

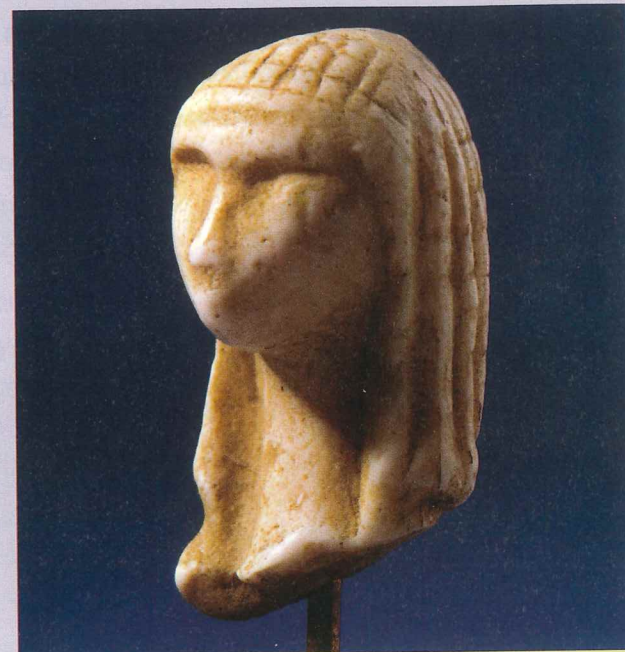
One Family

What does it mean to be human?

Think about what it means to be human. Examine the images on these two pages and talk about things that all humans around the world, in the past and today, have in common. Is there anything you can think of that is not shown here?



Why do humans develop religions and belief systems?



Why did early humans create art?



Why have humans used language to transfer knowledge?

DISCOVER

- ▶ How human beings developed
- ▶ What humans have in common
- ▶ Ways in which humans transfer knowledge
- ▶ Ways in which human societies respond to change

BIG IDEA

Cultural practices that emerged during this period have endured and continue to influence people.



Why did human communities develop social classes?



How did tools and technology help early humans survive and adapt to the environment?



In what ways did kinship ties help our ancient ancestors survive?



Unravel the Past

Think about what it means to be human. What makes us different from every other species on Earth? What do we have in common with our earliest ancestors?

Examine

What Do We Know About the Development of Humans?

THINKING LIKE AN... Archeologist

Archeologists study the development of early humans by examining bones, footprints, tools, and other evidence using a variety of techniques. They establish which human species came earlier and which ones developed later. How do you think scientists determined that this skull belonged to one of our earliest ancestors, *Homo habilis*?

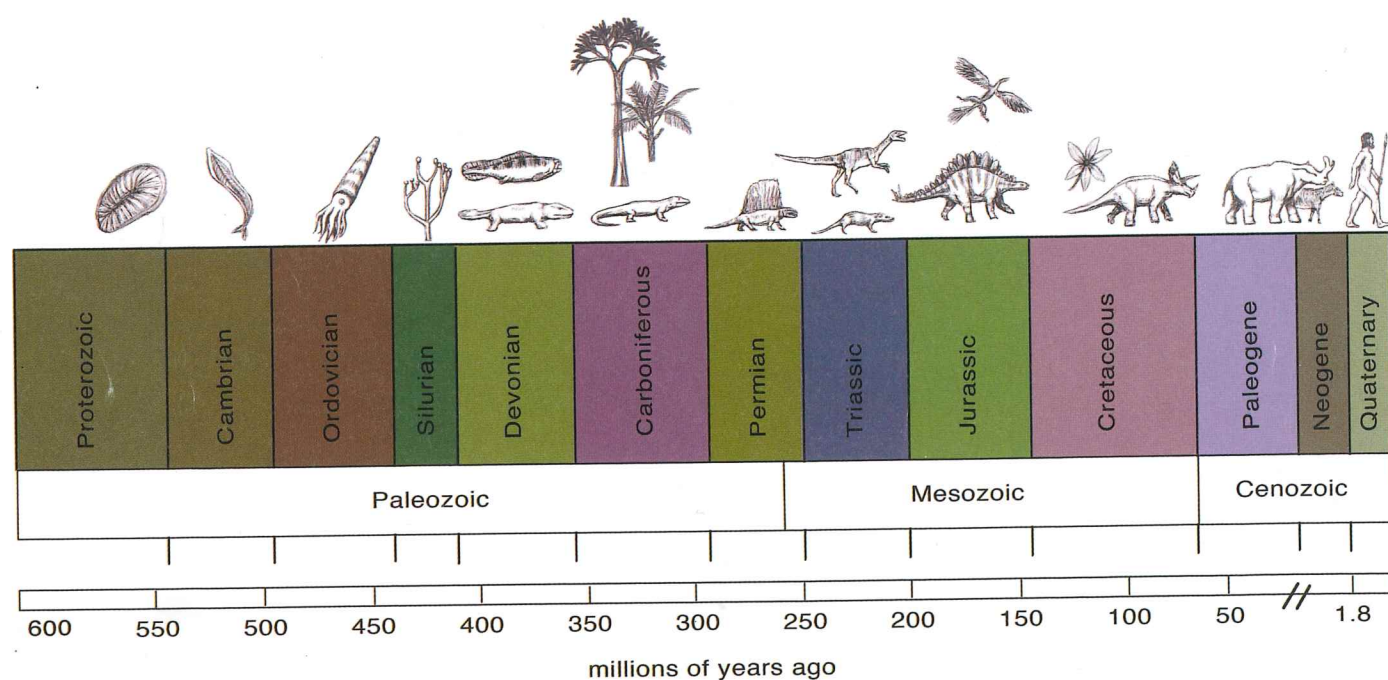


The Mystery of Evolution

How can we know about the past from limited evidence?

The first **hominids**, or beings with human characteristics, emerged in Africa between six million and four million years ago. Over time, they spread into what is now Europe and Asia.

There are still many questions about when and where certain steps in human evolution took place. This is partly because there is little evidence. Scientists have unearthed the bones and skeletons of about 6000 humans who lived more than 10 000 years ago. This means that there is little evidence for huge periods of time.



▲ Our earliest human ancestors—the first members of the genus *Homo*—appeared during the Holocene epoch, the most recent part of the Quaternary period. What does this timeline tell you about human development?

Evolution describes how species change very gradually over a very long time, sometimes in profound ways.

Evolution is not a simple process. Every evolutionary story has some missing links and dead ends. There are still many mysteries to solve about human evolution, especially in its earliest stages. Let's take a look at a few things we do know for certain and at some of the mysteries that remain.

? Questions to Ask about Continuity and Change

As you read, think about what we can learn about human evolution by applying the concept of continuity and change.

- Which human characteristics *changed* during human evolution?
- Which characteristics *remained the same*?

Who Is Our Closest Relative?

Some species are “close relatives” of humankind because we both developed from an earlier species. If you had to choose among all the species living in the world right now, which would you say is our nearest relative? If you said one of the primates, or big apes, you would be on the right track. But which one? Consider the chart below. Based on the images and information, who would you say is our closest relative among the big apes? Explain your reasoning.

Give evidence from the chart in your answer to the question “Who is our closest relative?” Conclude with an explanation of how your evidence supports your answer.

Common name	Human being	Gorilla	Orangutan	Chimpanzee
Average height	1.6–1.7 m	1.6–1.7 m	1.2–1.4 m	1.2 m
Average brain weight	1300–1400 g	465–540 g	370 g	420 g

Many people think that the gorilla is our closest relative. It is roughly the same height as a human being, and it has the largest brain of all the non-human primates. In fact, the chimpanzee is closest to us from a genetic point of view. We share 98.8 percent of our DNA, or genetic makeup, with chimpanzees.

What's so important about our genetic similarity to chimpanzees? Scientists think it shows that humans and chimpanzees probably share a common ancestor species. They believe that this ancestor likely lived in the rainforests of ancient Africa, and that the two species began to separate about seven million years ago.

What Came First: A Bigger Brain or an Upright Stance?

A hundred years ago, most anthropologists would have said that a larger brain was the first step in human evolution. Since then, anthropologists made several discoveries that did not support this theory. They found a 3.2-million-year-old skeleton they named Lucy. The structure of Lucy's skeleton seemed to prove that she walked upright on two feet. This meant she was different from the apes, who walked on all fours.

What was the first physical attribute that set us apart from the apes?

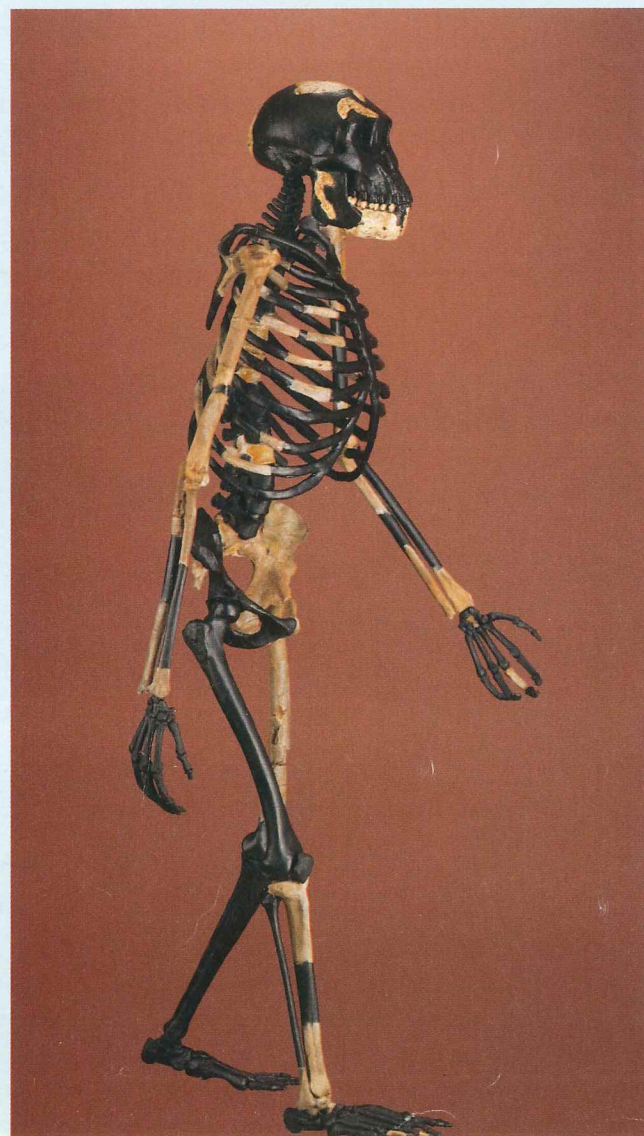
► In 1974, anthropologists found the remains of Lucy's skeleton in a valley in Ethiopia. Lucy belonged to a species called *Australopithecus afarensis*. Although her hips, legs, and feet resembled those of a human, her skull was the same size as a chimpanzee's.

CONSIDER THIS!

Evolution and Climate Change

Climate change can have an effect on the evolution of a species—or even play a role in its extinction. For example, many scientists think that periods of rapid warming at the end of the last ice age had a role in wiping out the woolly mammoth and other large mammals.

Climate change may also have had a significant effect at the very beginning of human evolution. About 10 million years ago, large forests in what is now Africa were replaced by grassy plains as a result of a drying climate. Apes that had lived in the trees now lived on the ground. Over thousands of years, these apes adapted to their new environment in several important ways.



Lucy's skeleton showed that early hominids developed the ability to walk upright *before* they developed larger brains. But scientists were not sure exactly how *A. afarensis* walked until 1978. That year, a team led by paleoanthropologist Mary Leakey discovered a series of *A. afarensis* footprints at Laetoli in Tanzania. Around 3.7 million years ago, four hominids (most likely *A. afarensis*) left their footprints in a layer of slightly wet volcanic ash. When this ash hardened the footprints were preserved. These footprints showed that this species walked very much like we do today.

Anthropologists made some exciting discoveries in the 20th century. Create a headline for an article about one of these discoveries. What makes it different? Why did it interest you?



▲ How can we know what members of *A. Afarensis* looked like? Images like the one shown here are created by artists who work closely with scientists to reconstruct early life. How might this kind of painting influence what we think about our ancient ancestors?



Check Your Learning

1. Investigate the role that climate change played in our ancestors becoming a ground-dwelling species. How did our ancient ancestors adapt to their new environment?
2. Lucy and other members of *A. afarensis* may have been walking upright, but their brains were still the size of a chimpanzee's. What sort of society do

you think they had? Would it have been more chimpanzee-like or more human-like? Explain your reasoning.

Make Connections

3. Walking upright gave *A. afarensis* several advantages. With a partner, discuss what these advantages might be.

What were some key turning points in the development of humans?

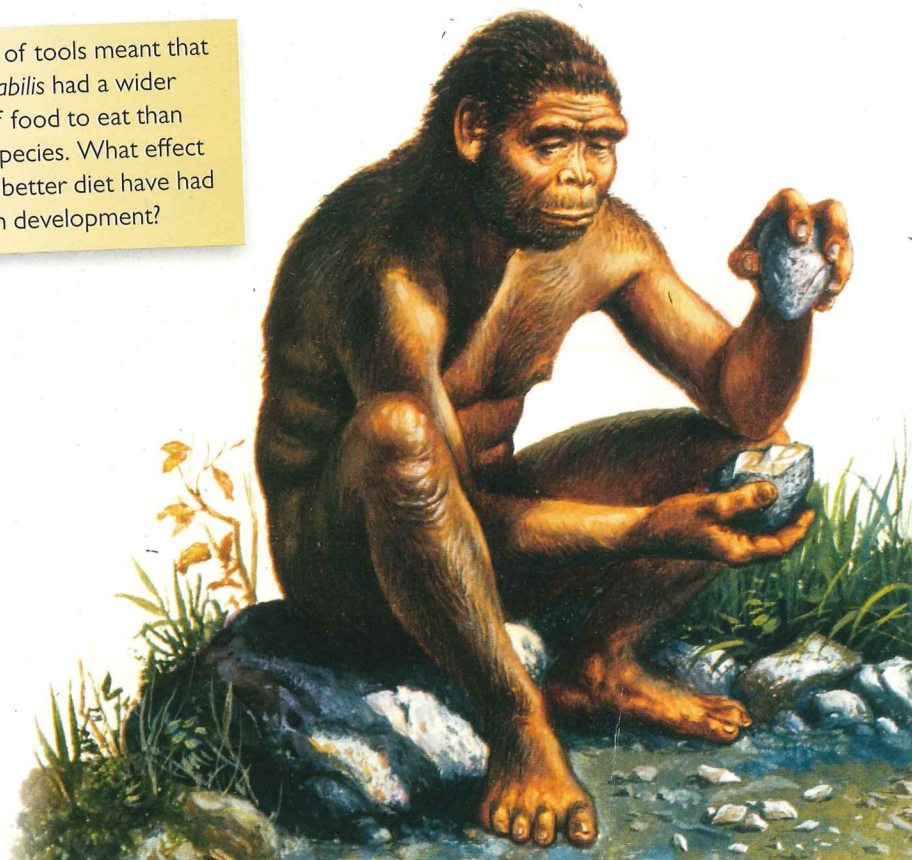
Lucy and other members of *A. afarensis* took the major evolutionary step of standing upright. They were not, however, entirely human. Humans developed in Africa about 2.4 million years ago, millions of years after Lucy lived.

Who Were the First to Use Tools?

The scientific name **Homo** comes from a Latin word meaning "human being." Learn more about scientific names on the next page.

The first human-like being to use tools was called *Homo habilis*. They are also called the "handy human." What else set it apart from Lucy's species? It had a noticeably larger brain. Although the brain of *Homo habilis* was only half the size of the modern human brain, this development would make humans different from every other species.

The use of tools meant that *Homo habilis* had a wider range of food to eat than Lucy's species. What effect might a better diet have had on brain development?



▲ Even with its larger brain and upright stance, *Homo habilis* still bore a strong resemblance to its apelike ancestors. Why would having a larger brain give this species a better chance of survival?

Why Do We Use Scientific Names?

The story of human evolution is complex. It can involve small changes over millions of years, and new species are still being discovered. To help identify and track these new species, we use scientific names.

Scientific names for living creatures date back to 1753, when Swedish botanist Carl Linnaeus developed a way of cataloguing living things, both plants and animals. His system, with some modifications and updates, is still in use today.

How are human beings described scientifically?

- We are mammals and belong to the order Primates, which includes all monkeys and apes.
- Our family is Hominidae, which includes the apes.
- Our genus is *Homo* and our species is *sapiens*, so the scientific name for a human being is *Homo sapiens*, the "thinking human."

How are dogs described scientifically?

- Dogs are also mammals, but they belong to the order Carnivora (meat-eating mammals).
- Their family is Canidae, which includes wolves, coyotes, and jackals.
- The dog belongs to the genus *Canis* and its species is *lupus*, which is the same designation as the wolf.
- Scientifically, dogs are domesticated wolves, so their scientific name is *Canis lupus familiaris*.

▼ Four different members of the family Canidae.

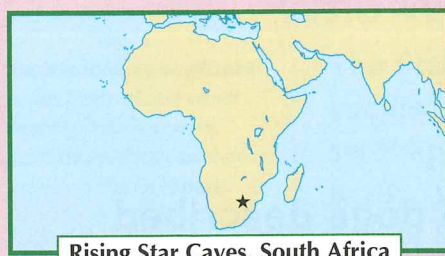


Look at the image here. Why would scientists need distinct names for each of these species?

Who Was *Homo naledi*?

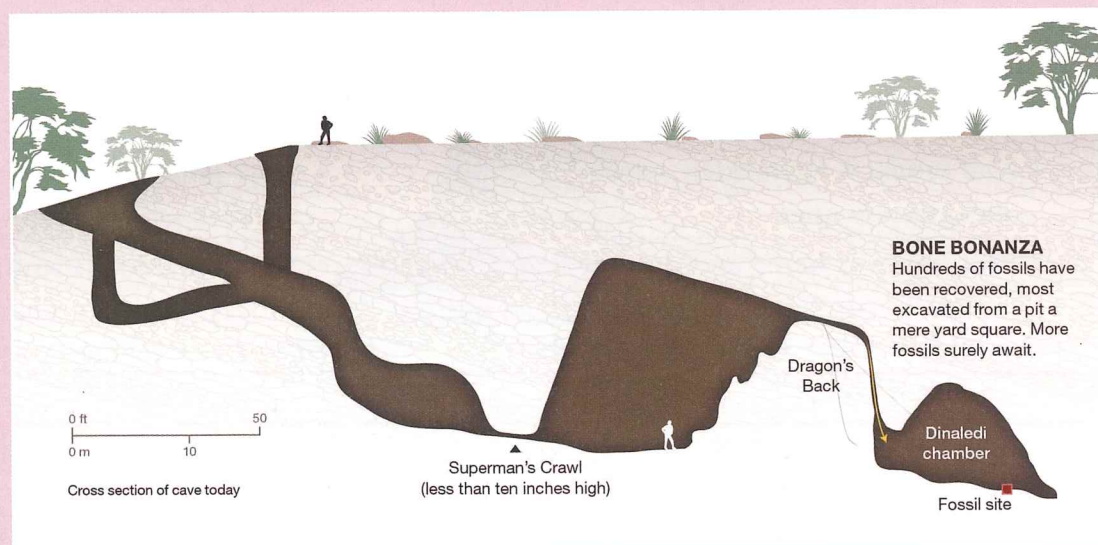


In 2013, two cavers were exploring the Rising Star cave system in South Africa. To their surprise, they discovered a cavern littered with fossilized bone. They reported this to Dr. Lee Berger, an anthropologist. Dr. Berger thought the fossils might be significant, but recovering them would be very difficult. He made a worldwide appeal for archeologists willing to take on the dangerous and challenging work. In the end, he hired six scientists, all of them women.



Rising Star Caves, South Africa

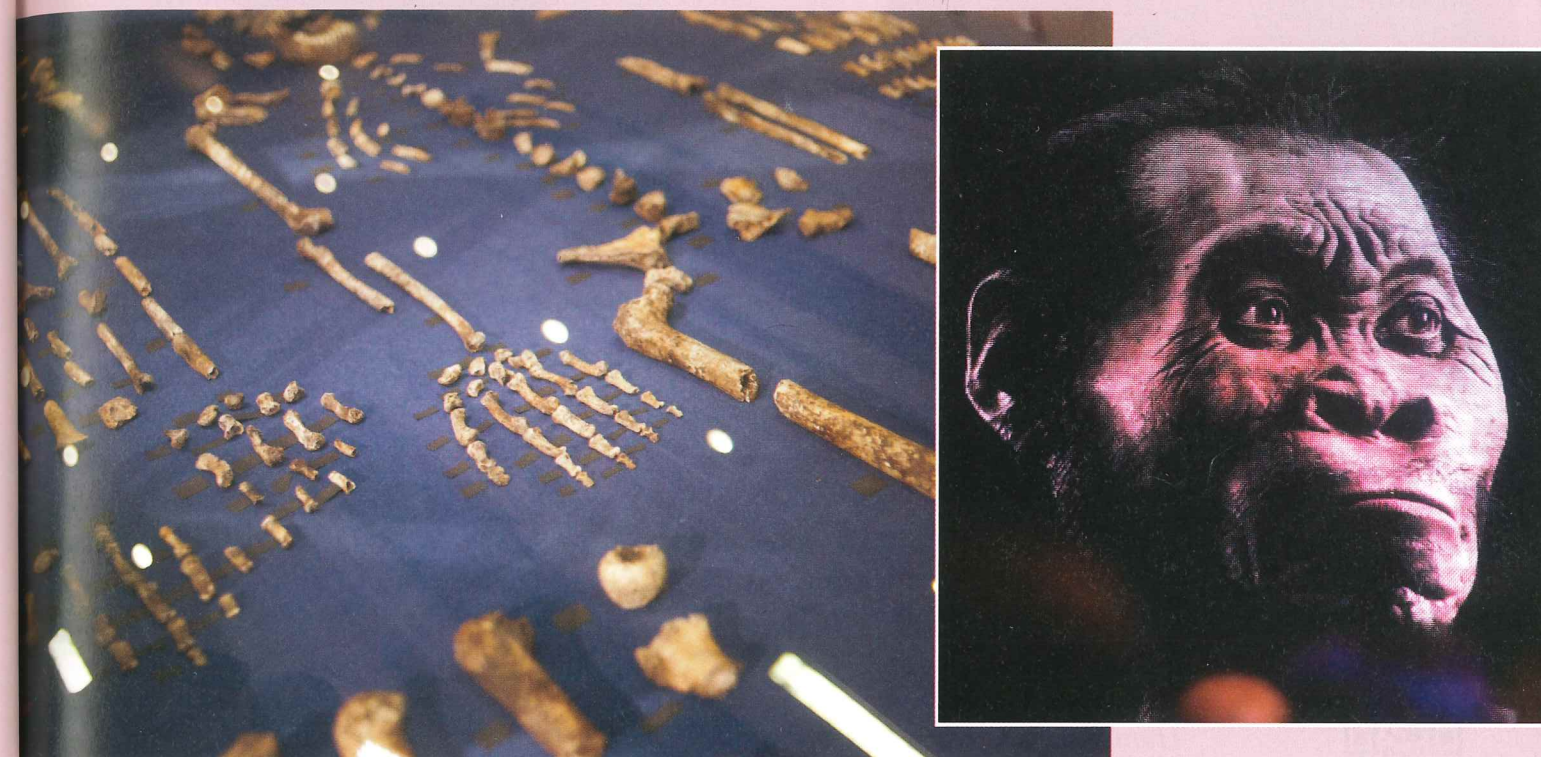
► This diagram shows the route to the underground chamber.



▼ The team who went into the Rising Star caves to carefully identify and extract the fossils called themselves the "Underground Astronauts."



After six months the team working in the cave had recovered over 1550 pieces of bone. Dr. Berger and his team sorted, identified, and analyzed the bones. They realized that the bones belonged to an early hominid species that had not been discovered before. They named this new species *Homo naledi*.



▲ The bones that had been discovered allowed researchers to reconstruct much of the skeleton of *Homo naledi* and imagine what members of the species might have looked like.

A Surprising Discovery

In 2017, the scientists investigating *Homo naledi* announced a shocking discovery. They had been working for years to identify the age of the rocks in the Rising Star cave. They hoped this information would show how long ago *Homo naledi* lived. To their surprise, the rocks were between 414 000 and 236 000 years old. This meant that *Homo naledi* must have lived at the same time as more advanced human ancestors.

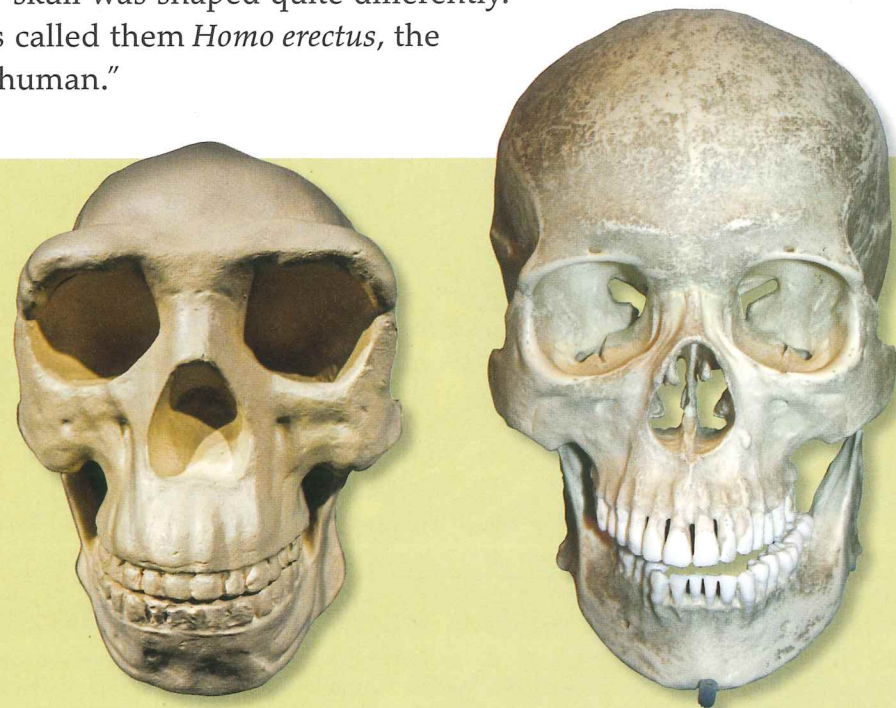
- What are the most recent theories about *Homo naledi*?
- Why do new discoveries present challenges to anthropologists and other scientists?

