

figure was more similar to an ape than the modern human. Her brain size was the size of a chimpanzee's, but the leg structure suggests she was bipedal.

"Lucy" is the name given to a fossil of *Australopithecus afarensis*. She also originated from Ethiopia and is 3.2 million years old. She has arched feet, indicating a walker rather than a climber. Her body figure is in between that of an Ape and a Human. Her brain was larger than Ardi but still close to a chimpanzee's. The structure of Lucy's legs is more developed than Ardi, suggesting she walked more than Ardi.

"Turkana Boy" is a fossil of *Homo erectus*, 1.6 million years old. His structure is more like a human, including the brain size. He has further developed leg structure, indicating most of his time was spent walking rather than climbing.

Stone Tools

We can use tools as evidence for human evolution. The complexity of these tools increases over time, indicating a development in brain size and capacity. The earliest tools were merely rocks used for specific purposes, before gradually changing to be specifically shaped for their intended purpose. By the time of the Neanderthals, they were using sharpened tools, such as spears and hunting tools.

The Pentadactyl limb

A pentadactyl limb is that with 5 digits, like our hand. In all modern animals with four limbs, the pentadactyl limb is present in some form.

Classifications

There are two systems of classification used today. The 5 kingdom classification is more traditionally used, but is older than the 3 domain classification.

The 5 kingdom classification splits all organisms into 5 kingdoms: animals, plants, fungi, prokaryotes and protists. Below this, there are Phyla, Classes, Orders, Families, Genuses and Species. Genus and species are usually quoted for a specific organism, such as *Homo sapiens*.

The 3 domain classification splits all organisms into Eukarya, Archea and Bacteria. Below the domains are the kingdoms, phyla, classes etc.

Selective Breeding

Selective breeding is the process of selecting organisms with useful traits and breeding them to make that trait prevalent. It is faster than natural selection, and so is more beneficial to humans. The process is similar to natural selection, but only the organisms with the useful characteristics are bred together, in order to speed up the process.

Selective breeding is currently used for farming and medical research.