were grateful for their lives. The god of the heavens was pleased, too. Now, millions of creatures respected and honored the gods, praising them, and making sacrifices to them.



Chapter 5

Aztec City on the Water's Edge

THE BIG QUESTION

What factors led to the success of the Aztec capital of Tenochtitlán?

Have you heard of Mexico City? Did you know that this modern capital of Mexico was built on top of another city? If you visit Mexico City today, you can see archaeologists at work. They are busy uncovering the ancient city of Tenochtitlán.

Tenochtitlán was the capital of the Aztec Empire in the 1300s and 1400s. This empire existed more than 500 years after the Maya abandoned their great inland city-states. The ancestors of the people now known as the Aztec migrated from the north. By 1325 CE, they had settled in the Valley of Mexico.

Other people had lived in Mexico's fertile valley for thousands of years before the Aztec arrived. Many groups were competing for space. The Aztec had several temporary homes, all of which they were eventually forced to leave. The land the Aztec finally claimed may seem an unlikely choice—two **swampy** islands in the middle of Lake Texcoco.



Aztec Beginnings in Lake Texcoco

On the lakeshore, the Aztec built mud huts and lived on food from the lake: frogs, fish, and algae. They hunted deer, rabbits, coyotes, armadillos, and snakes. They raised bees, turkeys, and ducks. They gathered grasshoppers and worms for food.

The Aztec adapted to their swampy environment by creating **habitable** land from the lake bottom. They built gardens, called chinampas, in the middle of Lake Texcoco. They built bridges over the **marshes** and grew a variety of crops on the mainland as well. They cultivated corn, beans, squash, tomatoes, amaranth, and chilies. Members of the ruling class grew fruit trees in their small personal gardens. Crops grew throughout the year in Mesoamerica's tropical climate. As food supplies expanded, Tenochtitlán grew.

Chinampas

Gardens Built from a Lakebed

The Aztec perfected a technique for building gardens in Lake Texcoco. First, they scooped up mud from the bottom of the shallow lake. Then, they piled layers of mud and aquatic plants on top of one another. They used reed posts to anchor these rectangular gardens

to the lake floor. They planted willow trees along the borders to help hold the **artificially** filled lakeshore in place. A series of canals crossed the chinampas, providing a year-round source of water for crops. Fish and other aquatic life lived in the canals and were another source of food.



Tenochtitlán: A Well-Planned City

Tenochtitlán was laid out on a grid. Its streets and canals formed a pattern of squares. Its religious and ceremonial center was located at the heart of the city. This Sacred Precinct, or pyramid-temple complex, was much larger than those at the Maya centers. Stone walls carved with serpents surrounded the precinct. The Great Temple, or Templo Mayor, dominated the space inside the walls. On top of Templo Mayor, the Aztec built shrines to honor their two most important gods. One shrine was dedicated to Huitzilopochtli, the sun god. The other honored Tlaloc, the rain god.

Social class determined where people lived, how they dressed, and how they earned a living. Aztec priests lived in palaces within the Sacred Precinct. Just outside the Sacred Precinct, the **emperor** and members of the noble class built carved stone palaces and beautiful gardens. Beyond its city center,



Tenochtitlán was divided into four sections, or quadrants. Each quadrant was divided into 20 *calpullin*, or districts. Each one, by itself called a *calpulli*, had its own farm, marketplace, and school.

Commoners, including merchants, artisans, and farmers, lived together in the *capullin*. They built their houses of sundried clay bricks called adobe. These one-story houses often had **peaked** thatch roofs. Others had flat earthen roofs used for planting gardens. Many people also built domed mud huts outside their homes. These huts were used as sweat baths. The Aztec lit fires outside the huts to warm the walls. They entered the sweat baths once the inside walls became hot. They threw water against the heated walls, producing steam. The effect was similar to modern-day steam baths and saunas.

At Tenochtitlán, many people were employed to sweep the streets and get rid of garbage. Each neighborhood had public toilets.



Causeways, Aqueducts, and Marketplaces

Lake Texcoco contained salt water. Providing fresh water for the population of Tenochtitlán was a challenge. The Aztec used sand, dirt, rocks, and wooden stakes to build three wide causeways. Each causeway was about two and a half miles long. These wide, raised roads connected the city to natural springs on the mainland. Each causeway supported an aqueduct, a structure built to carry water. The aqueduct consisted of two clay pipes. One **transported** fresh water from the springs into Tenochtitlán for drinking and bathing. The second pipe was a spare, used only when the first pipe needed cleaning.

Bustling marketplaces filled Tenochtitlán and other cities. At the grand market in nearby Tlatelolco, thousands of people traded daily for goods such as clothing, food, and pottery. Merchants brought goods to exchange from all over central Mexico and even beyond.





Gods, Goddesses, and Sacrifices

Like the Maya, the Aztec believed in multiple gods and goddesses. They believed in gods of nature, gods of health, and gods of war. The Aztec believed that the sun god, Huitzilopochtli, could not make his daily journey from east to west without **nourishment**. They believed that the sun would not rise and the world would end if they did not feed Huitzilopochtli.



Active volcano near Tenochtitlán

The Aztec believed that the gods, humans, and nature worked together. The Aztec lived in a region surrounded by volcanic mountains. It was an area where earthquakes were likely to occur. They believed that the gods controlled these forces of nature. If the people angered the gods, the gods might rattle the earth or release hot lava from the mountains. So, like the Maya, the Aztec made sacrifices to the gods.

At the base of the temple steps, the Aztec built a rectangular ball court. The object of the ball game, called ullamaliztli, was to pass a rubber ball through a stone ring. Doesn't that sound a lot like the Maya game of pok-a-tok? Like pok-a-tok, the Aztec ball game was sometimes played as part of religious rituals.

Everyday Life in the Aztec Empire

The Aztec valued education. Boys went to different schools depending upon their social status. Noble boys were taught by priests in the temples. They learned to read and write and trained to be future leaders. In addition, noble boys learned about religion, medicine, law, and astronomy. Boys from lower social ranks attended schools where they learned a trade, such as building roads or repairing temples. From an early age, all boys trained for battle. Girls were educated separately. They learned the arts of cooking, sewing, and weaving.

Women and girls used fibers from both cotton and maguey cactus plants to weave beautiful cloth. Commoners and nobles alike wore bright and colorful fabrics dyed with natural plant dyes. Clothing styles varied throughout the Aztec Empire, but all clothing was loose and simple. Men and boys wore loincloths and draped themselves in triangular cloaks. Women and girls wore long skirts and sleeveless blouses. Noble men and women preferred clothes made of cotton and added gold, feathers, and fur. Necklaces, earrings, and bracelets made of precious gems decorated their bodies.



Boy being trained for battle



Girl learning to weave

Chapter 6

Emperors, Gods, and Foreign Invaders

THE BIG QUESTION

What led to the rapid fall of the powerful Aztec Empire?

As the city of Tenochtitlán grew, the Aztec fought for **dominance** over other city-states in the area. In 1428 CE, Tenochtitlán formed a Triple Alliance with the cities of Texcoco and Tlacopan in the Valley of Mexico. These three cities were allies, or on the same side. They united to conquer neighboring cities. Tenochtitlán quickly became the most powerful city of the three, and the most important city in Mesoamerica.

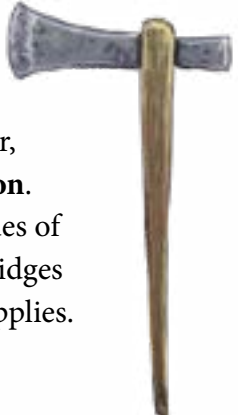
The Aztec had an organized social structure. You have already learned that Aztec families lived in districts called *calpullin*. Each *calpulli* elected a leader. Together, these leaders formed a city council. Each city council elected its own *tlatoani*, or leader, to govern the city. The *tlatoani* of Tenochtitlán was not only the leader of the city, but the leader of the empire as well. This

supreme leader was called the Huey Tlatoani, or Great Speaker. He was the emperor, or king, of the Aztec.



Moctezuma I

In 1440 CE, Moctezuma I became the Huey Tlatoani. He expanded the Aztec Empire beyond the Valley of Mexico by constantly waging war. Before going to war, Moctezuma sent **ambassadors** to neighboring groups of people. He gave these groups the option of sending him gifts of gold to avoid battle. If they refused, the emperor prepared his troops for battle.



War as a Way of Life

Priests determined the date of battle. As the day drew near, citizens gathered in the Sacred Precinct for the battle **procession**. Many people marched with the warriors. Priests strapped statues of the gods to their backs. Engineers carried materials to build bridges and towers along the way. Young boys carried weapons and supplies. Women and girls cooked and later cared for the injured.

When preparing for attack, smoke signals rose from the Aztec camps. These signals announced the **appointed** day of battle. The Aztec beat on drums and blew shrill whistles. At the sound of the commander's trumpet, young archers charged into battle. They were armed with bows and obsidian-tipped arrows. Warriors used a variety of wooden and stone weapons, many edged with razor-sharp pieces of obsidian. They threw darts. They hurled rocks over long distances using slingshots made from the fibers of maguey cactus plants. Spears, hatchets, and clubs were all common weapons of battle.



Success on the battlefield was the only way commoners could become nobles. If they captured four prisoners in battle, they were allowed to join one of the **elite** warrior societies. Each of these warrior societies named and identified itself with a specific animal. The warriors dressed in the feathers and pelts of their namesake animals. It was easy to spot these warriors in battle, especially the Eagles. An Eagle warrior wore a fancy headdress with his face peeking out from the eagle's beak. As soldiers advanced in rank, their costumes became more and more elaborate.



An Eagle warrior dressed for battle



Unrest in the Empire

The size of the Aztec army grew with each new conquest. Because the Aztec outnumbered the other groups, they won nearly every battle. By the time Mocteczuma II took the throne in 1502, the Aztec had fought numerous battles and made many conquests. The Aztec Empire extended from the Pacific Ocean to the Gulf of Mexico.



The emperor demanded tribute, or taxes, from all parts of the empire. When he conquered new lands, he allowed local governments to remain in place, but tribute had to be paid. People paid tribute in goods, including cacao, rubber, seashells, cotton, feathers, and precious gems. These goods contributed to Tenochtitlán's wealth and greatness. The emperor's demands created **resentment** among the conquered city-states.



Cacao (top), Cotton (middle), Feathers (bottom)

By the early 1500s, the Aztec ruled about 500 smaller city-states and millions of people. Tenochtitlán was the most densely populated city in Mesoamerica. And at the time, it was one of the largest cities in the world. Rumors of Tenochtitlán's wealth spread far beyond its boundaries.

Flower Wars were Fought for Blood

The Aztec ruled with fear and **might**. They believed Huitzilopochtli, the sun god, needed food daily, so they held ceremonial battles called “flower wars.” In Aztec poetry, flowers symbolized blood, so flower wars were blood wars. Unlike wars fought over the possession of city-states, these wars served the sole purpose of acquiring sacrificial victims. The best warriors, dressed in their finest battle clothes, fought in these ritual wars. Some groups avoided the flower wars by paying tribute, or taxes, to the Aztec.

The sun god



Warriors dressed for battle

Arrival of Cortés and the Spanish

Hernán Cortés, a Spaniard, was one of the men who heard tales of riches in Mesoamerica. In 1519 CE, he led an expedition from present-day Veracruz on the Gulf of Mexico. Seeking gold and power, he stepped ashore with about 500 men. They made their way inland on horseback. Cortés and his men fought and conquered powerful Aztec city-states along the way. However, these battles had a strange outcome. Instead of creating enemies, in some cases the Spaniards gained friends. Some city-states disliked the Aztec Empire so much they quickly became Cortés's strongest allies. These allies joined Cortés's troops. The size of the Spanish army grew to several thousand men. Together, they marched on to Tenochtitlán.



Hernán Cortés



Meeting between Moctezuma II and Cortés

When Cortés and his men arrived in Tenochtitlán, they were stunned by its elaborate palaces and dazzling chinampas. Moctezuma II welcomed Cortés and gave him gold and jewels. While the men greeted each other on friendly terms, it appears Cortés never intended to be Moctezuma II's friend.

Cortés left Tenochtitlán, determined to conquer the Aztec Empire. He planned to claim the land for the king of Spain.

Unpredictable factors made Cortés's task easier. First, some of the Aztec city-states became his allies. Second, the Spanish brought deadly European diseases with them. One of Cortés's men was ill with smallpox and this highly **contagious** disease spread throughout the empire. With no immune resistance to the disease and no cure for it, thousands of people died. By August of 1521 CE, over 40,000 Aztec lay dead. The powerful Aztec Empire, which rose up out of a swamp, was defeated.

Aztec Feathered Shield

Feather artifacts are rare as they are very **fragile** and hard to preserve. This extraordinarily beautiful shield has lasted hundreds of years. It was once carried into battle by an Aztec warrior. Its feathered fringe and tassels hung down to protect the warrior's legs.

The feathers on this shield come from a variety of birds common to the rainforests of Mesoamerica. They include the yellow oriole, the blue cotinga, the scarlet macaw, and the roseate spoonbill. Scholars think that the blue figure at the center of the shield is a coyote. Like eagles and jaguars, coyotes were symbols of one of the Aztec's elite warrior societies.



Yellow oriole



Blue cotinga



Scarlet macaw



Roseate spoonbill

Chapter 7

Birth of the Inca Empire

THE BIG QUESTION

What factors contributed to the Inca Empire becoming the largest pre-Columbian empire?

Travel south in your mind now, leaving behind the volcanic mountains and jungles of Central America. As you wind your way down into South America, you will cross the Equator. You will pass through more lush rainforests in the Amazon River Basin. Continue west in the direction of the Pacific Ocean. You will soon discover that there is no way to reach the ocean without crossing the Andes Mountains. This mountain range is one of the highest and longest in the world.

In the 1300s, the Aztec created an empire in Mexico and the Inca built an empire in the Andes. These civilizations developed nearly 3,000 miles apart. There is no evidence to suggest that the two empires had any direct knowledge of one another.

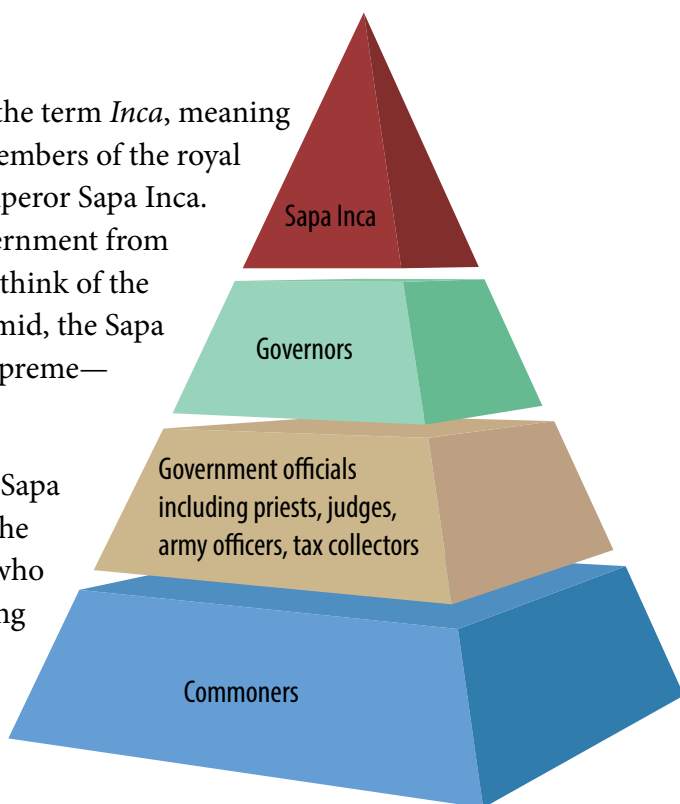
According to legend, the sun god chose the birthplace of the Inca civilization. He chose Cuzco, located in a beautiful valley in present-day Peru, as the place where the Quechua people should settle. They lived mostly in small farming communities for about 200 years. Then, in 1438 CE, a powerful enemy threatened the Quechua's way of life. The Quechua defeated this enemy, greatly increasing their power. The size of the Quechua army grew. With Cuzco as their base, they began to conquer other indigenous groups throughout the Andes Mountains. An empire was born.

The Quechua called their empire Tawantinsuyu, meaning “Land of Four Quarters.” They divided the empire into four areas, or quarters, some much larger than others. Cuzco was at the center of the empire where the four quarters met. The empire extended across the high Andes Mountains. From there, it dipped into sheltered valleys, windy plains, and dry coastal deserts. In the 1500s, the Spanish changed the empire’s name to *Inca*. Today, we use the name *Inca* to describe the largest pre-Columbian empire ever built.

Pyramid of Power

In the days of the empire, the term *Inca*, meaning king or lord, referred only to members of the royal family. The Inca called their emperor Sapa Inca. He ran a strong, organized government from the capital city of Cuzco. If you think of the Inca society structure as a pyramid, the Sapa Inca was at the top. He ruled supreme—above all others.

The Inca believed that the Sapa Inca was descended from Inti, the sun god. Heredity determined who would become emperor, meaning that when the emperor died, his son would become the next ruler. If the Sapa Inca had more than one son, he chose the strongest of his sons to replace him.



Nobles and members of the royal family held high-ranking government positions.

