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Anthropology LS/DV 1020

Dr. Conover

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A.

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|  | **Early Hominids** | **Early Homo** | **Neandertals** | **Homo sapeins** |
| **Brain size** | Australopithecus  440 grams | H. habilis   600 grams | Neandertal  1600 grams | Homo sapiens  1350 grams |
| **Height** | Males: average 4 ft 11 in (151 cm);  Females: average 3 ft 5 in (105 cm) | average 3 ft 4 in - 4 ft 5 in (100 - 135 cm) | Males: average 5 ft 5 in (164 cm); Females: average 5 ft 1 in (155 cm) | Males: 5 ft 9 in (175 cm);  Females: average 5 ft 4 in (162 cm) |
| **Weight** | Males: average 92 lbs (42 kg);  Females: average 64 lbs (29 kg) | average 70 lbs (32 kg) | Males: average 143 lbs (65 kg);  Females: average 119 lbs (54 kg) | Males: average 137 – 171 lbs;  Females: average 119 - 135 |
| **Face** | apelike face proportions (a flat nose, a strongly projecting lower jaw) | slightly larger braincase and smaller face and teeth than in Australopithecus or older hominin species. But it still retains some ape-like features | large middle part of the face, angled cheek bones, and a huge nose | Flat, near vertical forehead, much less (if any) of the heavy brow ridges of other early humans. Jaws are also less heavily developed, with smaller teeth. |

B.

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| **Early Hominids** | **Early Homo** | **Neandertals** | **Homo sapiens** |
| Earliest tool use | First to rely on tools rather than their bodies as their adaptive strategy | Used front teeth as tools | Diverse use of compound tool use, blades, harpoons, big game hunting |
| Increased focus on foods that required heavy chewing | First evidence of body manipulation; marks on face indicate tool use on face | Take care of each other when injured | Art: ivory and stone sculptures, cave art, ritual behavior |
| Removed meat from bones with tools | Foot shape indicates longer walking ability, hunting and long distance walking | Strategically cut marks on bones indicate possible canablism. | Ornaments, tailored clothing |

C.

Cooking food has changed human dietary requirements and lowered the need for such robust jaws and teeth. Smaller jaws and teeth may have also played a part in the ability to speak with precision. This is an advantage that increases the ability to warn others of danger and allowed humans to build greater bonds among groups.

Burying dead and use of fire could have changed the kinds of predators that lingered, and lowered the number of predators because fire keeps predators away. This is a removal of a natural selection pressure.

D.

1.

Early Hominids – Central / Eastern Africa

Early Homo – All of Africa and some movement into Asia and Europe

Neandertals – Europe, and Asia

Homo Sapiens – All over the world

2.

The environment has influenced human macroevolution in a number of ways. For example, it is hypothesized that neandertals went extinct largely due to climate change. If neandertals were still around it might have effected how modern humans are today. Another example is how an ice age lowered the ocean levels allowing humans to cross into North America. Native Americans had the chance to adapt, isolated, for many years and have many clear physical differences from the peoples of other continents.

E.

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| **Early Hominids** | **Early Homo** | **Neandertals** | **Homo sapiens** |
| Finding more than fragments of skeletons | Dubois findings of Homo Erectus were met with mixed reactions, mostly negative. | Anthropologists have had to fight the idea that Neantertals were just big, stupid football players. Evidence suggests instead that Neandertals were nearly as smart as homo sapiens. | Many religions have claimed the origin of humans as divine with no evidence. Anthropologists have had a hard time getting funding because the findings go against Genesis, this displeases some of those that make decisions. |
| In Olduvai archaeologists are not able to date fossils directly, but they instead must use the surrounding strata to date fossils. | Homo Erectus was found in a very wide area. This makes it difficult to pinpoint any origins. | The prevailing view in the early 1900s was that Neandertals were an evolutionary dead end. This view was very widely believed and any evidence to the contrary was not accepted easily. | Nations budget more toward military instead of study. |
| Anthropologists have to reconstruct a lot of the skulls they find because much of these fossils are not intact. | When research started because we were trying to find a single link between humans and apes. But what we found was that there were dozens of links and offshoots. Some lived at the same time. | It is difficult to study many of the regions of the world where Neandertals lived because many of these areas are in political turmoil. | People do not leave things where they find them, anthropologists cannot place or date an artifact if it hasn’t been documented first. |