What Changed When Humans Began to Use Fire?

Have you ever cooked food over a campfire? Was it easy or difficult? What did you like about it? What didn't you like?

Anthropologists think a more advanced form of the genus *Homo* developed in East Africa about two million years ago. They were about the same height and weight as modern humans. In fact, this species looked very similar to modern humans, except that their skull was shaped quite differently. Scientists called them *Homo erectus*, the "upright human."

► Compare the skull of *Homo erectus* (left) with that of a modern human (right). Make a list of the differences, and speculate about possible reasons for them.



Homo erectus had a brain that was smaller than a modern human's but larger than that of *Homo habilis*. This bigger brain helped it to evolve in certain ways. *Homo erectus* made tools, such as the hand axe, that were more sophisticated than the simple stone tools of *Homo habilis*. Most importantly, *Homo erectus* learned how to use fire to cook food. Cooking made food easier to chew and digest, and it also killed parasites. What effects might an improved diet have had on the size of this species' brain?

On the Move

Although *Homo erectus* first appeared in Africa, this species soon began to migrate into parts of Europe and Asia. Archeologists were surprised to find remains of *Homo erectus* in the Caucasus Mountains (northeast of Africa) that dated to 1.8 million years ago. This means the species was settling in new places almost as soon as it developed.

Why do you think that many species, including human beings, migrate instead of staying in one place?

Who Were the Neanderthals?

Homo erectus lasted until about 143 000 years ago. Gradually, this species developed into modern humans. In Africa, *Homo erectus* developed into *Homo sapiens*, the "wise human." This is the species to which we belong today.

In parts of Europe and Asia, early hominids developed differently. They were *Homo neanderthalensis*—the Neanderthals. Who were these mysterious people? How closely did they resemble us? What happened to them?

Due to the physical appearance of Neanderthals, many anthropologists assumed that this species was not capable of sustained thought or of feeling emotions, such as pity and love. Today, these assumptions have changed. Why do you think anthropologists now view Neanderthals differently?

Answers in DNA

There's a bit of Neanderthal in many of us today. Scientists studying the genome (genetic makeup) of Neanderthals compared their results with the genome of modern humans. Some people may have inherited as much as 1 to 4 percent of their DNA from Neanderthal ancestors.

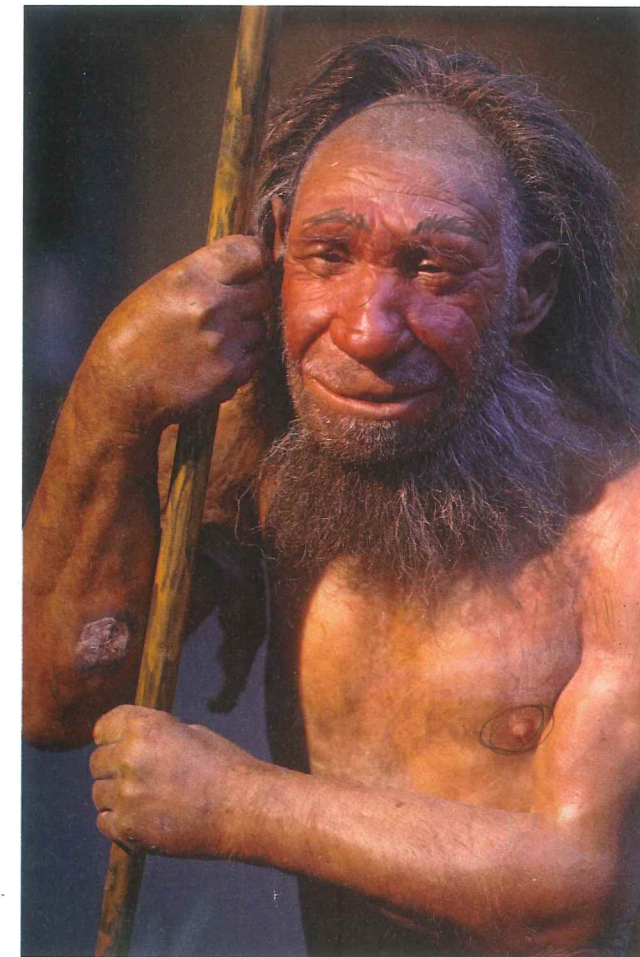
Kinship

Early humans such as Neanderthals had long childhoods. While children grew, they were fed and protected by their family. This strengthened the **kinship** ties among family members. All members learned that they had to work together to survive.

Anthropologists think Neanderthals probably lived in small family groups of 10 or 12 people. To hunt large animals for food, everyone—even the children—had to help.

Evidence shows that Neanderthals often brought food back to a fireplace in a sheltered area such as a cave. What role would sharing food play in strengthening kinship ties?

Kinship refers to social relationships between humans within a family or other group.



▲ The Neanderthals lived in what is now Europe and parts of Asia about 400 000 years ago, during the last ice age. Their bodies were short and thickly muscled, which made them well adapted to living in cold conditions.

Neanderthals: Fact or Fiction?

Scientists now know that Neanderthals were among the first humans to make their own clothes. They used flint scrapers to remove hair and fat from animal hides, and then stitched the hides together using bone needles.

Neanderthals also made other adaptations during the ice age. Archeologists have discovered the remains of Neanderthal tent dwellings on the Russian tundra that resemble Inuit igloos in size and shape. Instead of using snow, Neanderthals built their shelters of mastodon bones and animal skins sewn over a framework of poles.

Elsewhere in Europe, Neanderthals dwelt in caves that they sometimes adorned with art. In one such cave, archeologists discovered the remains of a bone flute. What does this show about this species?

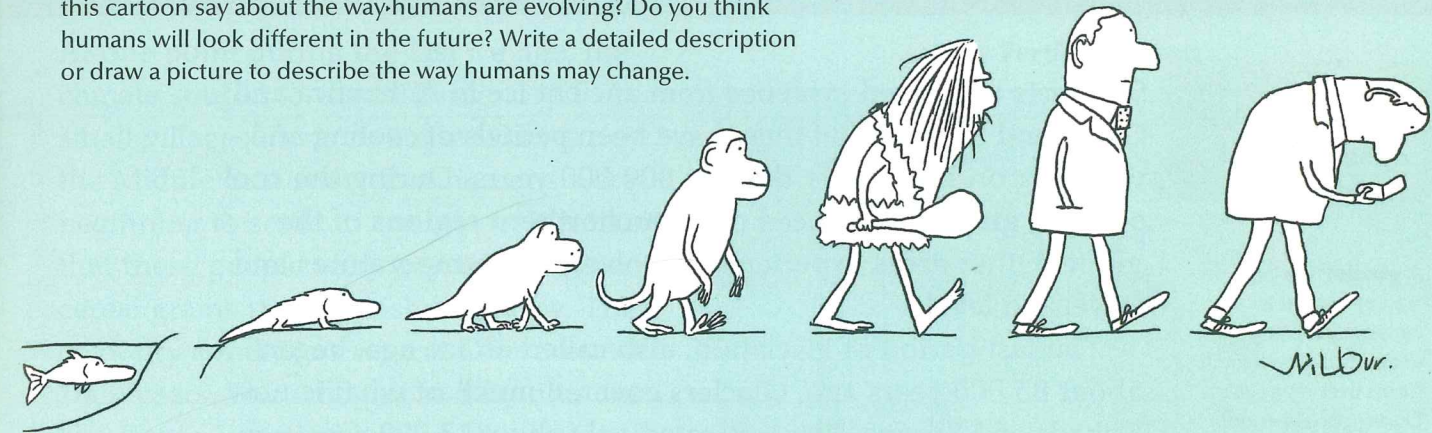


► This is a reconstruction of a Neanderthal grave site that was discovered in a cave in France in 1908. The body was that of an older male. He had been carefully placed in the grave, with his arms crossed over his chest. Tests showed that he had arthritis. He had lost most of his teeth—so many that he would have needed help to eat. What does this evidence tell us about how Neanderthals felt about each other, especially the elderly and the sick? Does this prove or disprove the earlier hypothesis that Neanderthals were not capable of feeling pity or love?



Give evidence from the image and the text when you answer the questions in the caption. Conclude with an explanation of how your evidence supports your answers.

▼ Images of human evolution are often used for humour. What does this cartoon say about the way humans are evolving? Do you think humans will look different in the future? Write a detailed description or draw a picture to describe the way humans may change.



CONSIDER THIS!

Creationism

In this section, we have used the scientific theory of evolution to explore the development of the human species over millions of years. It is important to remember that there are other theories of the way humankind came to be.

One of these theories is **creationism**, which is based on the book of Genesis, in the Bible. Genesis explains that all existing species were brought to life by God in separate acts of creation. Many cultures have creation stories, such as the Haida story of how Raven created Haida Gwaii and the first humans.

