**Human Ancestors**

*Australopithecus afarensis*

* Lucy
* 40% skeletal muscle remains discovered which suggest bipedalism
* Gracile form
* **Flat nose, strongly projecting lower jaw and small canine teeth**
* Cranial capacity = 500cc – 1/3 size of modern human brain
* Long and strong arms with curved fingers adapted for climbing trees

*Australopithecus africanus*

* Taung child
* **Rounder cranium, larger brain and smaller teeth** compared to Australopithecus afarensis
* Pelvis, femur and foot bones indicate bipedalism
* Shoulder and hand bones indicate they were adapted for climbing

*Paranthropus robustus*

* 1.8-1.2 million years ago
* Large megadont cheek teeth with thick enamel
* Focused their chewing in the back of the jaw
* **Large zygomatic arches** (cheek bones) which allow the passage of large chewing muscles to attach to the jaw
* **Sagittal crest** which provided a large area to anchor chewing muscle to the skull

*Homo habilis*

* First species to make tools (handy man)
* **Taller with longer femurs and larger brain** in comparison to Australopithecines
* **Smaller teeth** = change in diet (meat) which increased brain size
* Bulge in speech producing area of brain = development of language
* May have existed alongside Paranthropus Robustus
* Hands were more robust compared to Homosapiens which suggest tree climbing is still prominent

*Homo erectus or (Homo ergaster)*

* Larger brain than Homo Habilis
* Footprints in Africa = big tie was parallel to other toes
* Evidence of fire use – **advantages**

-light

-kept predators away

-cooking became more important = softened meat, killed parasites, detoxify plant foods

* Increased group hunting
* They modified the environment (environment is no longer a selective agent)

-expansion of areas occupied

-building shelters

-tool and fire use

*Homo neanderthalensis*

* Cranial capacity = 1485cm^3
* Heavy brow ridge remain
* Probable that Neanderthals and Sapiens lived alongside each other
* Extinct = Homosapiens outcompeted directly in contact and indirectly in hunting and gathering resources

*Homosapiens*

* “Cro-Magnon”
* Cranial capacity = 1350 cm^3
* Flatter faces
* No brow ridges
* No sagittal crest
* Smaller teeth
* Broader hips
* Longer femurs which slope towards knee