

Exploring Human Evolution at the American Museum of Natural History (AMNH)

Information to know before you start: Humans, like all species, are a result of the process of evolution. Your task is to visit the **Spitzer Hall of Human Origins (see map on blackboard)**, which showcases crucial evidence including fossils, genetic data, and artifacts used by scientists to construct the evolutionary narrative of our taxonomic family, the hominins.

Hominins include humans and our ancestors. Please note that while "hominin" is the presently accepted term, the exhibit uses the term "hominid," which was previously used interchangeably to refer to the same group of species.

A note about skeletal fossils – skeletal fossils are often incomplete (missing parts of skulls, teeth, ribs, etc.) This does not mean the organism did not have those bones, it just means that when the fossils were found and excavated, they were missing pieces. There are multiple other reasons a piece of a skeleton might be missing: pieces may have been crushed over time (broke down), were never found, were damaged when excavating, etc.

Assignment Instructions: Answer four out of the five questions based on the exhibits and the evidence they present. Keep in mind that online sources may provide different answers to these questions.

1. **Bipedalism Evidence:** Describe the evidence of bipedalism presented in the exhibit. Specify which hominin species is associated with each piece of evidence. Pay attention to dates (when certain traits appeared).
2. **Brain Size Increase:** Identify the hominin in the exhibit that experienced a significant increase in brain size. (Provide information about when brain size increased – from which hominins – experienced an increase).. Analyze how the evidence in the exhibit can either support or challenge the hypothesis that the evolution of bipedalism coincided with an increase in brain size. Include multiple pieces of evidence in your argument.
3. **Paranthropus Skull Comparison:** Examine the skulls of the Paranthropus species and compare them to the skulls of hominins from the genus Australopithecus and genus Homo. Discuss the notable differences and similarities you explained in the exhibit (Note. Evidence for this is in multiple areas of the exhibit).
4. **Homo floresiensis:** Explore the exhibit's explanation for the small size of the Homo floresiensis. Summarize the theory and evidence presented regarding this interesting characteristic.
5. **Comparison of Homo neanderthalensis and Homo sapiens:** Analyze the differences and similarities between Homo neanderthalensis and Homo sapiens as portrayed in the exhibit.

Highlight key aspects that distinguish these two hominin species. Include non-physical elements in your response (things besides skeletal differences/similarities).

Museum selfie - Include a picture of yourself at the museum. I need to be able to see that you are in the museum itself (not just the lobby). Add this photo, or screenshot of the photo to the assignment itself (word doc/google doc/etc.).

Grading Criteria:

- Accuracy and detail of your responses based on the museum exhibit
- Clarity and organization of your explanations
- Thoroughness in answering the prompts