

CHRONOLOGY LAB: DIRECTIONS & DATA 2007

DIRECTIONS: READ ALL DIRECTIONS BEFORE STARTING! Using the list below, indicate (on the CHRONOLOGY OF FOSSIL HOMINIDS chart) the range of existence for each group (species or sub-species). Do this by marking on the chart the times for the earliest fossils and the most recent fossils known for a group (the maximum-minimum range, indicated in "years ago" below), then connect those marks with a **vertical** line. Add the name of the group just to the left or right of the line. Do this for each group.

BEST RESULT will be obtained if you start with the **oldest** known Hominid (*A. ramidus*), and plot its vertical line in the **lower left third** of the chart (and at the proper vertical position on the page, near the bottom). Then, for each of the remaining species, shift about a centimeter to the **right**, and plot its vertical position. [Exception: when you get to *A. robustus* and *A. boisei*, plot their vertical lines about a cm to the **left** of *A. africanus*]. Continue the *Homo* groups to the **right** of *A. africanus*, shifting about 1 cm further to the **right** for each one in turn.

ON THE CHART... "MYA" = Millions of Years Ago; so 0.2 MYA = 200,000 years ago; 1.4 MYA = 1,400,000 years ago, etc. The dotted lines represent the time levels indicated; you should estimate as closely as possible the positions to plot which fall between the lines.

BONUS: If you are interested and have the time, tape some extra sheets of paper to the bottom of the CHRONOLOGY sheet, and continue the time scale (using the same dimensions and distances) so that you can include the points where the different apes apparently branched off and began to evolve towards their modern forms. Likewise, for the earliest Hominoids (*Proconsul* and *Aegyptopithecus*). Be sure to label each identified time or range of time.

SPECIES / SUB-SPECIES	LIVED...YEARS AGO
<i>Homo sapiens</i>	195,000 - present
<i>Homo floresiensis</i>	95,000 - 13,000
<i>Homo neanderthalensis</i>	230,000 - 30,000
<i>Homo heidelbergensis</i>	500,000 - 200,000
<i>Homo erectus</i>	1.8 mya - 300,000
<i>Homo ergaster</i>	1.9 mya - 1.4 mya
<i>Homo habilis</i>	2.4 mya - 1.5 mya ?
<i>Australopithecus robustus</i>	2 mya - 1.5 mya
<i>Australopithecus boisei</i>	2.1 mya - 1.1 mya
<i>Australopithecus aethiopicus</i>	2.6 mya - 2.3 mya
<i>Australopithecus garhi</i>	2.6 mya - 2.5 mya
<i>Australopithecus africanus</i>	3 mya - 2 mya
<i>Australopithecus afarensis</i>	3.9 mya - 3 mya
<i>Australopithecus anamensis</i>	4.2 mya - 3.9 mya
<i>Ardipithecus ramidus</i> ?	5.8 mya - 4.4 mya ?
<i>Orrorin tugenensis</i>	6.1 mya - 5.8 mya
EXTENDED CHART (BONUS)	
Chimpanzee (<i>Pan</i>)	line branched off about 7 mya
Gorilla (<i>Gorilla</i>)	line branched off about 10 mya
<i>Ramapithecus</i> (in orangutan line)	lived about 8 mya
Orangutan (<i>Pongo</i>)	line branched off about 16 mya
<i>Proconsul</i> (very early hominoid)	lived about 20-18 mya
<i>Aegyptopithecus</i> (an early hominoid)	lived about 33 mya

For latest list, go to Talk Origins site at <http://www.talkorigins.org/faqs/homs/species.html>.