

American Indians and Their Land

How did American Indians adapt to different environments in North America?

Introduction

In this lesson, you will learn about the first people to live in North America. You will find out where they came from and the places that they settled in.

The descendants of these people are the American Indians. Most American Indians tell stories that explain where their ancestors came from. These stories have been passed down for many years. This lesson includes an example of one of these stories.

Many scientists believe that these early people first moved from another region. They came from the continent of Asia to North and South America, traveling into many parts of the American continents over hundreds of years.

These early people settled in different locations around the Americas. You will read about the various places in which American Indians lived and see why they had different ways of life. By staying in the same regions for many years, tribes became very skilled at living off the land. The American Indian man in this image made his clothes and gear from things found around him.

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There were different environments on this continent that the first Americans settled in. You will learn about four kinds of environments and why each environment presented different challenges to the American Indians and how tribes found ways to overcome these problems. As an example, you will take a close look at the Inuit (IN-oo-it) tribe in the ice fields of the Arctic. Why might this environment be challenging to live in?



Social Studies Vocabulary

adaptation

environment

kiva

migration

natural resource

origin story



Geography

1. American Indian Origin Stories

Storytelling has always been important to American Indians. In some tribes, members would meet in a **kiva** and share stories or reenact them during spiritual ceremonies. They told stories to entertain one another and to teach about their beliefs and ways of life. They used stories to explain and record their experiences for future generations.

One kind of story American Indians passed down through the years was the **origin story**. These kinds of stories explained how Earth and its people came to be. The Hopis (HO-pees) are an American Indian group who live in the Southwest, in what is now the state of Arizona. The following is a Hopi origin story.

Hopi Origin Story

In the beginning, Earth was damp and dark. There were no animals or birds. At first, the people lived happily inside Earth. After a while, however, their caves became too crowded. People began to argue with one another. The worried chief agreed that his people needed to leave Earth's dark inside.

The chief's advisors made a mockingbird that found a hole at the top of Earth and flew around the world. When the bird came back, he reported that life above them was very different.

The chief's advisors grew sturdy plants that reached like a ladder to a hole in Earth's crust. The chief guided his people up the plants to Earth's surface.

Once there, the people did not know where they should settle, so they set out in different directions. They traveled east, west, north, and south until they found good land upon which they could grow crops and build villages. This is how it all began for

the Hopis.



2. Migration Routes of the First Americans

Today, most scientists agree that the first people in North America came from Asia. This **migration** is estimated to have taken place during the last ice age, at least 12,500 years ago. An ice age is a long period of time during which large areas of Earth's surface is covered with thick sheets of ice.

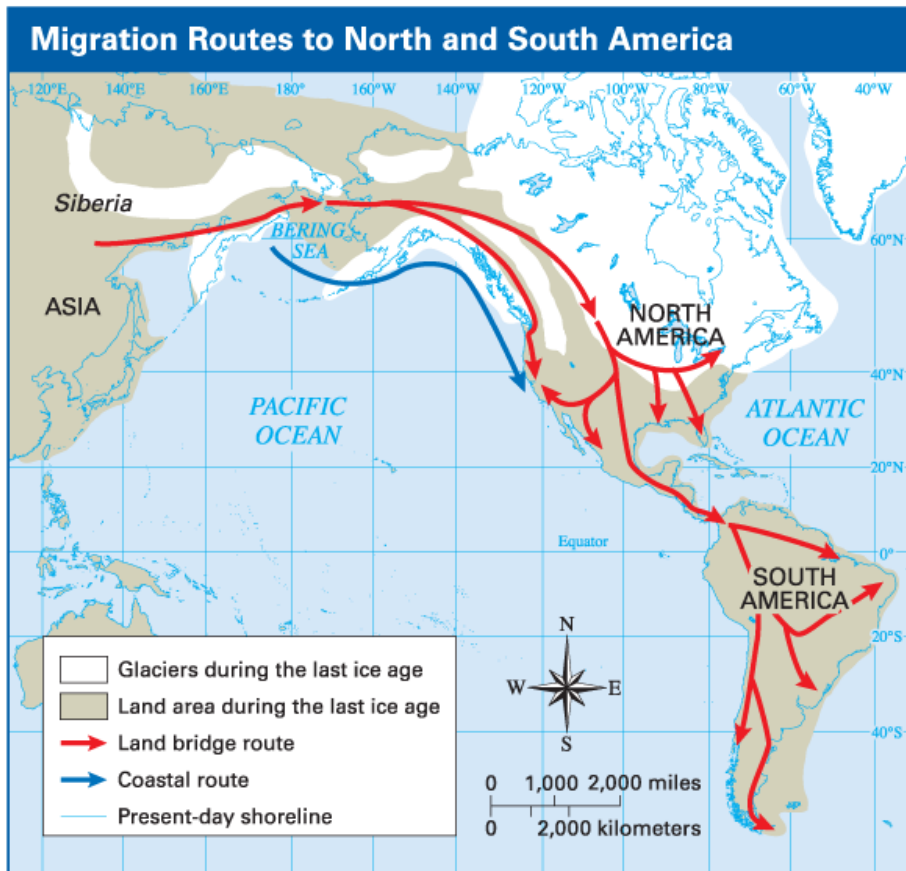
The last ice age began about 2.6 million years ago and ended about 10,000 years ago. During the last part of the ice age, about 25,000 years ago, the

Bering Sea did not separate Asia and North America, as it does today. Instead, a bridge of land almost 1,000 miles wide connected them.

Most scientists believe that the first Americans came from Siberia, which is a region in northeastern Asia. The people living in this region followed and hunted big game, such as mammoths (large, elephant-like animals), bison (also called buffalo), and caribou (reindeer).

Scientists believe that these large animals ate the grass on the land bridge. As the years passed, they moved across the land bridge. Small groups of Siberian hunters followed the animals, reaching North America after a long time. Other Siberians may have moved along the southern coast of the land bridge in small boats. They may have continued along the Pacific coast of Alaska and Canada and then turned south.

For hundreds of years, early Americans hunted big game. The animals likely led the hunters south through North and South America, with groups of people settling in areas along the way. Others kept moving until they reached the southern tip of South America. The paths they took to reach their new homes are called migration routes.



3. American Indians and the Environment

After the last ice age, there was a change in the climate that affected the plants and animals found in each area. Different areas each have their own **environment**. Sunlight, air, water, land, animals, insects, and plants are parts of an environment. A variety of environments appeared across North America following the ice age. Over time, early American Indians settled in environments that differed greatly from one another.

One feature of an environment is its climate. The climate supports certain kinds of vegetation.

Animals that can live in the climate and eat the plants thrive. An environment also has **natural resources**, which include soil, water, trees, and minerals such as copper. Things that people and animals eat, like nuts, berries, and other wildlife, are natural resources, too.

In each place, people survived by changing their ways of life. They used what was around them in nature to build homes, make clothes, and get food. Their homes and clothing were made to fit the climate.

Look at the four natural environments shown here. What do the images tell you about the climate, vegetation, and natural resources of each environment?

One environment American Indians lived in was grasslands. Some grasslands in North America get only enough rain to support different types of grasses since most trees and bushes need more water to survive.

A second type of environment American Indians settled in was the desert, which gets very little rain. People living in desert areas often dig wells and ditches to get enough water for drinking and for raising crops.

Some American Indians lived in the rainy and snowy mountain regions of North America. While

forests of pine, fir, and spruce often grow below the highest points, the tops of mountains have little or no plant life.

Other groups settled in the Arctic ice fields, which are near the North Pole. Here, huge sheets of ice cover the land for most of the year.

Most American Indians chose areas that were rich in natural resources. These environments had mild climates and plenty of food and water. Even though life was hard in places such as the desert of the Southwest and the icy Arctic region, some groups stayed in such regions where resources were scarce.