People treated the Sapa Inca like a god. He lived in a magnificent palace, dressed in gold-fringed clothing, and ate off gold plates. Servants carried him on a golden **litter**. Powerful men surrounded the Sapa Inca. Four governors helped him rule each of the empire’s four quarters. Most government officials were nobles and members of the royal family. They included priests, judges, army officers, and tax collectors. The bottom of the pyramid consisted of the rest of society—commoners who worked for the emperor.

The Inca Empire was divided into four quarters, some much larger than others.

Cuzco



Sapa Inca on a golden litter



Growing Food from Mountain Peaks to Coastal Plains

The success of the empire depended upon the commoners, most of whom were farmers. The Inca cultivated many different crops, including potatoes, corn, beans, peanuts, manioc, chili peppers, tomatoes, and squash. Cotton grew in the hot, dry coastal regions. **Quinoa** thrived in cooler, wetter mountain areas.

Terrace farming was a common practice in the Andes Mountains. Like the Maya, the Inca transformed hillsides with terraces, or steps of flat land. They built raised aqueducts and irrigated their crops with water from mountain springs. The terraces helped trap water, preventing erosion and run-off. The Inca produced an abundance of food for an ever-growing empire working with simple hoes, sod-breaking clubs, and foot plows.



Terraced fields trap water and prevent erosion.

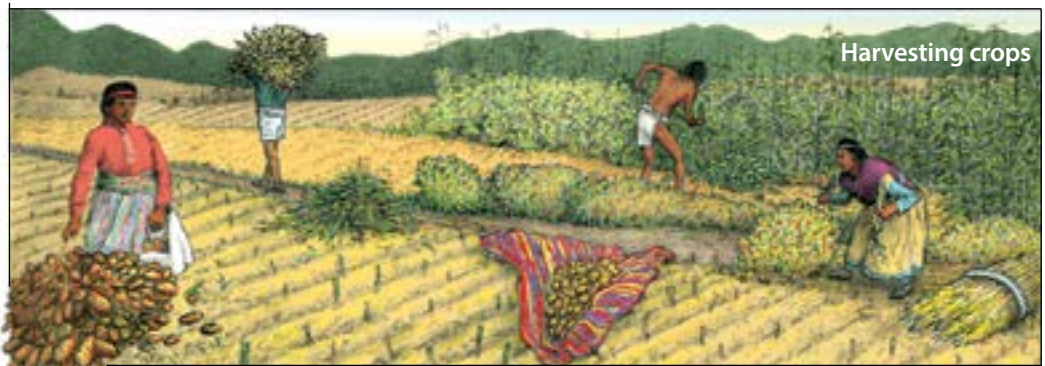


Potatoes, Potatoes, Potatoes

Potatoes, native to the Andean highlands, provided food year round. The Inca grew different varieties of potatoes along terraced garden slopes. The mountainous climate, with hot days and cold nights, was perfect for freeze-drying. Potatoes baked in the sun during the day and froze at night. This early method of preserving crops meant the Inca could store food for later use.

Government Organization: Tribute Rules for the Commoners

With each new conquest, the emperor acquired new land and more commoners to work the land. The emperor controlled the land and the crops grown on it. Commoners were organized into family units of 10 to 20 people. Governors divided the land among each unit, or ayllu. Each ayllu cultivated three separate plots. One plot was for feeding the priests and gods, another for feeding the emperor and his nobles, and the other for feeding themselves. The governors collected some of the harvested crops and placed them in storehouses throughout the empire. Storehouse produce fed traveling armies and served as disaster relief in times of emergency.

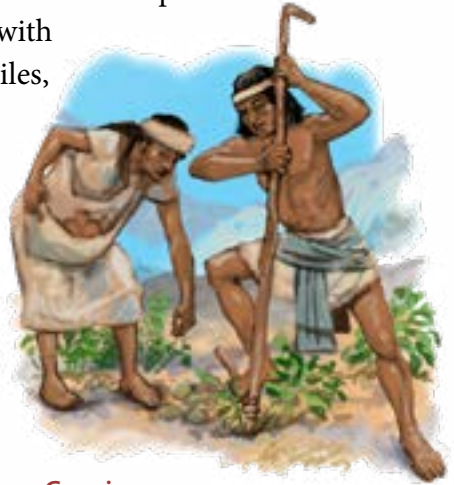




The Inca did not use any form of money. Like the Aztecs, they had a tribute, or tax, system. The government collected tribute in two ways. First, people paid a goods tax based on the number of people in their ayllu. For example, commoners only kept about one third of their harvest. They sent two thirds to the gods and nobles. People also paid tribute with pottery, textiles, and gems.

Serving in the army

The second government tax was a service or labor tax, called a mita. Each household chose someone, often the father, to fulfill the government's mita requirement. Some people served in the army. Others built roads and buildings. Still others worked in the mines, mining copper, tin, gold, or silver. As a result of the mita tax, the Inca built the most advanced road system in pre-Columbian South America.



Growing crops



Mining



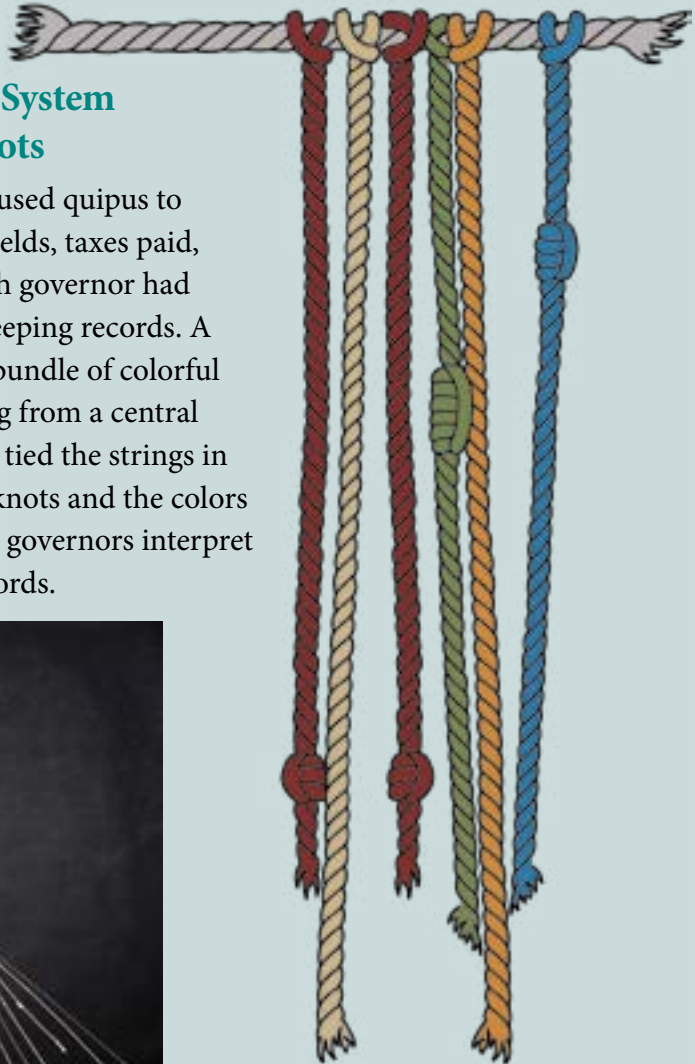
Constructing a wall

In exchange for tribute, the government took care of people. It made sure that people did not go hungry. The government cared for the sick and elderly. It made sure people in the empire had homes so they were not homeless. As long as people obeyed the Sapa Inca's rules, they received good care. If people disobeyed, they received severe punishment. If a farmer took food from the emperor's fields, he risked being severely punished. If he **condemned** the gods, he would surely lose his life.

The Quipu

A Color-Coded System of Counting Knots

The governors used quipus to keep track of crop yields, taxes paid, and taxes owed. Each governor had his own quipu for keeping records. A quipu looked like a bundle of colorful threads. Strings hung from a central rope. The governors tied the strings in knots. The types of knots and the colors of the strings helped governors interpret calculations and records.