Today, some think that while the theories of evolution and creationism are very different, they do not have to be viewed separately. For instance, Pope Francis, the head of the Roman Catholic Church, has said, "Evolution in nature is not inconsistent with the notion of creation [by God], because evolution requires the creation of beings to evolve." What do you think?

Check Your Learning

1. *Homo erectus* remains have been found in Africa and Eurasia. This species lived successfully in many different environments. How might brain size have affected how well this species adapted to different environments?

Make Connections

2. New discoveries continue to change what we think we know about early humans such as Neanderthals. Find a recent archeological discovery reported in the news. Describe what new information has been discovered and how it may change what we think about the past.

Investigate

How Did Changes in Climate Affect Human Development?

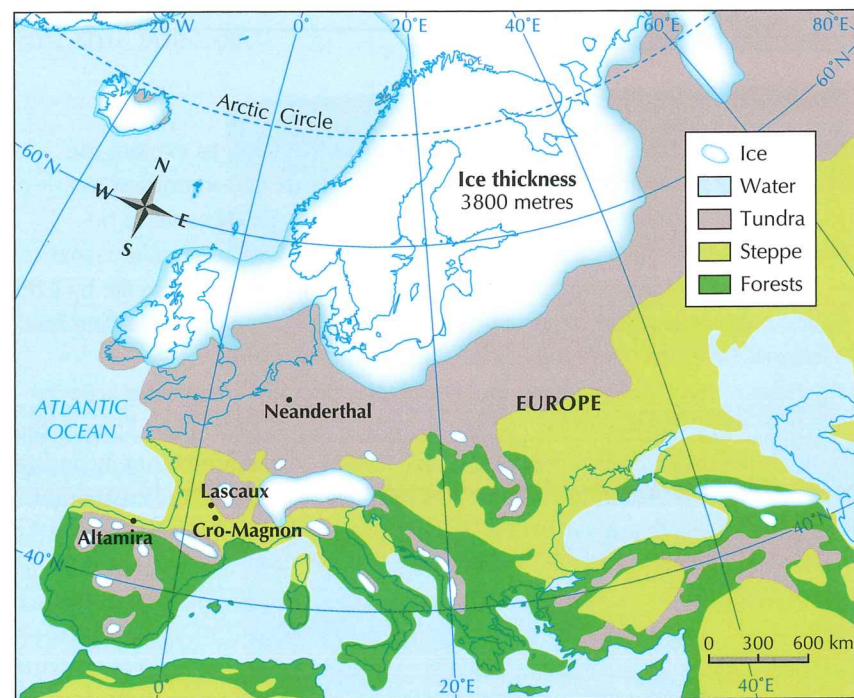
Why would the way humans gather food change over time?

A **glacier** is a large area of ice that is constantly moving under its own weight. It forms over many years. During glacial periods, these glaciers grow into vast ice sheets.

Scientists have used evidence from ancient ice in Antarctica and Greenland to show that there have been periods of cooling and warming on Earth over the last 800 000 years. During the cool periods, **glaciers** advanced over the northern regions of the globe. Other areas experienced cooler, drier temperatures and lower sea levels.

The last period of glaciation, also called an ice age, began about 85 000 years ago. Glaciers covered much of what is now Canada and Europe. They retreated only about 12 000 years ago.

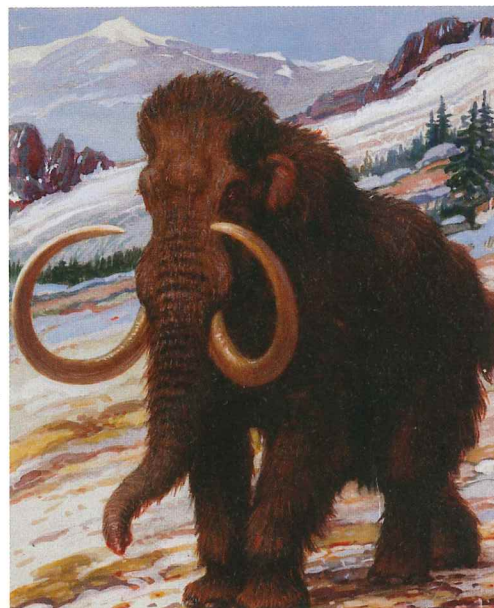
Glaciation in Europe During the Last Ice Age



◀ This map shows the most recent ice age in Europe, about 20 000 years ago. Look for the archeological sites in the southern regions of the map. These show where early humans chose to live during this ice age. How might the climate affect the way they lived?

In Europe during the last ice age, human beings developed cultures based on hunting large wild animals, such as the woolly mammoth and the Irish elk. These animals provided not only food and clothing but also tools made from their bones, tusks, and antlers.

▶ What kind of social organization would it take for early peoples to hunt an animal as large as the mammoth?



Did Climate Change Help Bring About Agriculture?

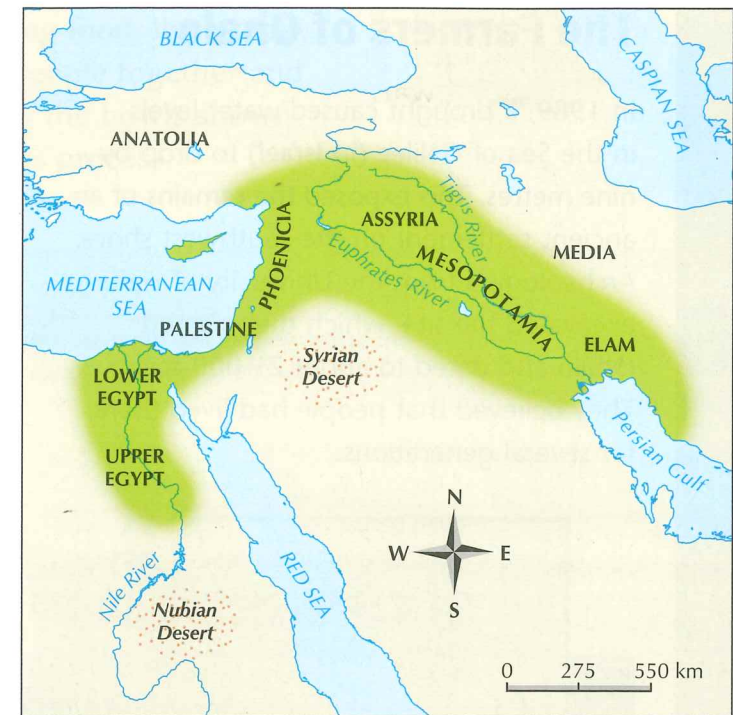
At one point during the last ice age, the climate started to warm. Evidence of small villages along rivers in what is now the Middle East show that humans were beginning to settle in one place. It is likely that these people were harvesting the wild cereal grains that flourished nearby. Then cold, dry conditions returned for around 1000 years. The wild grains began to die out. Some scientists believe that humans continued to use grains as a food source, carrying seeds with them and planting them in better conditions.

In the area we now call the "Fertile Crescent," conditions were good enough for humans to deliberately plant, tend, and harvest grains. They also began to grow figs, olives, and grapes. At the same time, they domesticated sheep and goats. These animals provided meat, milk, and wool.

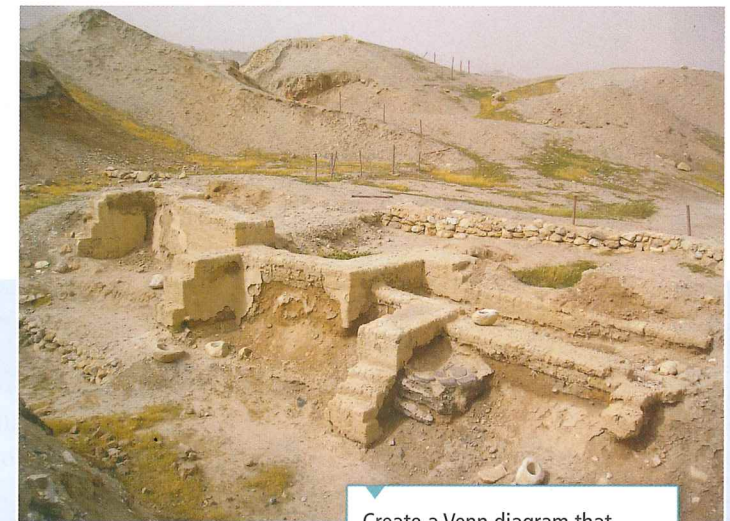
About 10 000 years ago, the climate warmed up again. Harvests became so abundant that there was more than enough food to go around. Populations grew, and agriculture became widespread.

▼ Jericho may be the oldest continually occupied human settlement on Earth. The photo on the right shows excavations of the original settlement inhabited by early farmers 11 000 years ago. The photo below shows the modern city. What environmental conditions do you think first attracted settlers to this location? Why do you think people continue to live there today?

The Fertile Crescent



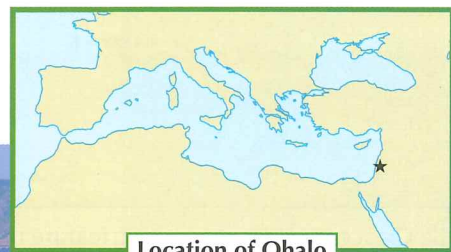
▲ The Fertile Crescent. What geographic feature may have made the land good for farming?