4. American Indians Adapt to the Environment

American Indians adapted their way of life to what they found in the area around them. Each group found ways to use nearby natural resources wisely, which helped the people survive in their environment. However, in areas with few resources, life proved to be difficult.

One group that lived in a harsh environment was the Inuits, who are also known as Eskimos. They built their culture in present-day northwestern Alaska, northern Canada, and Greenland. These places are part of Earth's Arctic region. The Arctic ice fields have long, cold winters and land that is frozen most of the time.

The Inuits had to adjust to their harsh environment. They hunted and fished animals such as whales, walruses, seals, caribou, polar bears, Arctic foxes, squirrels, salmon, and birds. These **adaptations** were necessary for the Inuit to survive.

The Inuits did not waste any part of the animals that they caught. They ate the meat, burned animal fat for fuel, and sewed animal skins together to make clothing, blankets, and tents. They used bones to make dogsleds and to support tent frames, and they also carved them for tools such as knives and harpoons, or long spears.

The Inuits even learned to fill sealskins with air to make floats. They attached the floats to harpoons that they used to hunt walruses and whales. These floats helped to tire out the animals when they tried to escape by diving underwater.

To build shelters, the Inuits used the materials that they found around them. In the summer, they made tents by stretching the skins of caribou or seals over driftwood. Sometimes they used whale bones to support the roof. They placed heavy stones at the bottom of a tent to keep it in place. In the winter, they built houses, called igloos, out of snow and ice.

To keep warm, the Inuits dressed in animal skins and furs. To protect their eyes from the bright glare of the sun shining on snow and ice, they wore snow

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goggles. Snow goggles were made from bone or wood and had narrow openings to look through.





Lesson Summary

In this lesson, you learned about the first people who came to North America. They passed down stories about their history and way of life. To learn more about these people, you first looked at migration routes, then studied where the first Americans chose to live, and finally looked closely at how one group adapted to its environment.

According to most scientists, the first Americans migrated from Asia to our continent during the last ice age. American Indians are the descendants of these first Americans.

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Where early American Indians settled, they adapted to the environment. The Inuit tribe served as a good example of this. You learned about the climate, vegetation, and natural resources of four different environments. American Indians in different environments each had their own unique challenges to overcome.

For thousands of years, groups of American Indians were the only people in North America. The things they made from their environment have helped us learn about their lives.



History



Geography



READ & DO

Recording Lakota History

For a long time, American Indians did not write. They told stories about their history, and sometimes they made drawings to keep records. American Indians called the Lakotas (la-KOH-tahs) lived on the Great Plains. What do their drawings tell about their history and how their surroundings affected their lives?

A group of Lakota families watched the night sky, certain that the world was coming to an end. Streaks of bright light darted above the Great Plains before falling into the blackness. Then new streaks flashed and fell across the sky—so many that one could not count them.

What was this grand display of fire in the heavens? Historians now know the Lakotas observed the Leonid meteor shower in November 1833. Scientists say that hundreds of thousands of shooting stars fell toward Earth on that cold, clear night.

The Lakotas who watched this amazing natural event would never forget it. They wanted to be sure that their children and grandchildren would know about it, so they made a record of the meteor shower for future generations.

To do this, the Lakotas would make a **pictograph**—such as a star—on an animal skin, or hide. The hide might already have other pictographs that represented memorable events from earlier years. One pictograph might show a buffalo hunt, or perhaps a war dance. Another image shows the meteor shower and stands for the year 1833. The Lakotas began calling this year the Year the Stars Fell.

Nature was important to the Lakotas. For example, they used the first snowfall of winter to mark the start of each year. These records are called “winter counts” and were made with pictographs. Each pictograph on a winter count showed a key event from a different year.

Many Lakota pictographs show how the climate, natural resources, and geography of the Great Plains affected their lives. For instance, some pictographs tell of heavy snowfalls or long periods without rain, while others show animal hunts in the Great Plains. Several images represent visits to nearby hills, forests, and waterholes to gather wood and water.

