

Classification of Homo Sapiens Sapiens

Domain - Eukarya: Cells with a nucleus

Kingdom - Animalia: Can't produce own food

Phylum - Chordata: Has a backbone

Class - Mammalia: Has hair, produces live young, feeds young milk.

Order - Primates: Opposable thumb

Family - Hominidae: Walks upright

Genus - Homo: The same, alike

Species - Sapiens: Wise

Sub-species - Sapiens Sapiens

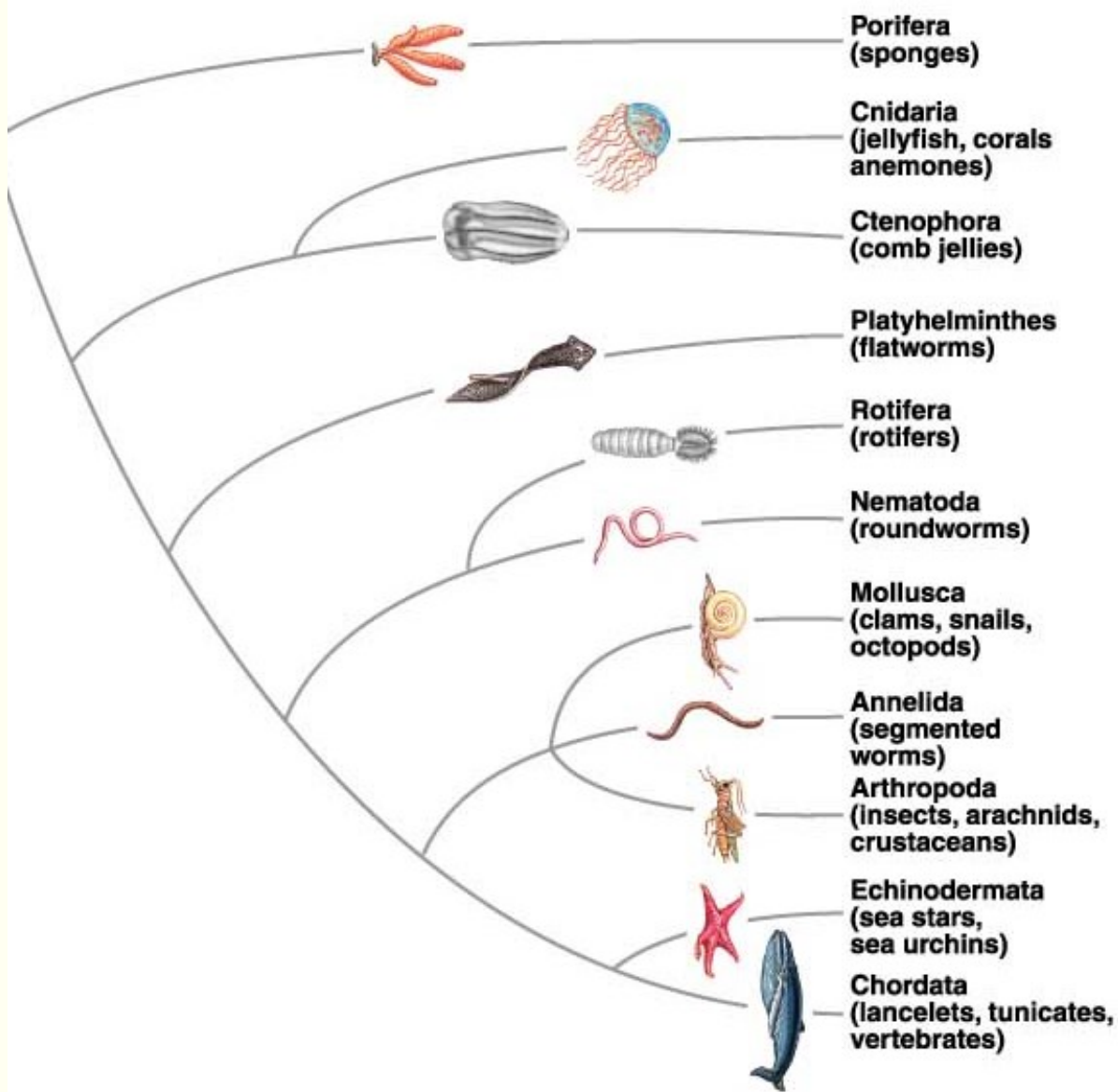
A detailed diagram of an animal cell, showing various organelles and their relative positions. The cell is roughly spherical with a blue plasma membrane. Inside, the cytosol is filled with various structures. The nucleus is a large, dark blue, spherical structure with a prominent nucleolus and a nuclear envelope with pores. Chromatin is visible within the nucleus. The Golgi complex is a series of stacked, flattened sacs. Lysosomes are small, spherical organelles. Mitochondria are bean-shaped organelles with internal folds. Centrioles are cylindrical structures. Vesicles are small, spherical organelles. The rough endoplasmic reticulum is a network of flattened sacs with ribosomes attached. The smooth endoplasmic reticulum is a network of flattened sacs without ribosomes. Ribosomes are small, spherical organelles. The flagellum is a long, whip-like structure. The plasma membrane is the outer boundary of the cell.