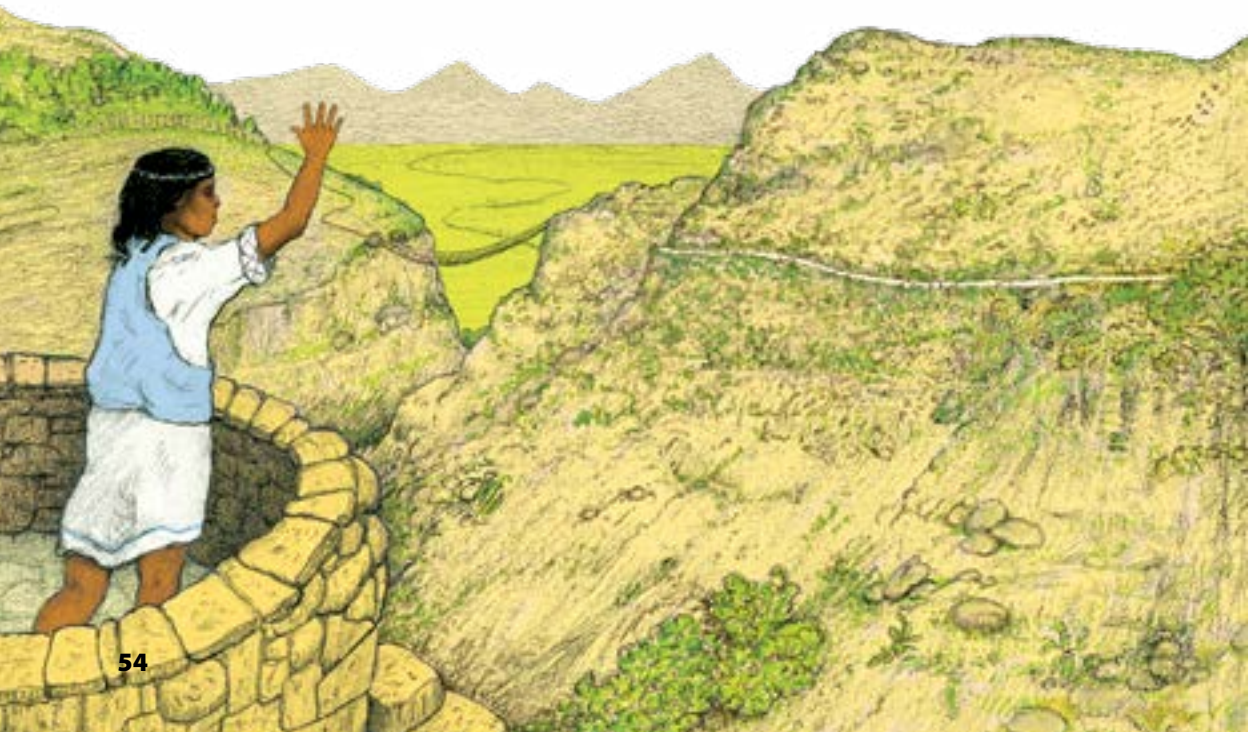


Quipus used to record information

A Superior Network of Roads

Inca roads created a network across different types of land. Using stone and **primitive** tools, mita workers followed the land's natural terrain. They chiseled stone out of mountainsides, building tunnels to connect cities from one end of the empire to the other. They laid steps up rocky cliffs. They stacked stones and floating reeds to form causeways over marshlands. Their rope bridges, probably the first **suspension bridges** in the world, spanned deep valleys and rivers along the way. They built low stone walls to keep desert sands from covering the flat, wide coastal roads. They edged the roads with stone gutters to prevent flooding. They even built tambos, or inns, for travelers. Thousands of workers maintained the empire's 24,000 miles of road.

The government primarily used the roads. Armies patrolled the roads, making sure commoners did not travel along them without permission. Because the Inca had no written language, the emperor kept in touch with his governors through **swift-footed** messengers. The emperor's messengers traveled across the empire carrying quipus. These knotted ropes contained records of everything from population figures to troop numbers to the size of animal herds. The messengers also memorized messages and transferred them orally from one person to another. They used relay stations that were set up about every mile along the roads.



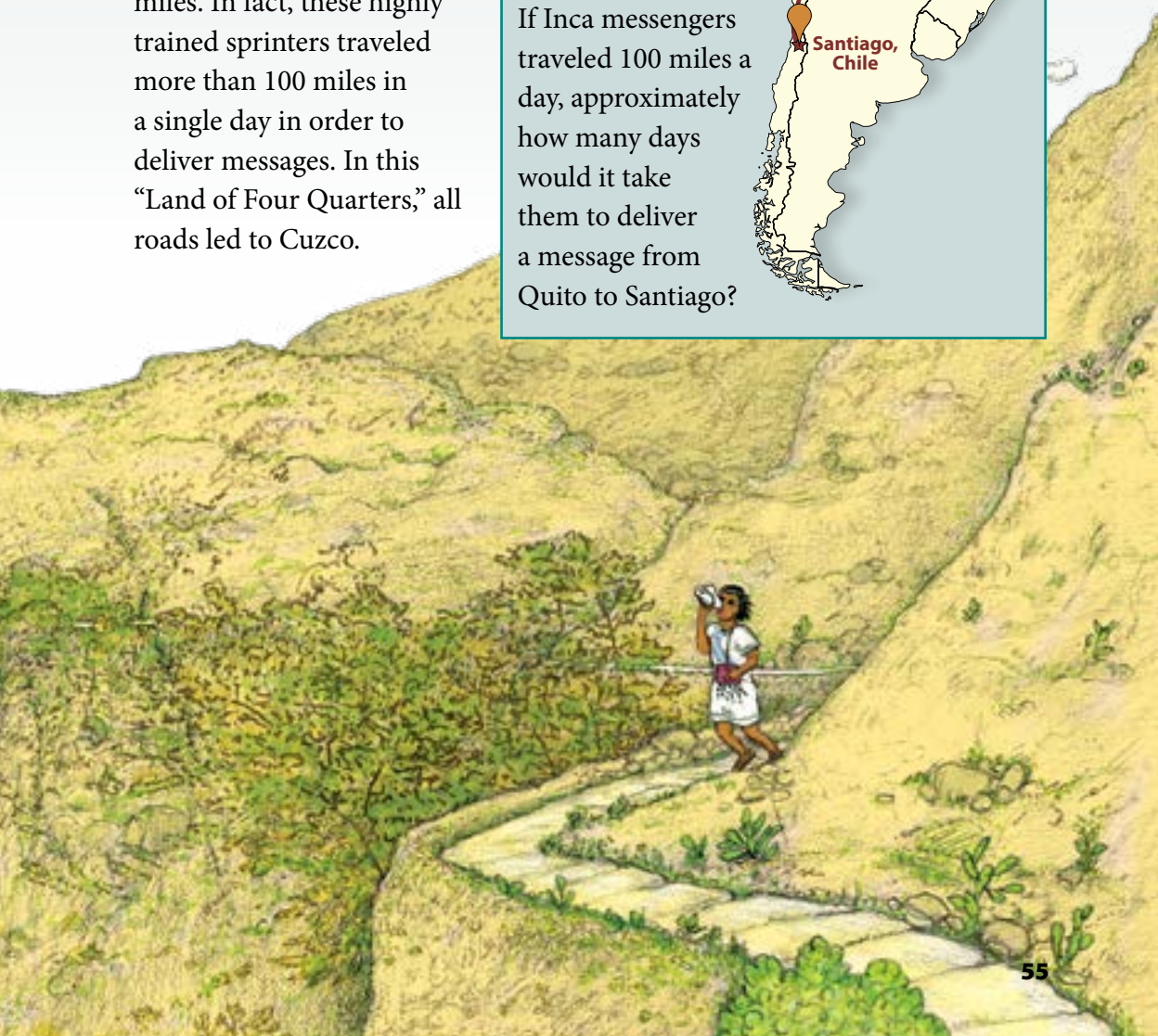
As one messenger approached another, he blew into a conch-shell trumpet, alerting the next messenger to be ready to run. The runner told his message to the next as the two ran side-by-side.

In this way, multiple messengers carried the same message from station to station across many miles. In fact, these highly trained sprinters traveled more than 100 miles in a single day in order to deliver messages. In this “Land of Four Quarters,” all roads led to Cuzco.

Math Challenge

Calculating Time

It is about 2,300 miles between the present-day cities of Quito, Ecuador and Santiago, Chile. Today, it takes about five hours to fly from one to the other. If Inca messengers traveled 100 miles a day, approximately how many days would it take them to deliver a message from Quito to Santiago?