Winter counts are **primary sources** because the people who created them witnessed the events depicted in the pictographs. Historians study primary sources to learn about past events. They also study **secondary sources**, or records of events created by people who were not there. A painting of the 1833 Leonid meteor shower by an artist who was not around during the event is an example of a secondary source. Those who create secondary sources often analyze primary sources. For example, a historian might study Lakota pictographs and write a book about it. The book would be a secondary source.

A man named Lone Dog painted a winter count that spans over 70 years of Lakota history. Each pictograph on it represents what he felt was the most memorable event of that year. One pictograph shows two hands coming together. It represents making peace with the Cheyenne tribe. Another one shows a man with lines coming from his mouth, representing a case of whooping cough that caused many deaths within the tribe.

In each band of Lakota, one individual called the keeper had the honor of painting the pictographs on the winter count. Lone Dog was a keeper. For a long time, only a man could be the keeper. However, by the 1900s, women were occasionally allowed to take on this role.

The keeper paints a new symbol on hide from

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animals that they hunted on the plains. The Lakotas used many different parts of the animal for food, clothing, and shelter, and to meet other needs.

The hides wore out over time, forcing the keeper to repaint the winter counts onto other hides. He might use cloth or perhaps paper if it was available.

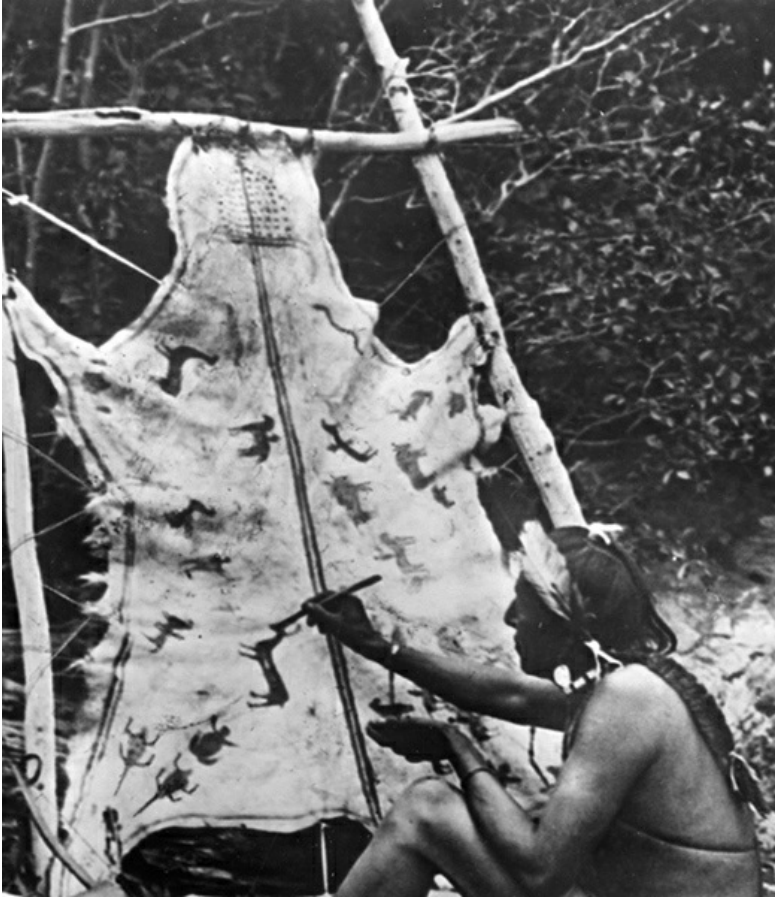
The Lakotas made winter counts for many generations. But once they began to write in the 1800s, many Lakotas stopped using pictographs to keep records. Today, some Lakotas use new forms of communication—like video and the Internet—to record their history.