Labels and their corresponding organelles:

- microtubules
- mitochondrion
- centriole
- vesicle
- cytosol
- rough endoplasmic reticulum
- ribosomes
- smooth endoplasmic reticulum
- chromatin
- nuclear envelope
- nuclear pore
- nucleolus
- Golgi complex
- lysosome
- flagellum
- plasma membrane
- nucleus (bracketed group of chromatin, nuclear envelope, nuclear pore, and nucleolus)

A eukaryote (*yoo-KARR-ee-ət*) is any organism whose cells contain a nucleus and other organelles enclosed within membranes. The defining feature that sets eukaryotic cells apart from Bacteria and Archaea is that they have membrane-bound organelles, especially the nucleus, which contains the genetic material and is enclosed by the nuclear envelope. The presence of a nucleus gives eukaryotes their name. Eukaryotic cells also contain other membrane-bound organelles such as mitochondria and the Golgi apparatus. Eukaryotic organisms may be unicellular or multicellular. Only eukaryotes form multicellular organisms consisting of many kinds of tissue made up of different cell types. Eukaryotes can reproduce both asexually through mitosis and sexually through meiosis and gamete fusion. The domain Eukaryota appears to be monophyletic, and so makes up one of the three domains of life. Eukaryotes represent a tiny minority of all living things. Eukaryotes first developed approximately 1.6–2.1 billion years ago (during the Proterozoic eon). <https://en.wikipedia.org/wiki/Eukaryote>

Kingdom - Animalia



All animals are members of the Kingdom Animalia, also called Metazoa. All members of Animalia are multicellular, and all are heterotrophs (that is, they rely directly or indirectly on other organisms for their nourishment). Most ingest food and digest it in an internal cavity. The bodies of most animals (all except sponges) are made up of cells organized into tissues, each tissue specialized to some degree to perform specific functions. In most, tissues are organized into even more specialized organs. Most animals are capable of complex and relatively rapid movement compared to plants and other organisms. Most reproduce sexually, by means of differentiated eggs and sperm. <http://animaldiversity.org/accounts/Animalia/>

Phylum - Chordata

Animals with a Backbone or Spinal Column:
(All these animals are in the phyla *Chordata*
and the subphyla *Vertebrata*.)

Fish



Fishes are vertebrates that have a skeleton made of either bone or cartilage. Most fish breathe through gills. They allow the fish to breathe oxygen in the water. Most fish swim using a tail fin.

Birds



Birds have 3 major differentiating characteristics: wings for flight, feathers, and a beak rather than teeth. There are over 8,000 species of birds

Reptiles

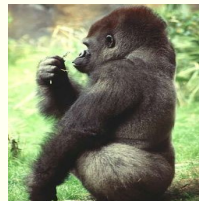
Reptiles are often called cold-blooded because they can't regulate their own body temperature. Their body temperature depends on the external temperature. The most noticeable feature of reptiles are the scales that cover their body.

Amphibians



Crocodiles and alligators are large amphibious reptiles. They can walk on land using their webbed feet. They can also use their long tail to swim in water.