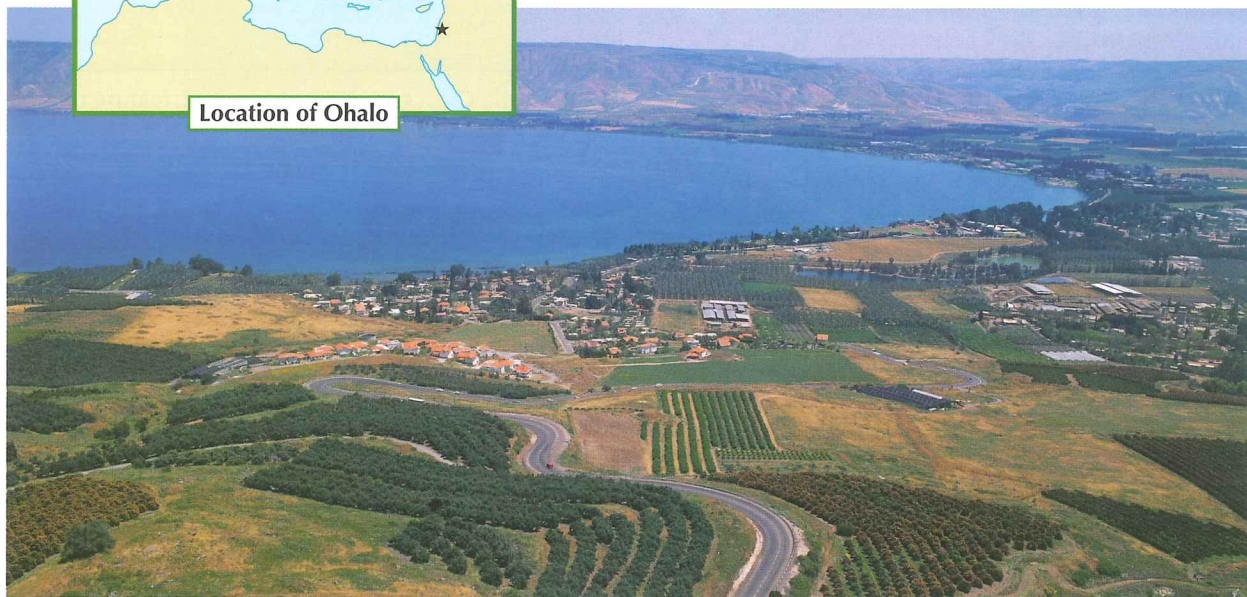
Create a Venn diagram that compares how ancient peoples lived during the ice age and after the ice age.

The Farmers of Ohalo

In 1989, a drought caused water levels in the Sea of Galilee (in Israel) to drop by nine metres. This exposed the remains of an ancient settlement on the southwest shore. Archeologists from the University of Haifa excavated the site, which they named Ohalo and dated to about 21 000 BCE. They believed that people had lived there for several generations.



Location of Ohalo



▲ The Sea of Galilee today. Why might people (both in the past and today) choose to settle and farm in this region?



◀ Flint tools like these were found at Ohalo. They were likely used to cut crops such as wheat.

What was found at Ohalo?

- ✓ Remains of dwellings and fireplaces
- ✓ Human burials
- ✓ Stone tools
- ✓ Bones of birds, fish, and animals
- ✓ Thousands of seeds stored in one of the dwellings—including seeds of fruits and grains
- ✓ A flat grinding stone

- What does the evidence show about how people lived at Ohalo?
- What do these innovations show about the farmers of Ohalo?
- What would be the significance of the Ohalo site to an archeologist or anthropologist?

History in an Object: The Bowl

Kinship ties and building social networks helped early humans survive in their environments. One aspect of social engagement involved sharing food. Even today, sharing a meal is a way to bring people together and strengthen bonds. Objects such as the bowls shown here were an important part of this process.

Why are bowls an artifact common to all societies—both ancient and modern?



◀ This bowl from what is now northern Iraq dates from about 5500 BCE.



◀ This clay cooking pot was found in what is now the Ottawa Valley, Ontario. It dates to about 2500 years ago.



◀ This bronze bowl from China dates to the Shang dynasty (1600–1046 BCE).

How did items such as bowls strengthen social ties in ancient communities?

Check Your Learning

1. Most groups in hunting and gathering societies are small, primarily because large groups would place too much strain on resources. Why might small groups be a disadvantage in an agricultural society?

Make Connections

2. What type of food is grown near where you live? Has this changed over time? Explain.

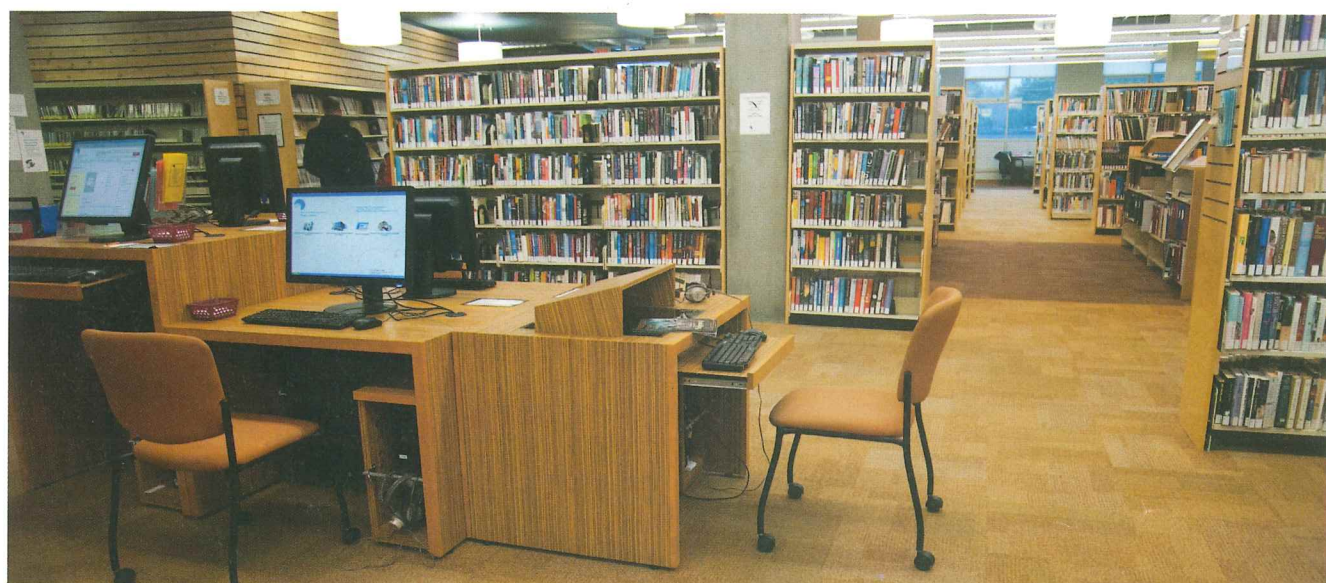
Why Do All Early Peoples Develop Ways to Communicate?

Imagine you want to learn about something new, or learn to do something new. List all of the ways that you could learn this. What might be different if you were doing this 100 years ago? 1000 years ago?

Human cultures have developed two main ways to transfer knowledge between individuals and from generation to generation:

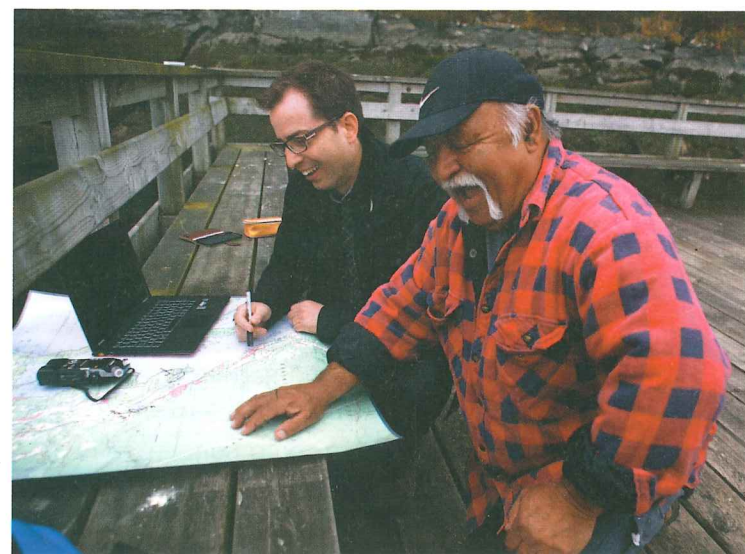
- A written record that living and future members can read, discuss, and interpret
- An oral tradition, in which Elders and Knowledge Keepers are responsible for keeping the knowledge and passing it on to future generations

How have these methods of sharing knowledge changed? What has remained the same?



