ANCESTORS EXHIBIT SCAVENGER HUNT



MAXWELL MUSEUM of Anthropology



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.



<u>https://humanorigins.si.edu/evidence/hu man-fossils/species/orrorin-tugenensis</u> Sahelanthropus tchadensis and Orrorin tugenensis were two of the ______shared by apes and humans.

Check Answer

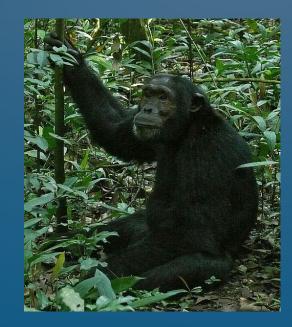
Last Common Ancestors



https://humanorigins.si.edu/evidence/hum an-fossils/species/sahelanthropustchadensis







https://australian.museum/learn/science/huma n-evolution/humans-are-apes-great-apes/

Click each of the following that are great apes.

Uh oh!	Baboons
Woohoo!	Chimpanzees
Yes!	Gorillas
Try again!	Capuchin monkeys
Great job!	Orangutans

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

Check Answer

Chimpanzees





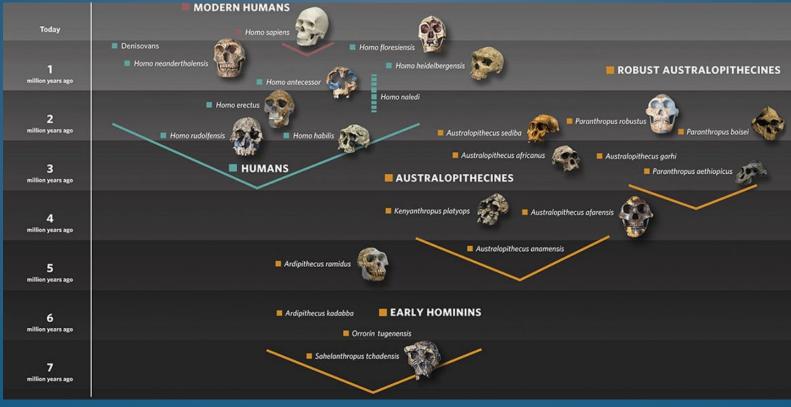


<u>https://australian.museum/learn/science/human-evolution/humans-are-apes-great-apes/</u>

are the only existing lesser apes.

<u>Check Answer</u>

Gibbons



<u> https://www.nhm.ac.uk/discover/how-we-became-human.html</u>

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

Sexual dimorphism is the shape and size difference between males and females in a species.

Bipedalism Larger brains Smaller canines Decreased <u>sexual dimorphism</u> Longer childhoods Precision grip

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.



https://humanorigins.si.edu/multimedia/videos/meet-ourscientist-briana-pobiner-dietary-detective



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

nttps://humanorigins.si.edu/evidence/humanfossils/species/australopithecus-africanus

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? <u>Check Answer</u>



https://www.amnh.org/exhibitions/permanent/humanorigins/lucy

How old is Lucy?

Check Answer

3.18 million years old



https://humanorigins.si.edu/evidence/ human-fossils/species/paranthropusrobustus



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

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?

<u>Check Answer</u>

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. Tubers are starchy root vegetables, like potatoes or taro.



https://australian.museum/learn/science/humanevolution/homo-habilis/

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*.



https://www.amnh.org/exhibitions/permanent/humanorigins/peking-man

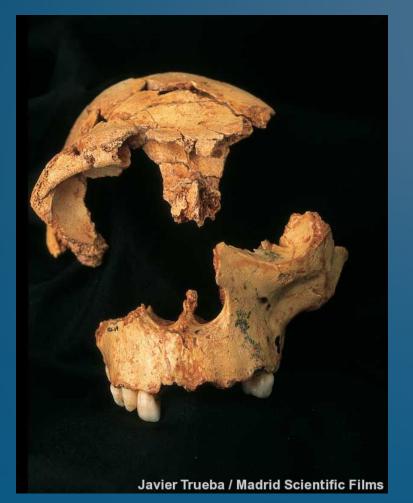
What are some of the cultural adaptations used by *Homo heidelbergensis*?

<u>Check Answer</u>

Fire Fire-altered tools Wooden spears They built dwellings.



https://humanorigins.si.edu/evidence/humanfossils/species/homo-heidelbergensis



<u>https://australian.museum/learn/scie</u> <u>nce/human-evolution/homo-</u> antecessor/ How do scientists think *Homo antecessor* fits into the evolutionary tree of the species Homo?

A) Homo antecessor isn't an ancestor of modern humans.

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

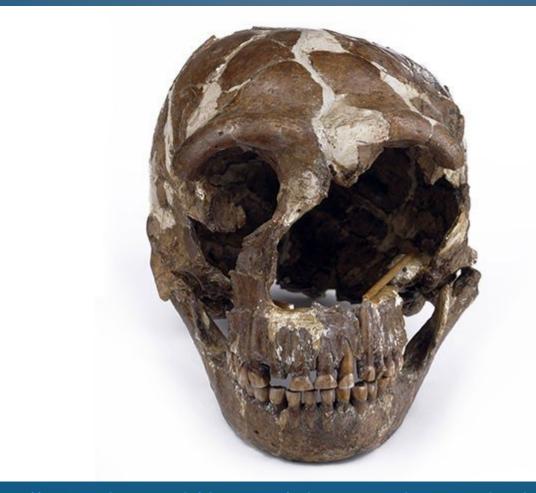
Uh oh!

Yes!

Sorry!

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

D) Homo antecessor is descended from Neanderthals.



Neanderthals were a species of Homo that evolved in Europe 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.

https://www.nhm.ac.uk/discover/who-were-the-neanderthals.html

Who were the Neanderthals? How long ago did they live? How are Neanderthals related to modern humans?

Check Answer

Neanderthals began producing tools years ago.

Check Answer

300,000 years ago



https://www.amnh.org/exhibitions/permanent/humanorigins/neanderthal-tools



https://www.nhm.ac.uk/press-office/press-releases/new-evidence-in search-for-the-mysterious-denisovans-.html

Who were the Denisovans? What evidence do we have for the existence of Denisovans? How are they related to *Homo sapiens*?

Check Answer

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.

YOU ARE HERE

https://humanorigins.si.edu/evidence /human-fossils/species/homo-sapiens 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?

<u>Check Answer</u>

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.



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

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.

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.