Mammals



Most mammals have hair, or fur, covering their body. They are also capable of regulating their body temperature. Most mammals walk on 4 legs, with only the humans walking upright on 2 legs. Aquatic mammals have flippers, or fins, for swimming rather than legs. One other difference is that mammals give birth to fully formed babies, and the female mammals produce milk to feed their young.

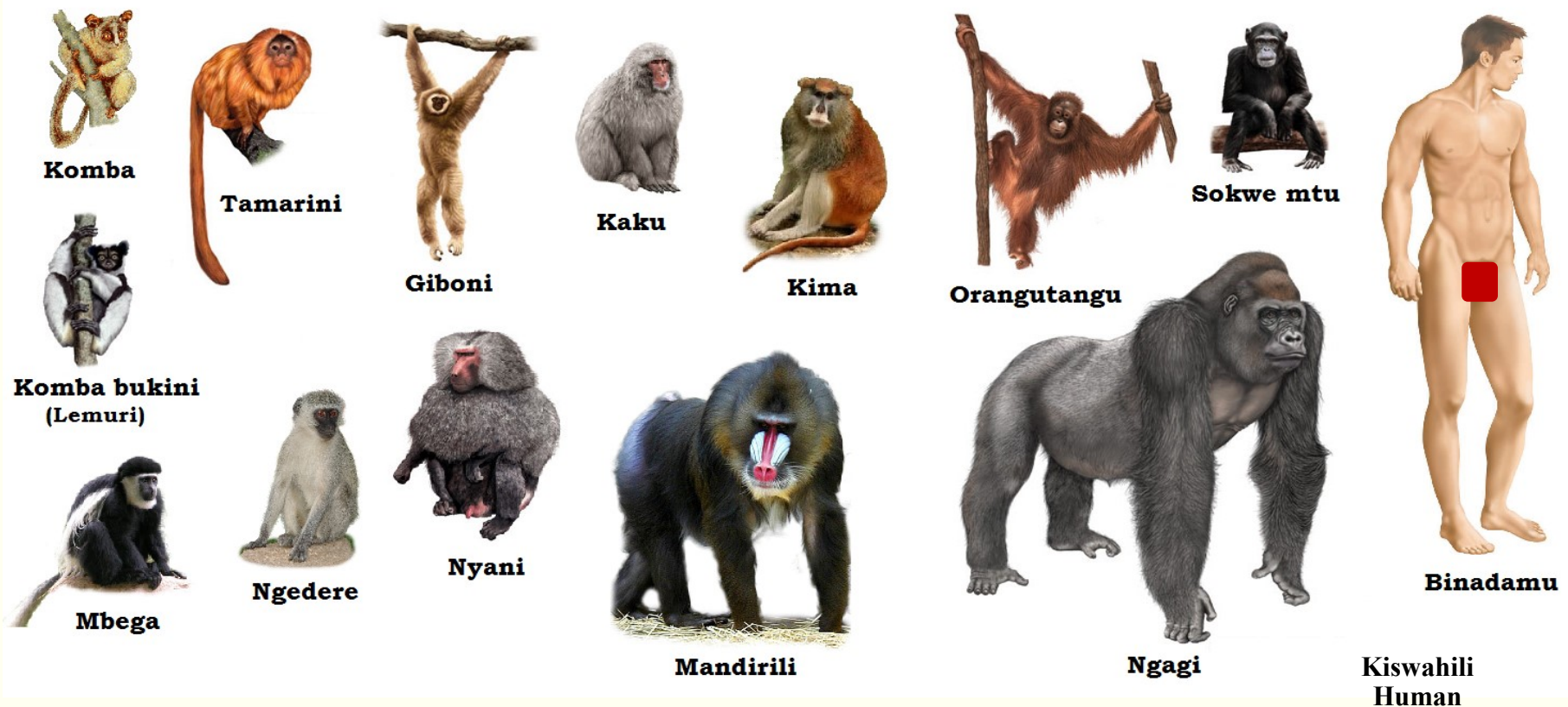
Class - Mammals



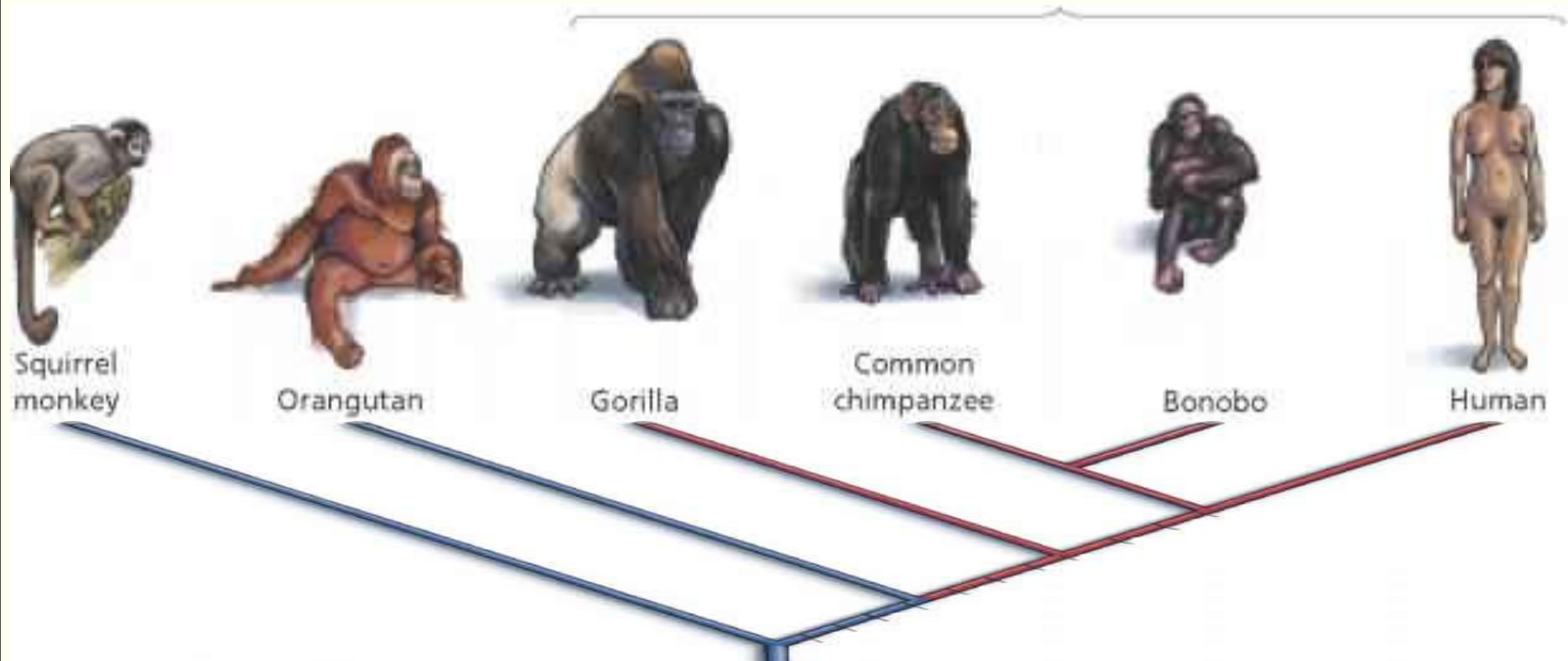
Mammals have several unique characteristics that differentiate them from other animals. Most mammals have hair, or fur, covering their body. They are also capable of regulating their body temperature. The mammals metabolism controls heat production, and the sweat glands help cool the body. These allow the mammal to maintain a constant body temperature, regardless of the environmental temperature. One other difference is that mammals give birth to fully formed babies, and the female mammals produce milk to feed their young. Most mammals walk on 4 legs, with only the humans walking upright on 2 legs. Aquatic mammals have flippers, or fins, for swimming rather than legs.

Order - Primates

- ♦ Primates are characterized by large brains relative to other mammals
- ♦ Rely on stereoscopic vision at the expense of smell
- ♦ Most have opposable thumbs and prehensile tails.
- ♦ Many species are sexually dimorphic
- ♦ Differences include body mass, canine tooth size, and coloration.
- ♦ Primates have slower rates of development than other similarly sized mammals
- ♦ Primates reach maturity later, but have longer lifespans.