▲ There are almost 3000 public libraries in Canada. What forms of knowledge are available in libraries?

Art is another way to preserve ideas and knowledge for others to appreciate. How is it different from written records or oral traditions?



► In 2014, Ray Harris, an Elder with the Stz'uminus First Nation, shared his knowledge about the land to help digitally map traditional territories on Google Earth. This project allows Harris to share traditional history and language with Aboriginal youth through their smart phones and laptops.

How Did Ancient Sumerians Transmit Knowledge?

The Sumerians lived in Mesopotamia, which included what is now the Middle East. This culture developed one of the oldest known methods of writing. **Cuneiform** is a system of wedge-shaped strokes that scribes pressed into soft clay tablets with a writing tool called a stylus. The clay would be heated in a kiln (an oven) to harden it to preserve the writing.

Originally, cuneiform took the form of pictographs. These were very simple pictures that represented a word or phrase. Think about the signs and messages that you read every day. Are pictographs still used? How do we know what they mean?



▲ This Sumerian tile dates to 2500 BCE. Scribes, who specialized in reading and writing, were valued members of Sumerian society. Scribes recorded laws and legal decisions, as well as peace treaties and maps. They also wrote medical, mathematical, and religious texts. Even works of imagination—poetry and stories—were set down and preserved in cuneiform. Why might societies want to preserve the works of poets and storytellers?

Original Pictograph	Later Cuneiform	Early Babylonian	Original Meaning
			bird
			sun, day
			to plow, to till

► This chart shows how Sumerian pictographs developed over time from simple pictures to symbols. Why would this development make cuneiform easier to write?

What Happened to Cuneiform Writing?

Historians use ancient documents to understand cultures that may have disappeared long ago. To do this they must work with specialists who study ancient scripts, such as cuneiform, and are able to translate them.

Once people stopped using cuneiform, knowledge about it was lost. No one was able to decipher it for hundreds of years. In the 19th century, specialists realized that cuneiform is a **logographic** script. Like Chinese characters or Egyptian hieroglyphics, each cuneiform character stands for a word or a phrase.

With this knowledge, experts began to decipher the ancient clay tablets and stone inscriptions. Since so few people can read cuneiform, the work has gone slowly. Even though about half a million tablets have been found, only about 30 000 have been translated so far.

- How could translating ancient languages help us understand the lives of people in the past?

List all the ways that you and your friends communicate ideas or information. What are some examples of words that you and your friends use that other people might not understand? What does this suggest about how language changes?



▲ Ministry of Egyptian Antiquities Inspector Zeinab Hashesh (left) and artist Margaret De Jong (right) work on inscriptions at the tomb of Nefersekheru in Egypt. Nefersekheru was a royal scribe for Amenhotep III.

Was Gilgamesh the First Superhero?

The *Epic of Gilgamesh* is one of the oldest known written pieces of literature. It was first set down on cuneiform tablets sometime before 2000 BCE. Archeologists found a complete version of the poem in 1853 when they were excavating the royal library at Nineveh, an ancient city in what is now Iraq.

In the story, Gilgamesh and a man named Enkidu have a series of adventures. Although Enkidu is a “wild man” who was raised by animals, he and Gilgamesh become friends. Against great odds, they journey to the Cedar Forest, slay the evil guardian Humbaba, and defeat the famous Bull of Heaven.

When Enkidu dies, Gilgamesh is consumed by grief. Now afraid of death, he sets out alone to find the secret to eternal life. He never finds it, but history remembers him to this day.



In what ways does the *Epic of Gilgamesh* deal with issues and ideas that are still significant to people today?



◀ Enkidu and Gilgamesh battle the Bull of Heaven. What other superheroes or mythological characters that you know about had to defeat a mythical beast? Why might this kind of story be told in many ways and in many cultures over time?

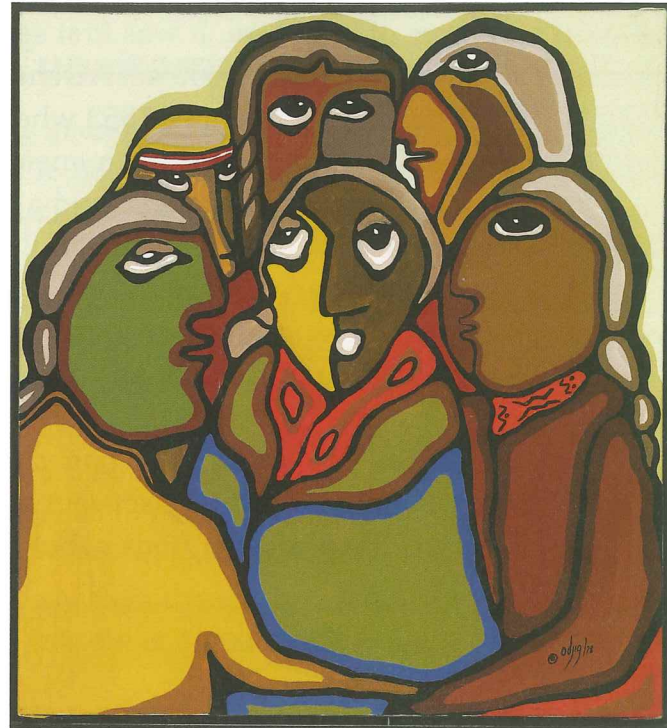


How Do Oral Traditions Transmit Knowledge?

Written records are fairly recent developments. Throughout history, many societies handed down knowledge in another way—through oral traditions.

Oral traditions are as valuable and important as written records. In many cases, a written record may be the product of only one person's effort, and it may provide only that person's perspective.

Among First Peoples, the responsibility of creating, preserving, and transmitting oral traditions is shared among many people. This cooperation ensures that the old stories are preserved intact and that new stories are properly documented. Since oral histories are so carefully kept, they have great significance, not just within the society that created them, but for other societies as well.



▲ *Aunt Grace and the Elders* (1978) by Potawatomi-Anishinaabe artist Daphne Odjig. This painting recalls Odjig's visits to storytellers on Manitoulin Island in Lake Huron, where she grew up. She tried to pass on the knowledge and sense of belonging she received from these Elders through her paintings. How do Elders help community members to maintain their identity?



▲ Delgamuukw (Earl Muldo) is a hereditary chief of the Gitksan First Nation. He was one of many who took part in the claims case.

Oral Histories as Legal Evidence

The legal case of *Delgamuukw v. British Columbia* shows how important oral histories can be. The Gitksan and Wet'sewet'en First Nations did not use written records, so the BC government refused to accept their land claims, even when hereditary chiefs presented their oral histories in court. Only after these Nations appealed to the Supreme Court of Canada did they win their case. In 1997, the justices ruled that oral histories have "equal footing" with other forms of evidence. Since that ruling, other First Peoples in Canada have used the same legal principle to win government approval for their own land claims.

Growing up Gitksan, with respected Elder Mary Johnston, I remember hearing stories as far back as nursery school age. Most stories Mom told us were of the lineage *adoax'*: the reason for why we were in what House, and how our family descended to the House (for us it was the *Tsim'K'aax* legend, and for Mom it was the Mountain Goat stories). Some stories I've relayed to my children while they grew up (like *Weegyet's* adventures)...Other stories were lessons to us: how to treat animals with respect; to listen to our Elders (teachers and role models); to know the way to thank Mother Earth for her abundant resources that we used and needed to thrive and survive; and to associate our sacred artworks as an expression of our claims to our names, lands (territories), Houses, and rights as people of the Gitksan.

—Geraldine Johnson

What do these statements tell us about the importance of oral stories and traditions?

Gitksan oral histories . . . date back ten thousand years and validate the people's connection to the land. In recent decades, they have been on a journey of gathering these histories from the elders, resulting in an archival collection of cultural identity that includes over ten thousand items. These histories, legends, and folklore provide invaluable information about genealogy and historical changes affecting weather patterns, local geology, and wildlife. The Gitksan did not simply occupy their traditional territories; they were part of the land.

—From the Quilt of Belonging website

As you consider these examples, ask yourself the following questions:

- Who created this art?
- Why did they create it?
- For whom did they make it?