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Explore - How People Modify the Environment

The Hopewell culture was an ancient American Indian civilization that flourished from around 100 B.C.E. to 500 C.E., mainly in what is now southern Ohio. Like other prehistoric groups in North America, the Hopewell lived by hunting and gathering wild foods. They also literally “planted roots” in Ohio by growing crops such as squash and sunflowers. They mined copper from around the Great Lakes region and used it to make beautiful objects. The Hopewell were among the first Ohioans to use the natural resources of the

environment.

The Hopewell people made an impact on the land in a more lasting way. They created earthworks by mounding earth into different patterns and shapes. They used them for religious and burial ceremonies.

The largest set of geometric earthworks built by the Hopewell culture are the Newark Earthworks in central Ohio near Columbus. They covered more than four square miles. Today the earthworks are protected as a national historic landmark. In 2006, the state of Ohio named them as the state's official prehistoric site. The Hopewell changed the landscape by using earth to create giant structures.

People Use the Environment

People have always used the resources of nature. We move and store water for our farms and cities. We cut down trees to build houses and furniture and to make paper. We dig minerals out of the ground. We mine metals to make tools and machines. We mine coal to power homes and factories. We drill for oil to make into fuel, medicines, plastics, and many other products.

Human communities have always depended on their local environment. Regions with fertile soil, like Ohio, have rich farms. Seacoast communities, like those in New England, live by fishing. Those with large harbors, like New York City, can grow

wealthy on trade.

Resources can drive history. Industry in the colonies and the young United States developed in towns along the fall line. This is an area where rivers form waterfalls or rapids. People used the power of falling water to grind grain, saw wood, and operate machines. Mineral resources, such as gold, brought people to California and other western states. They opened up new regions and trails for settlers. And it was land for farming that brought people to such places as Ohio, Kansas, and Oregon.

Warm, sunny weather and beautiful scenery are resources, too. They attract tourists with money to spend. And sunshine is a resource with more practical uses. Areas that get a lot of it, such as New Mexico and California, are building power plants that operate on solar energy.

People Change the Environment

The environment is not always friendly. Climates that are too hot or too cold limit human activity. So do mountains. Rivers provide water for drinking and farming. But they can also bring floods. The sea provides the basic needs of coastal communities. But it can also bring hurricanes. A waterfall can provide power. But it can also harm trade by preventing boats from moving upstream. Earthquakes, windstorms, and tornadoes remind people that they are not always masters of their

world.

But people have always found ways to adapt to their environments to secure their basic needs. And when they have to, they modify their surroundings. People who live near rivers or the sea build walls of earth called levees or dikes for protection against floods. The Andean peoples of ancient South America built their stone cities high in the mountains. They cut flat terraces in the steep slopes to make fields for farming. When Ohioans needed a faster and cheaper way to transport farm products and other goods, they built the Ohio and Erie Canal. Completed in 1832, the canal connected Lake Erie to the Ohio River. It provided easy access to the Ohio River and lowered shipping and transportation costs.

People Harm the Environment

The changes humans bring to the environment are not always for the good. Activities that help people may harm nature. For example, industry provided jobs to many people in the Lake Erie region. Cities such as Cleveland, Ohio, and Chicago, Illinois, grew. These same industries brought great pollution to the water. In the 1970s, parts of Lake Erie were declared “dead.” No fish or wildlife were able to live in those parts of the lake.

When settlers moved into the Great Lakes region in the 1800s, they cleared forest to create farmland.

Over time, loggers cut down more trees. Still later, land was cleared for factories and cities. Almost half of the region's original forest was lost.

Like forests, wetlands were also lost during settlement of the Great Lakes region. A wetland is an area where the soil is usually wet all year. Wetlands are home for a wide variety of wildlife.

Any environment has its own population of plants and animals. They live in balance with one another. Bringing in a new species can destroy that balance. In 1988, zebra mussels were accidentally introduced to Lake St. Clair, which forms part of the border between Michigan and Ontario, Canada. Zebra mussels are tiny freshwater mussels with big appetites. They can eat so much plankton that fish and other shellfish starve.