Family - Hominidae



https://images.search.yahoo.com/yhs/search;_ylt=A0LEV7irmtBXhHQA5FunnIIQ?p=Hominidae&fr=yhs-mozilla-002&fr2=piv-web&hspart=mozilla&hsimp=yhs-002#id=138&iurl=http%3A%2F%2Fwww.clicktocurecancer.info%2Fmedia-activity%2Fimages%2F1954_156_299-linnaean-classification-primates.jpg&action=click

The Hominidae (/hɒˈmɪnɪdi:/), whose members are known as great apes, or hominids, are a taxonomic family of primates that includes seven extant species in four genera: *Pongo*, the Bornean and Sumatran orangutan; *Gorilla*, the eastern and western gorilla; *Pan*, the common chimpanzee and the bonobo; and *Homo*, the human and near-human ancestors. <https://en.wikipedia.org/wiki/Hominidae>

Genus - Homo



Homo Erectus



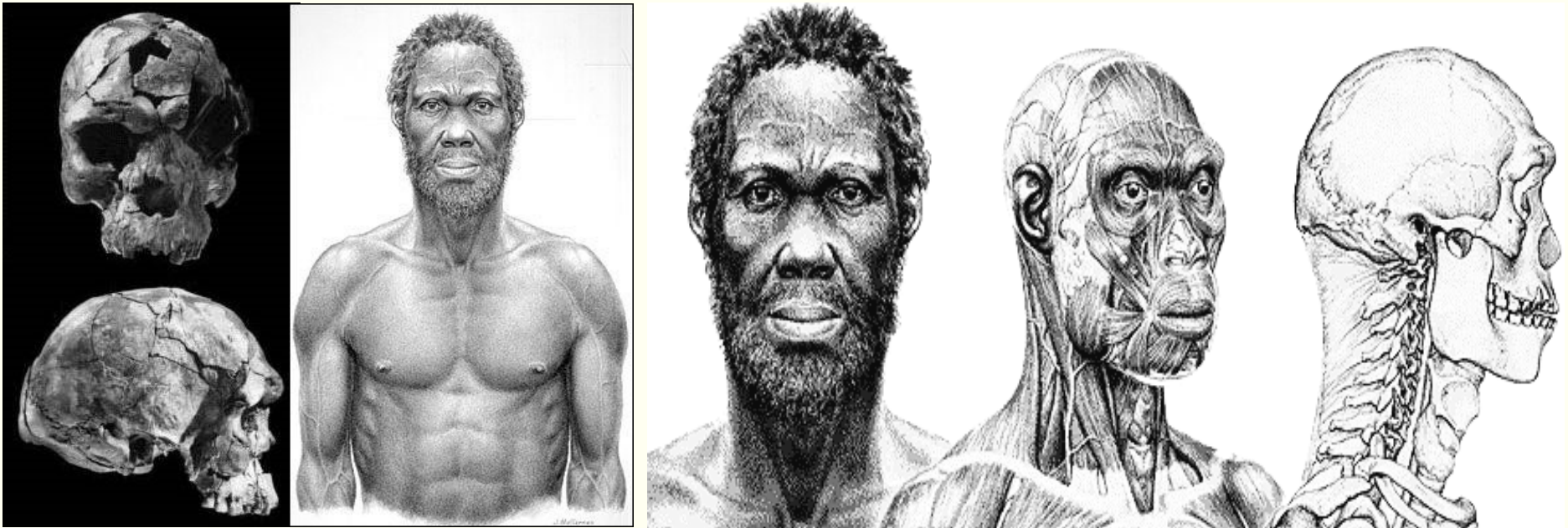
Homo habilis

Grouping	Subspecies	Populations
Humans	<i>H. s. sapiens</i> (anatomically modern humans)	<i>H. sapiens</i>
	<i>H. s. idaltu</i>	
<u>Neanderthals</u>	<i>H. s. neanderthalis</i>	<i>H. neanderthalensis</i>
Archaic Humans	<i>H. s. heidelbergensis</i> ^{[60][61]}	<i>H. heidelbergensis</i>
	<i>H. s. rhodesiensis</i>	<i>H. rhodesiensis</i>
	<i>H. s. antecessor</i> ^[62]	<i>H. antecessor</i>
	<i>Denisovan</i> ^{[63][64][65]} (?)	