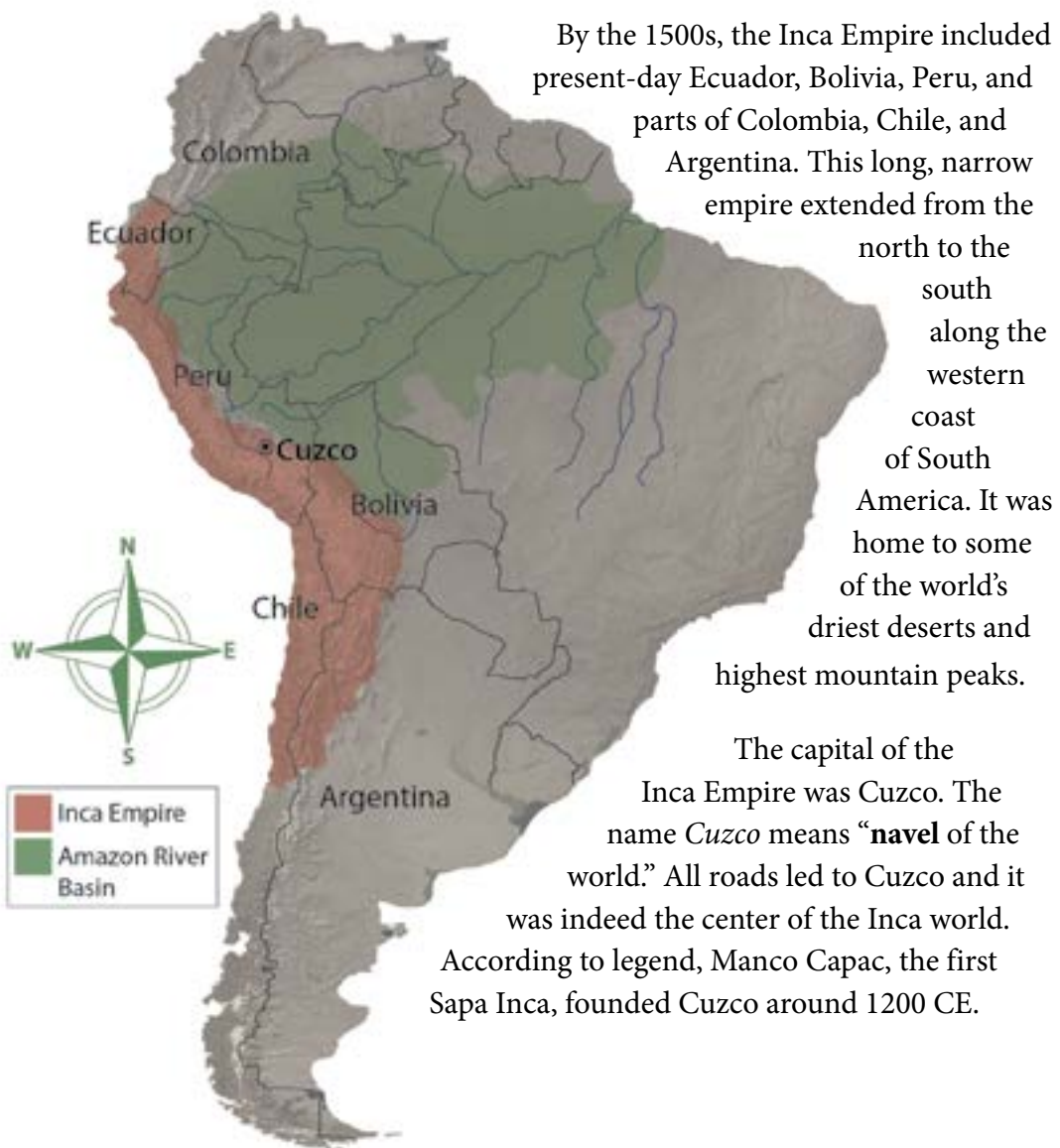


Chapter 8

All Roads Lead to Cuzco

THE BIG QUESTION

What were the key causes of the decline of the powerful Inca Empire?



By the 1500s, the Inca Empire included present-day Ecuador, Bolivia, Peru, and parts of Colombia, Chile, and Argentina. This long, narrow empire extended from the north to the south along the western coast of South America. It was home to some of the world's driest deserts and highest mountain peaks.

The capital of the Inca Empire was Cuzco. The name *Cuzco* means “**navel** of the world.” All roads led to Cuzco and it was indeed the center of the Inca world. According to legend, Manco Capac, the first Sapa Inca, founded Cuzco around 1200 CE.

Cuzco was a city filled with impressive stone buildings. The Inca were master stonemasons. They used huge stone blocks, tightly fitted together to build palaces, temples, and government buildings. They did not use mortar to hold the stones in place.



Temple of the Sun

Important government officials came and went from Cuzco, carrying out the empire's business. Few commoners ever entered the city, unless invited to a special ceremony or gathering.

The Coricancha, or Temple of the Sun, dominated Cuzco's main plaza and served as the religious center of the empire. Covered with sheets of gold and silver, its walls gleamed. The temple was reserved for priests, the Sapa Inca, his family, and aclas, or chosen women.

Aclas

The Emperor's New Clothes

Aclas lived together, preparing ritual food, maintaining the sacred fire, and making daily offerings to the gods. Aclas wove fine textiles. They made all of Sapa Inca's clothes as well as the clothes of the nobility. They used nothing but the best wool—the fine, silky white **fleece** of the vicuña, a wild relative of the llama.

These chosen women spent their entire lives working for the emperor.





The fortress of Sacsahuaman

Sapa Inca Pachacuti built a fortress in the hills surrounding Cuzco. The fortress, called Sacsahuaman, is one of the most important architectural masterpieces on Earth. Scientists think that it took 20,000 men about 60 years to complete the fortress. Nobody knows how its stone construction was possible. They did not use wheels to transport large stones or to lift them into place. The Inca may have used llamas—pack animals native to the Andes—to carry heavy materials. They may have used logs, ropes, and ramps to move massive limestone boulders into place. Stonemasons shaped the many-sided stones with pounding rocks and bronze chisels. The stones fit together like pieces of a jigsaw puzzle. Wedged so tightly together, not even a blade of grass could slide between the stones. These jagged walls have withstood earthquakes for more than 500 years!



Tightly wedged stones

Everyday Life in the Inca Empire

Commoners lived in ayllu units in the surrounding countryside. Their homes had few windows and often filled with smoke from central fireplaces. Families lived in one-room rectangular huts made of adobe and thatch and slept on straw mats on cold earthen floors.

To make clothing, Inca women and girls wove animals' wool into cloth and dyed the cloth with vegetable dyes. Most people's clothing was made from the wool of domesticated llamas and alpacas native to the Andes. The much finer wool of vicuñas was used to make the clothing of royalty alone.



**Inca woman
wearing traditional
cloak and sandals**

Men and boys wore loincloths and knee-length tunics. Women and girls wrapped their bodies in one large cloth from head to toe. These loose cloths were belted at the waist and pinned at the shoulder. Males and females both wore cloaks and sandals. Clothing was much the same throughout the empire, but different regions wove distinctive patterns into their cloth. Every region had its own style of hats as well.



Traditional hats

Skilled artisans populated the hills and coastline long before the Inca Empire came to power. They used metal, stone, and clay to make both decorative and useful tools. Noble men and women received beautiful gold jewelry, paid to the emperor as part of the commoners' required taxes.

Commoners did not always stay in the same place. The government conquered new groups and moved people from existing ayllu units to different parts of the empire. These government-arranged relocations killed two birds with one stone, or served two purposes at once. First, the relocations stationed workers where they were needed. Perhaps one part of the empire needed masons and another needed skilled potters or weavers. Second, the relocations made it more difficult for the newly conquered tribes to remain unified. This helped prevent them from rebelling against the government.

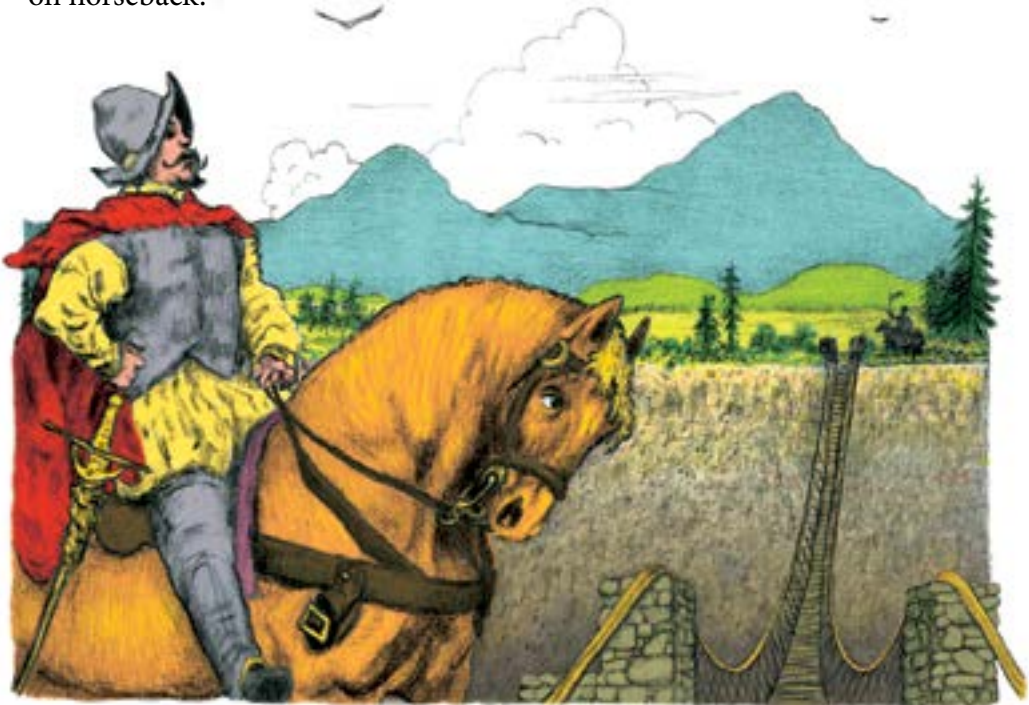
Royal Fighting, Pizarro, and the End of an Empire



Francisco Pizarro

The government kept tribal rebellions under control. However, a **quarrel** between two royal brothers nearly brought down the Inca Empire. Brothers Atahualpa and Huascar were fighting for control of the empire. Their father, Sapa Inca Huayna Capac, gave each brother separate parts of the empire to rule. When the emperor died, both brothers wanted to rule the entire kingdom. They were fighting with each other when the Spanish arrived in South America.

The year was 1532 CE. Francisco Pizarro, a Spanish conquistador, was exploring the Pacific coast of South America in search of gold. He led his men through deserts and over snow-capped mountains. The conquistadors were delighted to find that the Inca's swaying suspension bridges were strong enough to support their crossings on horseback!



Many suspension bridges could support horses.



Atahualpa, in chains, looks on as his prison cell is filled with treasure.

When Pizarro arrived, he found the city of Cuzco weakened from the fighting between the brothers. The Spanish joined forces in favor of Huascar. They imprisoned his brother, Atahualpa. Knowing that the Spanish had come in search of riches, Atahualpa made a deal with the Spanish. He offered to fill his prison cell with gold and silver in exchange for his life. The Spanish agreed. Then, at the eleventh hour, or the latest possible moment, the Spanish changed their minds. They killed Atahualpa and kept his room full of treasures.

The Inca civilization began slowly and lasted barely 100 years. Civil war had already weakened the Inca Empire before the Spanish conquerors arrived. European diseases killed 40 percent of the Inca population, quickening the end of the empire. When the Inca Empire ended, it was the largest pre-Columbian empire in the Americas. Descendants of the Inca still live in the Andes today, carrying on many of their traditions.

City in the Clouds

Machu Picchu is often called “the city in the clouds.” Its crumbling palaces and temples are perched on a mountain ridge, high in the Andes. Built in the 1400s, Machu Picchu probably served as a royal estate and ceremonial center for Inca emperors.

Machu Picchu is one of the world’s most important archaeological sites. Located about 45 miles from Cuzco, the Inca abandoned Machu Picchu before the Spanish arrived. Hidden in the mountains, Spanish conquerors never discovered this gem. It remained widely unknown until 1911, when Melchor Arteaga, a local Quechua-speaking man, led American archaeologist Hiram Bingham there. The Inca left no written records of their empire. Archaeologists must rely heavily on such sites for clues about how the Inca lived.

Today, tourists make the strenuous climb along the Inca Trail just to watch the sunrise over Machu Picchu’s surrounding peaks.



Llamas graze above the ruins of Machu Picchu.



Chapter 9

Myths of the Aztec and the Inca

THE BIG QUESTION

How did the Aztec and Inca explain the creation of their land and people?

Aztec Myths

The Five Suns

Like the Maya, the Aztec passed down their own traditional stories, or myths, from one generation to the next. You have already learned that the sun played an important role in the life of the Aztec. The sun is the subject of many Aztec myths, including a creation myth called “The Five Suns.” In this myth, each sun represents a separate world.

Aztec Calendar Stone

Archaeologists discovered this Aztec calendar stone beneath Mexico City’s central square in 1790. Although it is called a calendar stone, the 24-ton disk is not a calendar at all. It served as an altar and was dedicated to the sun god. The stone’s geometric face is covered with calendar signs and carvings that illustrate Aztec creation myths. The Aztec’s four previous worlds, or suns—jaguar, water, wind, and storm—are all represented. Two fire serpents are carved onto the sides of the disk. According to Aztec belief, these serpents played an important role by helping to carry the sun across the sky every day.



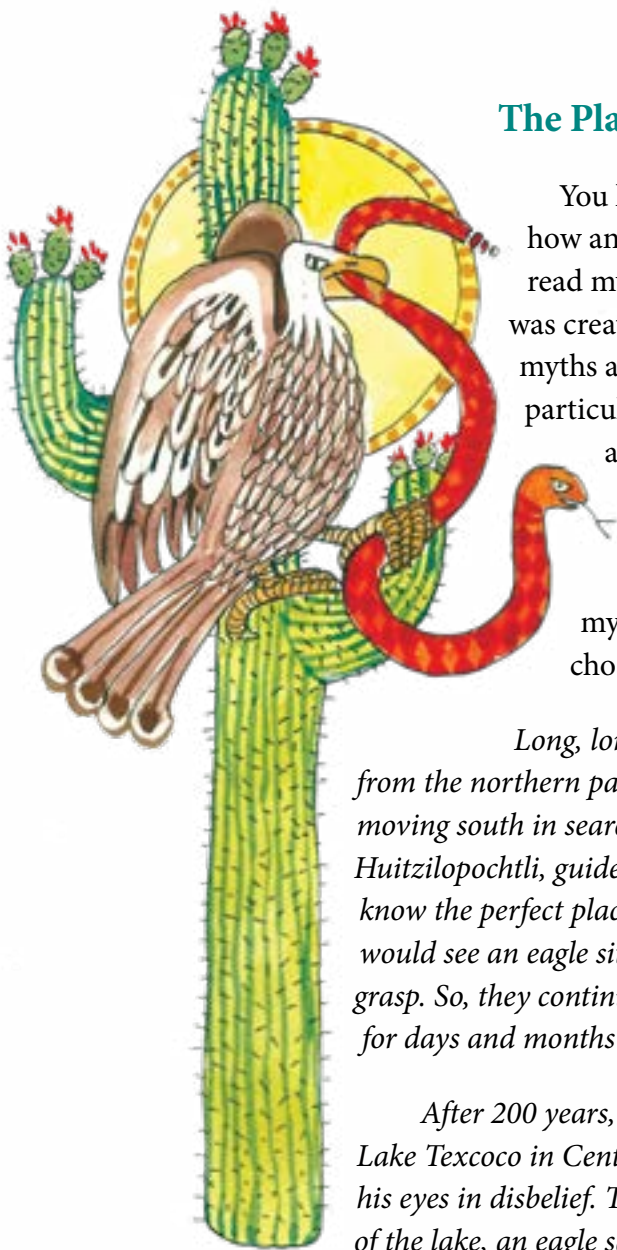
*Tezcatlipoca, or Smoking Mirror, ruled the first world, known as Jaguar Sun. Monstrous giants inhabited Jaguar Sun. When jaguars swallowed the giants whole, the first world came to an end. Quetzalcoatl, or Feathered Serpent, ruled the second world, known as Wind Sun. A great hurricane swept across this world, killing large numbers of people. The few survivors fled to the treetops where they became monkeys. Tlaloc, He Who Makes Things Sprout, ruled the third world, or Storm Sun. Its inhabitants ate aquatic seeds, but very few survived the heavy rains that fell. Those people who did survive turned into birds. The goddess Chalchiuhtlicue, Lady of the Jade Skirts, ruled the fourth world, or Water Sun. A great flood **engulfed** the people of Water Sun and transformed the survivors into fish.*

One of the gods had to be sacrificed before each new world could be created. After the fourth world ended, the brave god Nanahuatzin, Full of Sores, threw himself onto a flaming bonfire. He then became the ruler of the fifth world, called Earthquake Sun.



1. Smoking Mirror, ruler of Jaguar Sun; 2. Feathered Serpent, ruler of Wind Sun; 3. He Who Makes Things Sprout, ruler of Storm Sun; 4. Lady of the Jade Skirts, ruler of Water Sun; 5. Full of Sores, ruler of Earthquake Sun

The Place of the Prickly Pear Cactus



You know that myths often explain how and why events happen. You have read myths that explain how the earth was created and populated by people. Some myths also explain why cultures arose in a particular place. These homeland myths are important as a means to explain how societies are shaped by their environment. The following retelling of the Aztec homeland myth explains why this group of people chose to settle in the middle of a swamp.

Long, long ago, a tribe of people traveled out from the northern part of what is now Mexico. They began moving south in search of a new place to live. Their god, Huitzilopochtli, guided them. He told them that they would know the perfect place to settle. Huitzilopochtli said they would see an eagle sitting on a cactus with a snake in its grasp. So, they continued to migrate south. They wandered for days and months and years in search of this place.

After 200 years, a priest rested one day on the edge of Lake Texcoco in Central Mexico. He looked up and rubbed his eyes in disbelief. There, on an island in the middle of the lake, an eagle sat perched on a cactus. The eagle was clutching a snake. The people had found their home at last. The Aztec built their capital city of Tenochtitlán on the island.

