

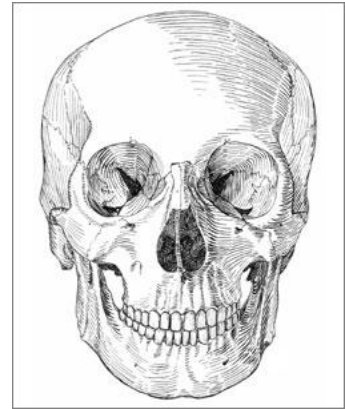
Paleoanthropology Review

Directions: Use the word bank on the back of this page to fill in the blanks for each question.

- 1) The closest living relative to humans is the **chimpanzee**.
We can determine this by comparing their **DNA**, which is up to 98% identical to ours.
- 2) The closest ever relative to *Homo sapiens* is **Neanderthal**.
- 3) "Lucy" is a member of the species, *Australopithecus* **afarensis**.
- 4) The two main groups (genera) of hominids are **Homo** and **Australopithecus**.
- 5) The **foramen magnum** is the point of the skull where it connects to the spine.
- 6) **Monkeys** are primates with tails. Those primates with larger brains and no tail are called **apes**. Upright-walking human relatives that branched off after our common ancestor with chimps are called **hominids**.
- 7) More recent hominid fossils can be found in **Europe** and **Asia**, but the earliest hominids are known to have originated on the continent of **Africa**, specifically near the **Great Rift Valley**.
- 8) The **sagittal crest** is what the jaw muscles attach to, on top of the cranium.
- 9) "Lucy" was discovered in 1974 by **Don Johanson** in Hadar, Ethiopia.
- 10) The **Laetoli** footprints were discovered by Mary Leakey in 1978. These footprints are preserved in a layer of sedimentary rock, made of **volcanic ash**. They give very strong evidence that *A. afarensis* was **bipedal**.
- 11) One way to establish that a specimen was bipedal is to look at its **pelvis**. If it is more elongated, then the species probably walked on all fours more like an ape, but if it is more compact, the species likely walked **upright**.



- 12) Paleoanthropology is the study of ancient humans.
- 13) All primates have binocular vision, which allows them to see in 3D (depth perception).
- 14) A hominid skull with a low angled facial slope and a long, parallel, U-shaped dental arcade most likely also exhibits significant prognathism.
- 15) Until recently, the Savannah Hypothesis was the predominant explanation offered for why human ancestors became bipedal. In this hypothesis, the early forest environment of Africa dried up and gradually gave way to more of a grassland.
- 16) Opposable thumbs on both hands and feet allowed earlier apes (and most modern primates) to grab onto and climb tree branches with ease.
- 17) Walking upright allows us to use less energy when moving around, compared to apes.
- 18) Ardi is the nickname for *Ardipithecus ramidus*, a more primitive hominid species that existed over a million years before Lucy.
- 19) *Homo habilis* literally translates to “Handy man”, referring to the fact that this specimen is thought to have made and used stone tools.
- 20) *Homo* sapiens is the name of our own species.



Word Bank

Laetoli	energy	prognathism
forest	Ardi	monkeys
Africa	handy	apes
Great Rift Valley	tools	hominids
volcanic ash	sapiens	DNA
foramen magnum	opposable thumbs	bipedal
pelvis	Savannah	upright
Neanderthal	paleoanthropology	binocular
afarensis	sagittal crest	Homo
Australopithecus	Asia	Europe
chimpanzee	Don Johanson	grassland