Zebra mussels live in massive clumps that stick to any surface. They clog pipes and other surfaces at power plants and cling to bridges and other structures. They quickly spread throughout the Great Lakes and into many inland lakes and rivers. This invasion by an animal not naturally found in the waters caused severe problems, including eliminating natural fish populations.

Human activities damage the environment in many ways. People use highways to get from one place to another. The cars and trucks on highways add to air pollution. Highways destroy plant and animal

habitats. They block the routes of migrating animals.

Irrigation projects bring water to farms and cities. Forest products provide us with some of our basic needs. But clearing hillsides of trees leads to soil erosion. Without the trees' deep roots to hold soil in place, it can wash away in the rain or blow away in the wind. Plowing up grassland for farming can also cause erosion.

Mining provides us with some of our basic needs, too. But it scars the land and leaves behind poisonous chemicals. And wherever people settle, they create trash and other waste products that they leave on the land.

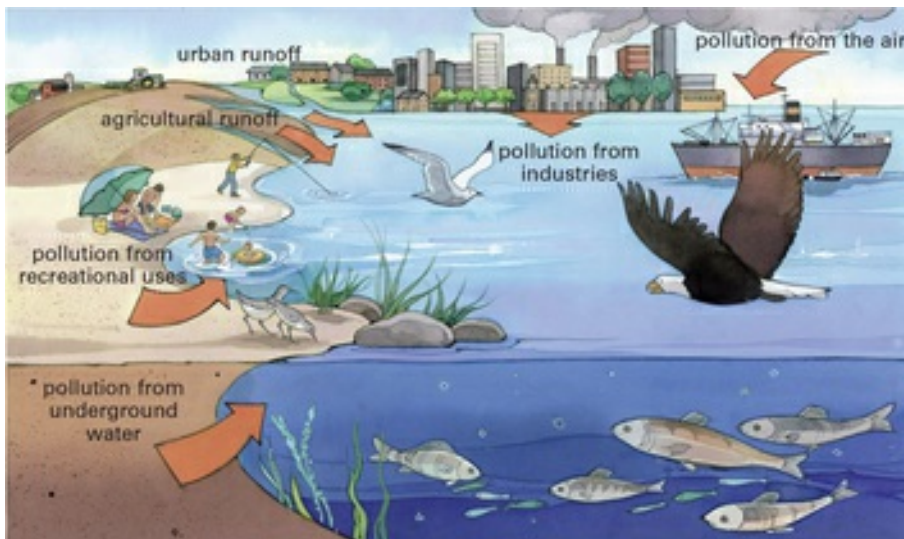
People Restore the Environment

Five lakes—Superior, Michigan, Huron, Erie, and Ontario—make up the Great Lakes. All of the Great Lakes, except Lake Michigan, are shared by Canada and the United States. Together they form the world's largest group of freshwater lakes.

More than one tenth of the U.S. population live in the Great Lakes region. Their shores border the states of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York. Michigan. People use the lakes in many ways. They depend on them for drinking water. They use water from the lakes in factories. They use the lakes for

shipping, fishing, and recreation. And they build cities on their shores.

By the late 1960s, the Great Lakes were in serious trouble. Pollution caused by industry and other human activity was killing fish and animals. Rivers that flow into the Great Lakes were heavily polluted as well. The Cuyahoga River flows into Lake Erie where Cleveland is located. In 1969, the Cuyahoga River caught fire when oil and debris in the water ignited.



Decades of pollution had turned the Great Lakes into dumping grounds for every kind of pollutant, from sewage to toxic chemicals. Not only did this hurt the natural environment, but it also hurt the 30 million people—in both the United States and Canada—who call the Great Lakes region their home.

By the 1990s, Lake Erie and the other Great Lakes

were much improved. People worked hard to repair the damage. They made laws to clean up and protect the water. Industries stopped dumping oil and other pollutants into rivers. Other laws stopped the use of chemicals that got into the water supply.

