SKETCH A SKULL

The replica skulls found in the Hominin Hall exhibit represent various hominins from our evolutionary past. Some of them may be direct ancestors, others are only close relatives. However, each provide important insight into the long process of human evolution.

Australopithecus wasn't a member of the genus Homo, but predated it, emerging 4.2 mya in Africa and diverging into several species until 1.9 mya. They dwelled primarily in trees, and retained an ape-sized brain, but their skulls show similarities with ours, and they had the ability to walk upright. When the first (and now famous) *A. Afarensis* specimen named "Lucy" was found, she was excitedly dubbed the link between humans and apes. While we now know that human evolution was much more complex, the various Australopithecus species (Africanus, Afarensis, Boisei) represent a critical leap forward in the evolution of hominins. The discovery of a new specimen from the same time period, Kenyanthropus Platyops, has challenged Lucy's status as the direct ancestor of modern humans. However, its classification as a new hominin is contested, as the skull was found extremely damaged, broken into over 1000 pieces.

Homo Habilis, nicknamed the handy man, is one of the earliest known members of the genus Homo. A more modern foot allowed them to stand upright, but elongated arms suggest that they still resided primarily in trees. They retained a combination of ape-like and human-like features, and had a slightly larger brain, which may have granted some language capacity. The species earned its name by being the first hominin known to make and use stone tools.

SKETCH A SKULL

Homo Erectus (upright man) was the first truly bipedal human ancestor, with human-like proportions that allowed them to live on the ground, and to walk and run long distances. Their brains were significantly larger than previous hominins, and they were the first known to migrate out of Africa to parts of Asia. There is evidence that *Homo Erectus* was the first species to harness fire, and they are associated with the innovation of hand axes. They survived for over 1.5 million years, making them the longest-lived human species to date. The large geographic spread of *Homo Erectus* has been suggested as a reason for variation in specimens, and it is still debated whether species such as *Homo Ergaster* should be reclassified under this umbrella.

Homo Heidelbergensis lived from 700,000 to 300,000 years ago. The species is associated with controlled use of fire, wooden spears, large game hunting, and the construction of shelters. They were adapted to a colder climate, with short wide bodies for conserving heat.

Homo Neanderthalensis was also adapted to the cold and lived alongside *Homo Sapiens* as our closest extinct relative. They had brains just as large as ours, and exhibited many of the same cultural markers and symbolic behaviour—such as burying their dead, and the creation of decorative objects. Neanderthals likely disappeared due to a combination of competition for food, and a low population that led to reduced genetic diversity and its associated diseases. There is also evidence that they occasionally interbred with *Homo Sapiens*, contributing to 1-4% of our non-African genomes.

SKETCH A SKULL

Making good obervations is an important skill to develop. Choose one of the skulls on the previous pages and in the boxes below, write down 3-4 observations about the skull (e.g. head shape, jaw and teeth angle). Next, make a sketch of the skull. How does it differ from a modern human's skull?

Write observations here:

Draw here: