1.6 Cave Art

It wasn't all about tools in the Paleolithic Age. Early humans had an artistic side as well. Prehistoric graffiti appears on cave walls all over the world. It turns out that the urge for artistic expression is almost as old as humankind itself.

MAIN IDEA

Cave paintings reveal much about Paleolithic people and their world.

ANCIENT ARTISTS

Art is an important part of culture. It shows a capacity for creativity, which separates humans from animals. Very early humans may have collected pretty rocks, carved wood, or painted pictures of themselves and their surroundings.

However, around 35,000 years ago, an artistic explosion occurred when humans began painting detailed images on cave walls. Examples have been found across the world, but it took archaeologists a long time to accept that the cave paintings had been created during the Paleolithic Age. They found it hard to believe that prehistoric people had the ability, time, or desire to produce such beautiful works of art.

The subjects of these cave paintings vary quite a bit, which is not surprising since they were created over a span of 25,000 years. The paintings often depict side-view images of animals, including woolly mammoths and horses. Some images feature everyday scenes, such as deer being hunted by men with spears. Other images consist of lines, circles, and geometric patterns.

One type of image that appears all over the world is considered by many to be one of the most moving: handprints. An artist often created this image by blowing paint through a reed over the hands—leaving behind the imprint of people who lived thousands of years ago.

GLIMPSE INTO AN EARLY WORLD

The Lascaux Cave in France has some of Europe’s most amazing cave paintings, which were created about 17,000 years ago. The cave contains about 600 beautifully clear paintings, mostly of animals, many in shades of red, yellow, and brown. Some of the animals, including a nearly 17-foot-long bull-like creature, are now extinct.

Spectacular cave and rock paintings in Australia’s Kakadu National Park show details of daily life and also reflect the spiritual beliefs of Aborigines, the earliest people who lived in Australia. These beliefs include a strong connection to the land and nature, which is still shared by the people who live in the region today.

The Sahara is also rich in rock art. The Tassili-n-Ajjer (tuh-sill-ee-nah-JAIR) mountain range in North Africa has spectacular paintings showing the once abundant wildlife and grasslands of this now barren desert. The Cave of the Hands in Argentina contains an incredible wall of handprints, as shown on the next page.

Despite many theories, it is unclear why Paleolithic people created such beautiful images in dark and hard-to-reach caves. Some researchers believe that most early art was actually created outdoors but has long since faded away. While we are unlikely to ever fully understand the meaning of Paleolithic art, it does provide insight into the lives and culture of our ancestors.
Researchers believe that this painting from the Cave of the Hands in Argentina shows the handprints of 13-year-old boys.

**REVIEW & ASSESS**

1. **READING CHECK** What do cave paintings reveal about Paleolithic people?  
2. **INTEGRATE VISUALS** What different purposes might cave art have served in the Paleolithic world?  
3. **COMPARE AND CONTRAST** What does the rock art in North Africa reveal about how that region has changed from the Paleolithic Age to today?
2.1 Nomadic Hunter-Gatherers

When you're hungry, you probably raid the fridge or head for the store. When Paleolithic people were hungry, they tracked down an animal, killed it with their handmade weapons, and then cooked it over a fire they had to carefully start and keep going. That's what it took to survive every day.

Main Idea

Paleolithic people were constantly on the move to find food.

Moving with the Seasons

The Paleolithic world had no farms or stores, but it did have a rich variety of foods. People just had to search them out. During the Paleolithic Age, humans lived as hunter-gatherers. A hunter-gatherer hunts animals and gathers wild plants to eat. These tasks were made easier and safer by the fact that early humans worked together and shared the jobs.

Most hunter-gatherer groups were small—around 30 people. The men hunted, often herding large animals into traps or over cliffs. Meanwhile, the women and young children gathered fruits and nuts. Scientists have learned a great deal about hunter-gatherers by studying the body and belongings of a later hunter known as the Iceman, seen at right.

Because the animal herds moved with the seasons, so did the groups hunting them. People who move from place to place like this are called nomads. Nomadic hunter-gatherers traveled light. They carried all their possessions with them, including stone tools and clothing.

As hunter-gatherers traveled in areas outside of Africa, they learned to adapt to their new environments—especially the cold. They made needles that enabled them to sew warm clothes out of animal skins. Caves offered the best protection from the worst winter weather. However, people also made shelters of wood, bone, and animal skins, which provided temporary camps.

Following the Herds

Nomadic hunter-gatherers followed herds of megafauna as the animals moved from place to place. The herds migrated with the seasons and entered new environments created by the changeable Ice Age climate. For example, the Beringia land bridge allowed herds of woolly mammoths to cross into North America, with hunter-gatherers following closely behind.

It wasn't easy to kill an animal as big as a woolly mammoth. It took intelligence, teamwork, and special tools. Paleolithic people developed deadly new weapons, including barbed harpoons, spear-throwers, and bows and arrows. These weapons allowed them to kill from a distance, which made the task safer and more efficient. The rewards were also great. A woolly mammoth could feed the group for months.

As humans spread around the world, various human groups competed for resources. Conflict would have been most common during cold periods when food and shelter were scarce. It's likely that in warmer periods of plentiful food, human groups interacted more happily, sharing their technology and culture. This interaction helped spread new ideas and paved the way for a remarkable new stage in human development.
THE ICEMAN

The Iceman lived around 3300 B.C. More than 5,000 years later, hikers found his frozen body in the Alps in Europe. His clothing, his tools, and even the contents of his stomach have helped scientists understand how prehistoric people lived. The graphic here offers some clues as to how he might have died.

