

* Most recent common ancestor b/w humans/apes: 5-10mya

Human Evolution

* Trends in the Human Fossils

- facial anatomy
- Teeth
- torso
- size
- tools
- height
- brain



Ardipithecus ramidus • Few fossil remains found so description uncertain; • Ape-like dentition but transitional between apes and Australopithecines; • Tooth enamel very thin compared to hominids; • Hominid type canines – low and blunt; • Incisors larger than hominids but smaller than chimpanzees; • more centrally positioned foramen magnum indicating a trend towards bipedalism. (See box on previous page).	4.4 – 4.3mya; [4-5mya] Height possibly slightly smaller than afarensis; East Africa.
Australopithecus afarensis • ape-like face; • flat nose; • no chin; • protruding jaws; • canines smaller than modern apes; • large molars; • males much larger than females. Handwritten notes: "Lucy", "Common ancestor to Australo. line and Homo line"	3.9 – 2.5mya; [2.5-4mya] height 1.07 – 1.52m; brain size 375 – 550cm³; East Africa.
Australopithecus africanus • flatter face; • smaller canines; • larger molars.	3.0 – 2.3mya; height 1.1 – 1.4m; brain size 420 – 500cm³; Southern Africa.
Homo habilis • smaller teeth and jaws; • this indicates more meat in the diet; • first to adapt and use stone tools; • hips form a distinct pelvic bowl; • near to modern humans in size; • males and females similar size. Handwritten note: "hunted"	2.4 – 1.8mya; [1.5-2.5mya] height 1.0 – 1.5m; brain size 500 – 800cm³; Eastern / Southern Africa.
Homo erectus • meat formed a significant part of their diet; • rib-cage barrel-shaped; • sophisticated stone-tool makers; • probably used fire. Handwritten note: "bodyhair (cooling)"	1.8 – 0.3mya; height 1.3 – 1.5m; brain size 750 – 1225cm³; Africa, Indonesia, Asia. (A. migration)
Homo neanderthalensis • large-brained; • heavy-boned; • large teeth and jaw muscles; • brow-ridge above the eye sockets was nearly as prominent as in <i>H. erectus</i>; • limbs were relatively short with respect to the torso (indicating an adaptation to the cold). Handwritten note: "burials"	150,000 – 30,000 years ago; height 1.5 – 1.7m; brain size 1200 – 1625cm³; Europe, western Asia.
Homo sapiens sapiens • large brain; • face flat rather than projecting; • molars and canines reduced in size; • brow-ridge reduced; • lower jaw is reinforced on the outside producing a chin – this is absent from other hominids; • general trend towards smaller molars and reduced	130,000 years ago to present; height 1.6 – 1.8m; brain size 1200 – 1500cm³; Africa and western Asia.

Cultural Evolution: