ANCESTORS EXHIBIT
SCAVENGER HUNT
Content Warning: This scavenger hunt will contain images of skeletal remains, as will some of the museum web sites to which you will be directed.
Sahelanthropus tchadensis and Orrorin tugenensis were two of the Last Common Ancestors shared by apes and humans.

Check Answer
Last Common Ancestors
Click each of the following that are great apes.

- Baboons
- Gorillas
- Capuchin monkeys
- Orangutans

Which of the great apes shares the most recent common ancestor with modern humans?

- Chimpanzees

Gibbons are the only existing lesser apes.
What are some of the “key hominin traits” selected for by evolution that differ from the greater and lesser apes and have allowed humans and human ancestors to develop as they have?

Check Answer

- Bipedalism
- Larger brains
- Smaller canines
- Decreased sexual dimorphism
- Longer childhoods
- Precision grip

Sexual dimorphism is the shape and size difference between males and females in a species.
What role did diet play in human evolution?

Check Answer

The introduction of meat into the diet of early human ancestors led to increased brain size, development of language, social organization, and possibly expansion out of Africa into the rest of the world.

Gracile australopithecines are so named because of differences in anatomy stemming from a more varied diet than their robust australopithecine cousins. What are some of the different anatomical features that are found in species such as *Australopithecus africanus* that indicate this dietary difference?

Check Answer

Gracile australopithecines had a rounder cranium, larger brain, and smaller teeth.

How old is Lucy?

Check Answer

3.18 million years old
What are some of the anatomical characteristics of robust australopithecines, such as *Paranthropus robustus*, and what do they tell us about the diet of robust australopithecines?

Robust australopithecines had a sagittal crest on top of their head for chewing muscles to attach to, as well as larger teeth with thicker enamel and large cheek bones.

They tell us robust australopithecines did not have a varied diet but rather one that consisted of a lot of tough foods such as seeds, nuts, and tubers with only a small amount of insects, meat, leaves, and soft fruit.

The sagittal crest is a bony piece on top of the skull where jaw muscles attach.

Tubers are starchy root vegetables, like potatoes or taro.
Choose all of the following skeletal differences between *Homo habilis* and Australopithecines.

- Yes! Brain size
- Uh oh! Food choices
- Woohoo! Jaw and teeth
- Right on! Arms
- Great job! Legs
- Try again! Foramen magnum

Who is Peking Man? What human ancestor does he belong to?

Check Answer

A human ancestor found near Beijing, China between 1929-1937. He is a member of the species *Homo erectus.*

What are some of the cultural adaptations used by *Homo heidelbergensis*?

Check Answer

- Fire
- Fire-altered tools
- Wooden spears
- They built dwellings.
How do scientists think *Homo antecessor* fits into the evolutionary tree of the species *Homo*?

Uh oh!  
A) *Homo antecessor* isn’t an ancestor of modern humans.

Try again!  
B) *Homo antecessor* is the earliest species of *Homo*.

Yes!  
C) *Homo antecessor* could be the last common ancestor of Neanderthals and modern humans.

Sorry!  
D) *Homo antecessor* is descended from Neanderthals.
Neanderthals were a species of *Homo* that evolved in Europe and Asia and interacted with humans living at that time. They lived between about 400,000 and 40,000 years ago. Neanderthals are our closest relative. Descendants of non-African populations have a small percentage of Neanderthal DNA.
Neanderthals began producing tools _________ years ago.

Check Answer

300,000 years ago

https://www.amnh.org/exhibitions/permanent/human-origins/neanderthal-tools
Who were the Denisovans? What evidence do we have for the existence of Denisovans? How are they related to *Homo sapiens*?

Denisovans were a species of *Homo* found across Asia. We know of Denisovans mostly from DNA, a finger bone, and a piece of a jaw. Denisovans mated with *Homo sapiens* between 50,000 and 60,000 years ago. As with Neanderthals, descendants of non-African populations have a percentage of Denisovan DNA.
Who are Homo sapiens? What are some of the physical traits of Homo sapiens? What are some of the behavioral traits and cultural adaptations that Homo sapiens have used?

Check Answer

Us! We have a foramen magnum on the bottom of our skulls, slanted femurs to keep balance, and a center of gravity around our pelvis. We also have larger brains and smaller jaws and teeth.

Behavioral traits and cultural adaptations include using complex stone tools, such as fishhooks and spear throwers, making fire, building shelters, domesticating plants and animals, developing social organization and language, and creating art.
Cheddar Man is a Mesolithic era (15,000-5,000 years ago) human from Great Britain. His eye color, skin color, and hair color indicate lighter colored eyes evolved in humans in Europe before lighter skin or hair colors.

https://www.nhm.ac.uk/discover/cheddar-man-mesolithic-britain-blue-eyed-boy.html

Who is Cheddar Man? What is special about his eye color, skin color, and hair color combination?

Check Answer
Reflection

Now that you have viewed the *Ancestors* virtual tour and completed this scavenger hunt, summarize what you have learned. What is something you did not know before that you learned? What is something you would want to teach someone else about human evolution? What were your favorite parts? What were your least favorite parts?

How would you visualize what you have learned? You could create a timeline, draw a picture, make a map, or even write a story.