The country of Mexico takes its name from the Culhua-Mexica people, who later became known as the Aztec. Its modern-day flag bears the emblem of an eagle on a cactus clutching a snake.



Inca Myths

Viracocha, Creator of All Things

Just like the Maya and the Aztec, the Inca of South America have their own creation myth to explain how things came to be. This retelling of the story begins at Lake Titicaca with the Inca sun god, Viracocha. Bordered by both Bolivia and Peru, this lake is the highest **navigable** lake in the world.

*In the beginning of time, total darkness blanketed the world. There was no land and no sky, only water. Then Viracocha **emerged** from the waters of Lake Titicaca, high in the Andes Mountains. He created land and sky. Next, he breathed life into stones, creating a giant race of men. These brainless men angered Viracocha and he turned many of them back into stone. Then he flooded the land so nothing but water remained.*

*Once the floodwaters **receded** and land reappeared, Viracocha rose up out of the lake once more. This time he brought light out of darkness. He created the sun, the moon, and the stars. He created thunder and lightning. He created time by commanding the sun to move across the sky. He created birds and animals, too. Then, Viracocha created figures who looked a lot like him.*



Viracocha rising
up out of the lake



Painted stone figures



Buried stone figures

Once again,
Viracocha began with
stones, but this time he
chose much smaller ones.
He painted a different
figure onto each stone.
He painted men and
women, old and young.
He painted boys and girls
of different shapes and
sizes. He painted pregnant
women and women with
babies. Some figures had
long hair; some had short.
Some had blue eyes; some
had green. Each figure
had colorful, patterned
clothes. Viracocha gave
them all cloaks and
sandals to wear.

When he finished
painting, Viracocha
divided the stone figures
into groups, or nations,
and created a language
for each group. He
created different songs
and different seeds to
plant in the ground. Then
Viracocha buried these
silent, motionless figures in
separate homelands. They
lived in darkness until he
was ready to breathe life
into them.



Viracocha breathing life into stone figures

When he was ready, Viracocha set out in the direction of Cuzco, awakening stone figures along the way. He taught each group how to live on each parcel of land. Meanwhile, two of his helpers branched out across the land. They, too, breathed life into the colorful stones. Then, the helpers taught the stone people how to live near the caves, streams, rivers, and waterfalls of their homelands.

When Viracocha and his helpers had finished, they met in Cuzco and set off in the direction of the sea. Pleased with their teachings, they rejoiced that new nations would rise up across the mountainous land. When they reached the Pacific Ocean, Viracocha and his helpers walked out over the waves and disappeared.

People say that Viracocha wandered Earth disguised as a beggar and continued to teach his people during his remaining days. Some say he performed miracles to help people with their troubled lives. Today, the places from which his stone figures emerged—caves, streams, rivers, and waterfalls—are huacas, or sacred places. The Inca depict Viracocha wearing the sun as his crown, holding thunderbolts in both hands, and crying tears of rain. He was the Creator of All Things.



Viracocha, the Inca Creator of All Things

The Founding of Cuzco

The following myth is similar to the Aztec homeland myth. Lake Titicaca is featured in the Inca homeland myth just as it was in the Inca myth of creation. Viracocha, the sun god, is not named in the following retelling of the story, but he is the one who is given credit for choosing Cuzco as the homeland of the Inca.

*Many years ago, two creatures emerged from a lake at the top of the world. Manco Capac and his wife, Mama Ocllo, rose up out of Lake Titicaca. They then began traveling south across the magnificent Andes Mountains. The sun god gave them a golden **staff**. He told them to search for a **suitable** spot to start a new nation of people. They would know they had arrived at this magical place when their staff sank easily into the ground. Manco Capac and Mama Ocllo traveled for many days and many nights. All along the way, they tested the ground with their staff, but it would not **pierce** the hard earth. One day they reached a beautiful valley. The staff sank deep into the ground with little effort. At last, they had found the land that the sun god had promised. They settled in the valley and named the city Cuzco. Manco Capac took leadership over other tribes in the area. He became the first ruler of the Inca. Cuzco, chosen city of the sun god, became the capital of a great empire.*



Manco Capac and Mama Ocllo

A Spanish Conqueror's Impressions

When Spaniards came to the Americas in the 1500s, they were seeking gold, silver, and other riches. They also sought to **topple** empires and replace them with their own. Hernán Cortés, one of these Spanish explorers, conquered much of Mexico. Cortés wrote a letter to Charles V, the king of Spain. This adaptation of his letter describes the splendid Aztec city of Tenochtitlán and its advanced civilization.

I am writing to your Majesty to tell you of this noble city of Tenochtitlán, and of the many rare and wonderful objects it contains. I also wish to tell you about the government and religious customs in this empire, which Moctezuma II rules. I would need much more time and many more writers to tell you everything, but I will do my best to describe what we have found in this part of the Americas.

This great city of Tenochtitlán is situated in a lake. Four wide artificial causeways form the four entrances to the city. Ten men, riding side-by-side on horseback, could easily cross each causeway at once. They all lead to the mainland, which is about three miles away.



Hernán Cortés

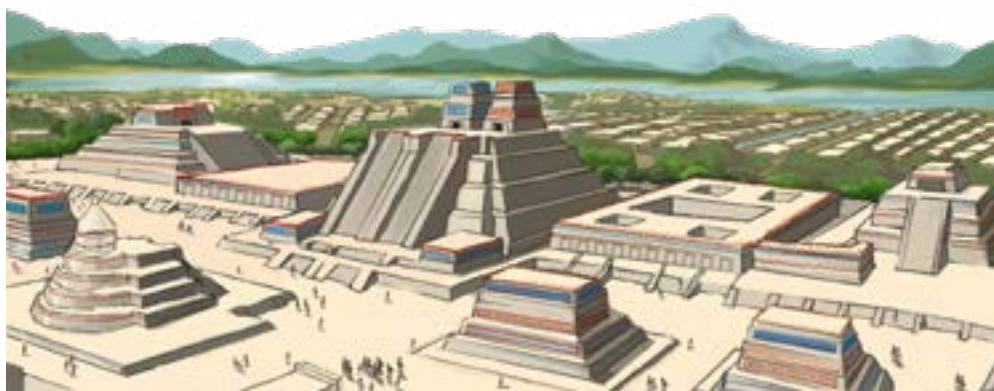
The city is as large as any I have ever seen in Spain. Its main streets are very wide and straight. Canals intersect with many streets. People use canoes to navigate the canals. There are also very wide bridges throughout the city.

*Public squares with markets for buying and selling fill the city. People sell every kind of merchandise imaginable in the grand marketplace. It draws more than 60,000 people to the city daily. The marketplace is made up of many different sections. Each section is full of stalls, set up side-by-side, selling the same merchandise. For example, all the cloth is sold in one quarter and all the gold in another. For such a large market, it is very **orderly**. If arguments arise in the marketplace, the **magistrates** settle the disputes inside a large central building. They punish people who are not behaving properly.*



Marketplace at Tenochtitlán

This great city contains a large number of temples honoring many gods. There is one district within the city that far surpasses all the rest. Surrounded by a lofty wall, there is room enough for a town of 500 families. Priests live in its stone-carved temples with large rooms and long hallways. There are 40 tall towers, beautifully made of wood and stone, which serve as burial places for the nobles. It is not humanly possible to describe the exquisite architectural details of these towers. The largest of these has 50 steps leading to its entrance. Inside, chapels dedicated to Aztec gods contain the work of the nation's best artisans. Images are carved in wood. Walls are painted with figures of monsters and other objects. These are sacred places and only the noble classes may enter them.



Temples and pyramids in the city center

*This great city contains many other fine and magnificent houses. Nobles, the city's wealthiest citizens, live in the city center. In addition to large and spacious rooms for ordinary purposes, each house has **conservatories** of flowers on both upper and lower floors. I cannot begin to describe the luxury of these nobles' homes.*

Moctezuma's people have devised a clever way to bring fresh drinking water to the inhabitants of this city. Two stone pipes, each of which is two paces wide and about five feet tall, line one of the causeways that lead into the city. An abundant supply of excellent water flows through one of these pipes to be distributed throughout the city. The second pipe, running beside the first, usually remains empty. People only use the second pipe when they are cleaning the main pipe. Fresh water flows from the pipes into canals built along the city's many bridges. This aqueduct, made of pipes and canals, serves the whole city.

Canoes pass under the freshwater canal bridges. From the canoes, people reach up and pay men stationed on the bridges to fill their vessels with fresh water.

The people of this great city have excellent manners, treating one another politely and with respect. They are clean and dress in attractive clothes, paying close attention to how they look. This has surprised me as I did not think we would find such civilized people in this distant land. They are, in fact, as civilized as any people I have encountered in Spain.