Today people are working to repair forests in the Great Lakes region. Logging companies are cutting trees in ways that are less harmful to forests. They also replant trees on land that has been cleared. Forests around the Great Lakes are now growing instead of disappearing.

People are also working to protect Great Lakes wetlands. One way is by creating preserves and parks on existing wetlands. Another is by creating government organizations that work to protect wetlands. The Ohio Department of Natural Resources is one such organization.

The Great Lakes region has not been totally restored, but situation has greatly improved. Today people know that the best way to deal with pollution is to prevent it. They also know that it is important to use resources in ways that keep them safe for future generations.



Explore - The Development of Mayan Civilization

The Maya are a group of Native Americans from Mexico and Central America. In ancient times, they created an advanced civilization. Their civilization peaked between 300 and 900 C.E. Mayan culture spread over much of Mesoamerica. You will learn about their complex civilization.

The Maya lived on land with many different features. The south had mountains and pine trees. The north had rainforests, grasslands, and swamps. So did the central region. In the south, jungle

covered the lowlands. This is where Mayan civilization reached its highest development. Today this area is called the Peten region of Guatemala.

The Origins of Mayan Civilization

The Maya built their civilization based on other groups' ideas. Many of their ideas came from a people called the Olmec. The Olmec lived on the east coast of Mexico. They lived in the jungle areas. Their civilization peaked between 1200 and 500 B.C.E.

The Olmec civilization was based on farming. Before, many people in Mexico were hunters and gatherers. But by 2000 B.C.E., some had turned to farming. Farmers often grew maize, or corn.

Farming helped the Olmec create permanent settlements. The Olmec established farming villages throughout the region. They also created trade routes. These routes stretched for hundreds of miles.

By 1400 B.C.E., the Olmec had a capital city. The city was filled with palaces, temples, and monuments. They were the first Mesoamericans to make large religious and ceremonial centers. They were also the first to use a solar (sun) calendar. The Maya would build on all these achievements.

Three Periods of Mayan Civilization

Mayan civilization arrived in parts of Mexico around 2000 B.C.E. Historians divide the history of Mayan civilization into three main periods: Pre-Classic, Classic, and Post-Classic.

The long Pre-Classic period began about 2000 B.C.E. It lasted until around 300 C.E. During this time, the Maya farmed the land. They lived in simple houses and compounds. A compound is a group of buildings.

Over time, Mayan culture became more complex. Settlements became larger as the Mayan population grew. The Maya began building public buildings. These buildings were often for governmental and religious purposes. They began to use the writing system of the Olmec. The Maya also started to create their own system of writing. They wrote using hieroglyphics.

Mayan civilization peaked during the Classic period. This period lasted from around 300 to 900 C.E.

During the Classic Period, the Maya adapted ideas they had learned from the Olmec. They also developed on these ideas. For example, they improved on Olmec building techniques. The Maya did not have metal tools. But they built enormous stone cities. In these cities, there were decorated temple-pyramids and palaces.

The Maya also built an observatory for studying the

heavens. There they tracked the movement of objects in space. They looked at the moon, stars, and planets. They used their knowledge of astronomy and mathematics to create calendars. These calendars were complex and very accurate.

During the Classic Period, Mayan society was not united. It was made of many independent states. Each state had farming communities. Each state also had one or more cities. At its height, the Mayan Empire included over 40 cities. These cities included Tikal, Copan, Chichen Itza, and Palenque.

Around 900 C.E., the Classic civilization collapsed. The Maya abandoned their cities in some areas. The great cities fell into ruin in the jungle. No one knows for certain why this happened.

The Post-Classic period occurred after the collapse. Mayan cities in the north still prospered during this period. The Post-Classic period lasted from about 900 C.E. to 1500 C.E. During this time, the Maya continued their warfare and empire building. But they had fewer great artistic and cultural achievements.

The Maya were not one unified nation. Instead they lived in many city-states. Their city-states had separate governments. What united them as Maya was their common culture. They shared their social system, languages, calendar, religion, and way of life.