1. The Iceman perches on a cliff. He tests the copper blade of his ax and the flint points of his dagger with satisfaction. They're razor sharp. He searches below for his prey. With any luck, he'll bring goat meat back to his community tonight.

2. Suddenly an arrow pierces the Iceman's shoulder. Another hunter has shot him from behind. The Iceman falls off the cliff into the snowbank below.

3. Desperately the Iceman rises and struggles to fight off his attacker, but he's too weak. He falls back down but manages to crawl into a cave in the ice. As the Iceman dies, snow begins to fall. Snow and ice will hide him from view for the next 5,000 years.

REVIEW & ASSESS

1. READING CHECK Why were Paleolithic people constantly moving from place to place?

2. INTEGRATE VISUALS What words would you use to describe hunter-gatherers such as the Iceman?

3. ANALYZE CAUSE AND EFFECT What impact did the changing climate have on hunter-gatherers?
2.2 The Beginnings of Domestication

A pet poodle might lick your hand and follow you everywhere, but dogs weren't always man's best friend. All dogs are descended from wolves. Humans transformed some of these wild animals into loyal helpers, which marked a major breakthrough in learning to control their environment.

**MAIN IDEA**

Early humans took control of their environment by raising useful plants and taming animals.

**CHANGING CLIMATE**

Around 14,000 years ago, Earth grew warmer, and the ice sheets melted. These changes raised sea levels, created freshwater lakes, and increased global rainfall. Large areas of land became covered with water. As a result, land bridges disappeared, and coastal waters formed that were full of fish. Animals moved, adapted, or died as their habitats, or environments, changed.

These environmental changes also began to transform the ways that hunter-gatherers lived in some areas. The warmer, wetter climate encouraged the development of forests and grasslands and resulted in longer growing seasons. These conditions proved to be perfect for the growth of grasses. In time, people learned to raise other plants and animals, making them useful to humans. This development, called *domestication*, led to the beginning of farming.

**TAMING PLANTS AND ANIMALS**

Hunter-gatherers had grown plants to increase their productivity long before the ice began to melt. Now the improved climate made growing plants even easier. After scattering seeds in wet ground, hunter-gatherers knew they could return and harvest the plants the following year. Some foods, especially grains from cereals such as wheat and barley, could be stored to feed people and animals year-round.

At about the same time, humans began to tame animals. The earliest domesticated animals were dogs. All around the world, wild wolf pups were caught and
bred for hunting and protection. Other animals were domesticated for food: first sheep and goats, then pigs and cattle. As well as providing meat, milk, and wool, some domesticated animals could carry heavy loads and pull carts.

Although most humans remained nomadic, the warmer climate provided certain areas with such abundant resources that some hunter-gatherer groups decided to settle down. For example, areas around estuaries made perfect places to live. An estuary is formed where a river feeds into the ocean. The combination of fresh water, salt water, and land provided people with a year-round supply of food. Settling down to live permanently in such places would bring about a great change that allowed humans to make their next big leap forward.

**REVIEW & ASSESS**

1. **REVIEW & ASSESS** How did humans use the plants and animals they domesticated?

2. **ANALYZE CAUSE AND EFFECT** How did the warmer climate and increased rainfall in some places affect people's ability to grow plants for food?

3. **FORM OPINIONS** What do you think were some of the advantages of the settled life over the nomadic one?
The Agricultural Revolution

If you wanted to grow some crops, you'd probably look for a warm place with a reliable supply of water and soil full of nutrients. Thousands of years ago, a number of river valleys satisfied all of these conditions. They were at the heart of an important change in the way people lived.

MAIN IDEA

Humans settled down and farmed along river valleys and developed new farm tools and methods.

FERTILE RIVER VALLEYS

Imagine that a great change took place all over the world and transformed forever the way people lived. That is exactly what happened when farming largely replaced hunting and gathering. The slow shift to growing food began around 10,000 B.C. and ended around 8000 B.C. By then, many people had discovered that they could live year-round on what they farmed, rather than on what they found.

This shift in the way people lived is called the agricultural revolution. **Agriculture** is the practice of growing plants and rearing animals for food. The shift to agriculture also ushered in a new period known as the **Neolithic Age**, which began somewhere between 10,000 B.C. and 8000 B.C. In the early stages of this period, people began to build farming villages.

Many of the earliest farming villages were in an area called the **Fertile Crescent**. This region stretches from the Persian Gulf to the Mediterranean Sea. It includes the fertile, flat floodplains along the Tigris and Euphrates rivers in Southwest Asia. **Fertile** soil encourages the growth of crops and plants. The region provided a steady food supply. People were able to settle down and enjoy a much more comfortable lifestyle.
NEW FARM TOOLS AND METHODS

Even so, farming was very hard work. To make it easier, Neolithic people developed specialized tools. They fashioned hoes for digging the soil and plows for preparing the land to plant seeds. They also made curved sickles that cut through the stalks of grain and millstones that ground the grain into flour.

Farmers used domesticated animals to make their new tools more efficient. For example, they tied cattle to the plows and led the animals up and down the rows. In addition to helping turn over the soil, the cattle left behind manure that fertilized the land.

Neolithic people also developed new technology for the home. They made clay pots and hardened them in kilns, or ovens. The kilns could also be used to heat and melt the metal from rocks—a process called smelting. The liquid metal was then cast in molds to create metal tools, which eventually began to replace stone tools. The Stone Age had come to a close.

REVIEW & ASSESS

1. READING CHECK What new farm tools did humans develop during the agricultural revolution?

2. INTERPRET MAPS Along what geographic feature had most agriculture developed by 5000 B.C.?

3. DRAW CONCLUSIONS In what ways was the agricultural revolution an important breakthrough in human history?

The Development of Human Societies 29