- ♦ The mainstream view, known as the "[Out of Africa](#)" or "recent African origin" model, holds that all or nearly all modern human genetic diversity around the world can be traced back to the first anatomically modern humans to leave Africa.
- ♦ This model is supported by multiple and independent lines of evidence, such as the fossil record and genetics.
- ♦ The precise location where AMH first emerged is still unclear, but the consensus in 2014 indicates an origin within SubSaharan Africa.
- ♦ The most genetically distinct contemporary human populations are hunter-gatherers within southern Africa. The analysis indicated a maternal line closely linked to that found in "Mitochondrial Eve".
- ♦ This supports archeological and osteological evidence indicating the presence, in southern Africa, of marine foragers with ancient maternal human mtDNA. This also supports views suggesting initial maritime dispersal of humans.

https://en.wikipedia.org/wiki/Anatomically_modern_human

Species - Sapiens



<https://search.yahoo.com/yhs/search?p=Homo+sapiens+idaltu&ci=UTF-8&hspart=mozilla&hsimp=yhs-002>
https://images.search.yahoo.com/yhs/search;_ylt=A0LEVjyondBX2vgAx7AnnIIQ;_ylu=X3oDMTBjB0aG5zBG9vbG8DYmYxBHBvcwMxBHZ0aWQDBHNIYwNzYw--?p=Homo+Sapiens+Idaltu&slotting=yst&fr=yhs-mozilla-002&hspart=mozilla&hsimp=yhs-002#id=5&ciurl=http%3A%2F%2Fwww.bradshawfoundation.com%2Forigins%2Fskulls%2F

Homo sapiens idaltu

Homo sapiens (Latin: "wise man") is the binomial nomenclature (also known as the scientific name) for the only extant human species. Some new fossils from Herto in Ethiopia, are the oldest known modern human fossils, at 160,000 yrs. The discoverers have assigned them to a new subspecies, *Homo sapiens idaltu*, and say that they are anatomically and chronologically intermediate between older archaic humans and more recent fully modern humans. Their age and anatomy is cited as strong evidence for the emergence of modern humans from Africa, and against the multiregional theory which argues that modern humans evolved in many places around the world. https://en.wikipedia.org/wiki/Homo_sapiens

Sub-Species - Sapiens Sapiens

HOMO SAPIENS SAPIENS

Modern Human Beings

Believed to have appeared in Africa between 150,000-200,000 years ago

Began to migrate outside of Africa 100,000 years ago.

Believed by many to have replaced the Neanderthals by 30,000 B.C..

By 10,000 B.C. *Homo Sapiens Sapiens* could be found throughout the world due to migration.

There are two theories for this migration:

One is the “out of Africa” model which states that *homo sapiens sapiens* migrated out of Africa and slowly replaced other groups they encountered throughout the world.

The other theory is the **multiregional model**, which states that development from earlier hominids to modern humans occurred in different locations in Africa, Asia, and Europe at different times.

https://images.search.yahoo.com/yhs/search;_ylt=A0LEVifwntBXyp8ARrsnnIIQ?p=homo+sapiens+sapiens&fr=yhs-mozilla-002&fr2=piv-web&chspart=mozilla&chsimp=yhs-002#id=107&ciurl=http%3A%2F%2Fhamptonworldhistory.wikispaces.com%2Ffile%2Fview%2FHomo_sapiens_ppt_2.jpg%2F257144464%2FHomo_sapiens_ppt_2.jpg&action=click

Modern humans are the subspecies *Homo sapiens sapiens*, which differentiates them from what has been argued to be their direct ancestor, *Homo sapiens idaltu*. The ingenuity and adaptability of *Homo sapiens* has led to its becoming the most influential species on the planet; it is currently deemed of least concern on the Red List of endangered species by the International Union for the Conservation of Nature. https://en.m.wikipedia.org/wiki/Homo_sapiens#Origin

Modern Humans