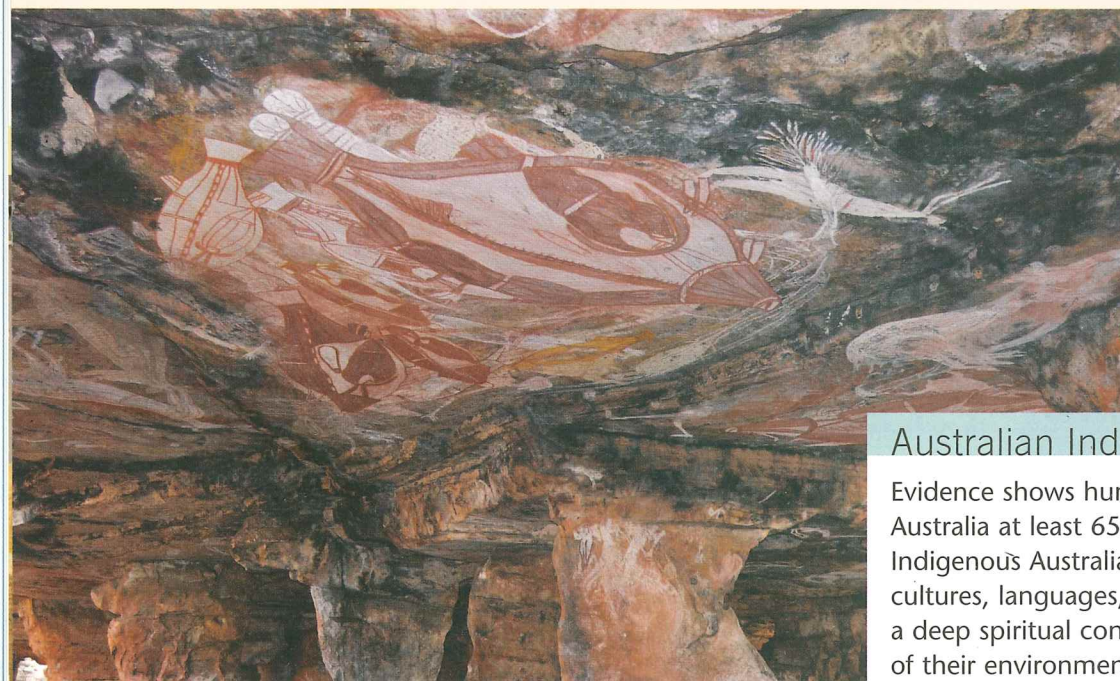
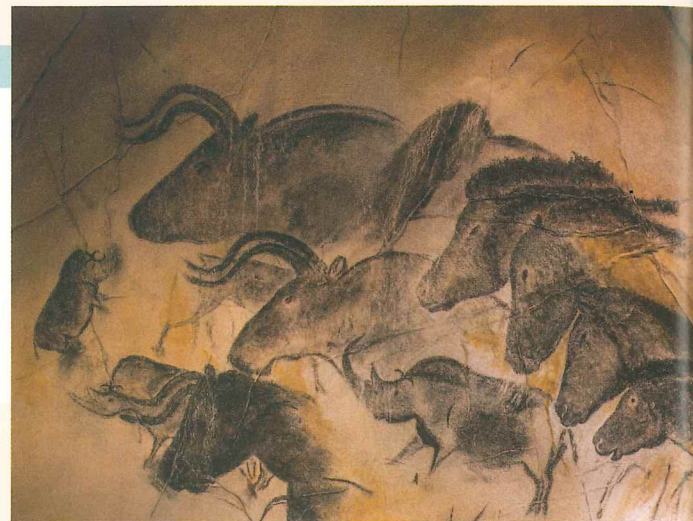
What Does Ancient Art Reveal About Human Nature?

Art is any type of expression that shows human creativity. People have been using art to explore what it means to be human almost since the genus *Homo* first appeared on Earth.

Cro-Magnon Cave Art

The first group of *Homo sapiens* to settle in Europe is known today as Cro-Magnons. They arrived about 40 000 years ago and left many examples of cave paintings. Most of these paintings show the large animals they hunted. Using ochre and charcoal, the artists drew with such skill and accuracy that modern biologists can identify each animal species, even those that are now extinct.

► Cro-Magnon artists painted their images deep inside caves. Imagine how this painting may have looked in a dark, torch-lit cave.



▲ The Gabarnmung Rock Shelter is one of the oldest art sites in Australia, dating to about 28 000 years ago. Indigenous Australians modified the original rock formation to make it a more suitable place to live. Then they painted the walls and ceilings.

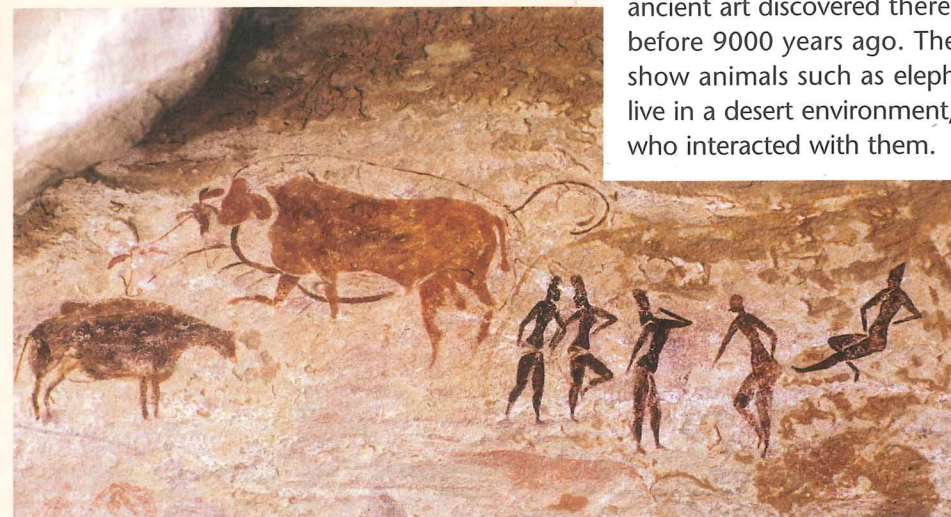
Australian Indigenous Rock Art

Evidence shows humans were living in Australia at least 65 000 years ago. Indigenous Australians still maintain their cultures, languages, and beliefs. They have a deep spiritual connection to every part of their environment and believe that everything in the world is connected. Their oral histories go back thousands of years. Even today, many can still interpret the oldest rock paintings.

Rock Art in the Sahara

The Sahara Desert is one of the most inhospitable places on the planet. However, the Sahara region has not always been a desert. One way we know this is through the ancient art discovered there. Most of this art dates to before 9000 years ago. The paintings and rock sculptures show animals such as elephants and giraffes, which cannot live in a desert environment, as well as the early peoples who interacted with them.

▼ What do you think the people here are doing? Why would the artist want to create a painting of this activity?



First Peoples' Rock Art in British Columbia

British Columbia has a rich tradition of art created by the First Peoples who have lived in this area from time immemorial. Many of the earliest examples of this art were wood carvings that did not survive in the wet climate.

Since rock is more resistant than wood, a lot of the artworks that remain from hundreds or thousands of years ago are stone carvings. Some of these were carved into cliff faces along the coast. Others were made into free-standing sculptures, each with its own story to tell.

► The Sechelt Image may be more than 3000 years old. Find out the story behind this image. Why might the people who created it have wanted to record this story by making a statue?



Check Your Learning

1. We know more about the Sumerians than other cultures of the same era because their writings have survived. Speculate on what sorts of things we could learn about the Sumerians from their cuneiform records.
2. Why is it important to recognize and value all ways of preserving and transferring knowledge?

Make Connections

3. Why do humans preserve and pass on their written, oral, and artistic traditions to future generations?
4. If you could leave a written record, an oral history, or a work of art for your descendants, what would you choose? Why?

What does it mean to be human?

THINKING LIKE AN... Anthropologist

Anthropologists study the development of humans—both their physical and their social natures. You have seen examples of how humans developed, adapted to their environments, and created ways to communicate knowledge and tell the stories of their cultures.

Choose one or more of the questions shown here. Represent your thinking and learning in any way you choose.

- Name and describe a key turning point in the history of human development. Explain why it was important and the changes that it created. **Continuity and Change**

- How does what people create (art or stories) and how they communicate reveal what they valued and believed? **Perspectives**

- What kinds of evidence help to explain and understand ancient peoples? What are the drawbacks of these types of evidence? How would an anthropologist make up for such drawbacks? **Evidence**

Explore and Reflect

You have seen how our understanding of ancient peoples has changed over time. How do new discoveries change what we think we know about the past?

Suggestions

- Look for primary sources to use as evidence to help you answer your question.
- Think about creating a story, a photo, an essay, or a video to answer your question.
- Use drawings, maps, or timelines to support your answer.



◀ In 2015, anthropologist Chalachew Seyoum discovered the fossilized jaw of an early human, from genus *Homo*, in Ethiopia. At the time, scientists believed that genus *Homo* emerged 2.4 million years ago. However, tests revealed that this jaw was at least 2.8 million years old. What makes this discovery so significant?

Think about the qualities that are common to all human beings everywhere. What has changed over time? What has stayed the same?

TRY IT!

If you needed to show an alien race what it means to be human, what would you show them? Create a “record” of your culture. Consider what you would like to show, what form it would take, and what impression you would like to leave. You could work with a group to share ideas.

GETTING STARTED

- Write down what you already know.
- Decide what else you need to know.
- Consider your audience. Which type of record will communicate your ideas most effectively?
- Collect your ideas in one place and make your choice.

SHARING THE WORK

- Divide responsibilities fairly.
- Give each other deadlines, and stick to them.
- Communicate to share ideas and discuss problems.
- Hold status meetings.
- Do what you say you will do.