*No person dresses in finer clothing than the emperor, Moctezuma. Every day, he wears four different suits and he never wears the same suit twice. Such extravagance is **apparent** in every part of his life. I know not where to begin. Six hundred nobles and men of rank serve his highness every day at the palace. They serve his meals in a large hall filled with spectacular dishes. Everything is orderly and clean; servants bring water for Moctezuma to wash his hands between courses. They serve each new course on clean plates with fresh napkins.*



Moctezuma II

*Moctezuma rarely appears in public but when he does, people show their respect by turning away from him or lying down in the streets until he has passed. I do not have room here to recount all the amazing ceremonies that are held in honor of Moctezuma and the gods, but never have I seen such **lavish** events as are held in Tenochtitlán. It is indeed a most magnificent city.*

Your humble servant,

Hernán Cortés

Ice Maiden of the Andes

In 1995, Dr. Johan Reinhard made an important scientific discovery while climbing in the Andes Mountains of Peru. He and his companion, Miguel Zarate, planned to get a better view of a nearby erupting volcano. Instead, they discovered a frozen body. As one of the leading high-altitude archaeologists in the world, Reinhard knew what they had found. He was staring into the face of an ancient Inca corpse.



Volcano in the Andes Mountains

It was Zarate who first spotted the reddish feathers peeking out from under gravelly gray ash beneath the summit's ridge. The feathers, from a scarlet macaw bird, were part of a headdress attached to a small shell figurine. Zarate uncovered two similar statues nearby, each clothed in colorful striped fabrics.

Reinhard recognized the statues. They belonged to the ancient Inca. Reinhard thought that more artifacts may be buried in the area but he was not prepared for what he found next. Bits of cloth, llama bones, pottery shards, maize kernels, and cloth bags were strewn across the slope. Inside the volcano's crater was a mummy bundle—the first frozen female mummy ever found in South America.

The mummy was frozen solid, but Reinhard knew that if he left the exposed bundle on the mountain it could be damaged by sun and



Johan Reinhard with bundle in his backpack

volcanic ash. It could be hidden by snow in a blinding snowstorm or looted by treasure hunters. Reinhard likened the mummy to a time capsule, containing information about ancient people of the past. Deciding that he must carry the mummy down the mountain, he wrapped the striped bundle in plastic and strapped it to his backpack. The descent was difficult. Carrying an extra 90 pounds, Reinhard fought the cold darkness. A light snow fell. He felt nauseous as he scrambled over the ice. Exhausted, Reinhard abandoned the mummy and



Leading the pack animal with the bundle

retreated to his tent several hundred feet below for the night.

The following morning Reinhard collected the mummy and placed it between two sleeping bags to act as insulation, protecting it from the sun. He and Zarate tied the bundle to a pack animal and continued the

grueling trip down the mountain. They walked nonstop for 13 hours before reaching the nearest village. There, they boarded an overnight bus to the town of Arequipa. The ice mummy rode in the coach's underbelly. Reinhard breathed a sigh of relief as he delivered the still-frozen mummy to a team of archaeologists in Arequipa.

The frozen female mummy became known as Juanita. Archaeologists already knew that the ancient Inca women wore shawl pins. However, it was not until the discovery of Juanita that they saw exactly how Inca women wore their shawls. Juanita's shawl was folded, wrapped over her shoulders, and fastened with a silver pin across her chest. Shawl pins found among mountain artifacts indicate to archaeologists that the mummies found are female. Hair is another indicator of gender. Cone-shaped hair was typical of males, whereas women wore their hair pulled back with a center part. Males and females alike wore feathered headdresses like those found near Juanita.

Several museums now house the mummies and Inca artifacts found in the Andes. You can see Juanita on display at the Museum of High Inca Sanctuaries in Arequipa, Peru. Argentina created the Museum of High Altitude Archaeology to honor its own Inca ancestors. These buildings are places for modern-day Inca to celebrate their heritage.

Glossary

A

ambassador, *n.* a person sent to represent his or her government in another land (**ambassadors**)

apparent, *adj.* easy to see or understand

appointed, *adj.* established or chosen in an official way

arid, *adj.* dry and having little rain

artificially, *adv.* in a way that does not exist in nature

artisan, *n.* a person who is skilled at making things by hand; a craftsman (**artisans**)

B

bustling, *adj.* busy with activity

C

cenote, *n.* a natural well formed from a sinkhole (**cenotes**)

city-state, *n.* a city, and the area surrounding it, that governs itself (**city-states**)

commerce, *n.* the buying and selling of goods and services

commoner, *n.* a person who is not part of the noble class (**commoners**)

condemn, *v.* to say in a strong way that something is bad or wrong (**condemned**)

conservatory, *n.* a special room used for growing plants (**conservatories**)

contagious, *adj.* able to be passed between people or animals

creation, *n.* the act of making something new

culture, *n.* the beliefs, traditions, and way of life shared by a group of people

D

descendant, *n.* a relative of someone who lived in the past (**descendants**)

disperse, *v.* to spread apart in different directions (**dispersed**)

distinct, *adj.* different in a noticeable way (**distinctive**)

diverse, *adj.* made up of different people or things

domesticate, *v.* to raise and train animals to live around humans
(**domesticated**)

dominance, *n.* the state of being more important, successful, or powerful
than most or all others

dwindle, *v.* to become smaller or lessen over time (**dwindled**)

E

elite, *adj.* most successful, powerful, or wealthy

emerge, *v.* to come into view (**emerged**)

emperor, *n.* a ruler who has total control of a region

empire, *n.* a large territory or group of people under the total control of one
ruler or government

engulf, *v.* to surround or cover completely (**engulfed**)

epidemic, *n.* a sudden, widespread illness

F

fleece, *n.* the woolly coat of a sheep or related animal

flourish, *v.* to be successful (**flourished**)

fragile, *adj.* easily broken

G

game, *n.* 1. animals that are hunted; 2. an activity done for pleasure or sport

generation, *n.* a group of people born and living at the same time
(generations)

grueling, *adj.* very difficult and tiring

H

habitable, *adj.* fit to live in

I

incessant, *adj.* continuing without stopping

indigenous, *adj.* produced, living, or existing naturally in a particular area

interpret, *v.* to explain or determine the meaning of something

irrigate, *v.* to supply water using pipes or channels

isthmus, *n.* a narrow piece of land that connects two larger pieces of land

L

lavish, *adj.* much more than is needed, especially to show

litter, *n.* 1. a covered bed with long poles at the bottom for carrying someone of high importance; 2. trash lying on the ground; 3. a group of baby animals born at the same time

lush, *adj.* healthy and full

M

magistrate, n. a local government official similar to a judge (**magistrates**)

marsh, n. soft, wet land overgrown with grasses (**marshes**)

might, n. power or force

mortar, n. a wet substance that hardens as it dries to hold bricks or stones together

N

navel, n. belly button

navigable, adj. deep and wide enough for ships to pass through

nourishment, n. food and other things that are needed to live and be healthy

nurture, v. to care for something or someone so that it/he flourishes

O

orderly, adj. arranged in a neat, tidy way

P

peaked, adj. pointed

penetrate, v. to go through or into something

pierce, v. to make a hole in something

primitive, adj. simple and basic

procession, n. a group of people or vehicles moving together as part of a ceremony

pulley, n. a simple machine made of a wheel or set of wheels used with a rope or chain to raise and lower objects (**pulleys**)

Q

quarrel, *n.* an argument or disagreement

quinoa, *n.* a plant that grows in the Andes Mountains with seeds used as food or ground into flour

R

recede, *v.* to move back (**receded**)

resentment, *n.* a feeling of displeasure or anger about something unfair

rigid, *adj.* stiff and inflexible

S

sacred, *adj.* holy or deserving respect

sieve, *n.* a tool with small holes for separating big and small pieces (**sieves**)

staff, *n.* a pole or rod used as a sign of authority or as support when walking

stucco, *n.* a type of plaster used as decoration or to cover walls

suitable, *adj.* having the right qualities

suspension bridge, *n.* a crossing hung from cables attached to towers
(**suspension bridges**)

swampy, *adj.* resembling wet spongy land often partly covered with water

swift-footed, *adj.* quick

symbolize, *v.* to stand for an idea or characteristic (**symbolized**)

T

temple, *n.* a building devoted to religious worship (**temples**)

textile, *n.* woven or knit fabric (**textiles**)

topple, *v.* to remove a government from power

trade, **1. v.** to give something in exchange for something else; **2. n.** a job that requires special training or skills (**traded**)

transport, **v.** to carry from one place to another (**transported**)

tunic, **n.** a knee-length piece of clothing, like a simple dress (**tunics**)

V

vast, **adj.** large or great in size, amount, or extent

W

warp, **v.** to bend or twist out of shape

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