

Who are the Hominins? Exploring Adaptations in Human Ancestors Grades 6-8

DESCRIPTION

All animals, including humans, exist within the larger context of their environment. What might that context have looked like for some of our human ancestors? In this gallery-based program, students practice observation skills to identify adaptations and participate in rich discussions about diet, habitat and the archeological record.

OBJECTIVES

- Learners participate in discussion to review/define the terms habitat, adaptation, and evolution.
- Learners explore the relationship between the term's primate, Hominid, and Hominin, and participate in discussions to define the taxonomic distinctions between them.
- Through observation and conversation, learners explore the relationships between diet, habitat, and adaptations, and how these concepts applied to human ancestors.

OHIO'S LEARNING STANDARDS

Grade 6

Science: Life Sciences – 6.LS.4

- Organisms have diverse body plans, symmetry and internal structures that contribute to their being able to survive in their environments.

History: Historical thinking and skills

- Multiple tier timelines can be used to show relationships among events and places.

Nature of Science: Scientific Inquiry, Practice and Application

- Think critically and logically to connect evidence and explanations.

Nature of Science: Scientific is a Way of Knowing

- Science is a way of knowing about the world around us based on evidence from experimentation and observations.
- Science is a continual process, and the body of scientific knowledge continues to grow and change.

ELA: Comprehension and Collaboration

- Prepare for and participate effectively in a range of conversations and collaborations

with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Grade 7

Science: Life Science – 7.LS.2

- Ecosystems are dynamic in nature; the number and types of species fluctuate over time. Disruptions, deliberate or inadvertent, to the physical (abiotic) or biological (biotic) components of an ecosystem impact the composition of an ecosystem.

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Grade 8

Science: Life Science – 8.LS.1

- Fossils provide important evidence of how life and environmental conditions have changed.
- Changes in environmental conditions can affect how beneficial a trait will be for the survival and reproductive success of an organism or an entire species.

Science: Life Science – 8.LS.2

- Every organism alive today comes from a long line of ancestors who reproduced successfully every generation.

Nature of Science: Scientific Inquiry, Practice and Application

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Nature of Science: Scientific is a Way of Knowing

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Before your Program

If this will be your first trip to the Museum for some of your students, you may want to discuss the following questions:

- What is a Museum? Why are we going to the Cleveland Museum of Natural History?
- How should we handle objects at the Museum?
- Use the vocabulary and additional resources provided in this Teacher Guide to preview or review program content with your class.

VOCABULARY

adaptation – The process by which a species is fitted to their environment.

evolution – The scientific theory of changes in the heritable characteristics of biological populations over successive generations.

hominid – All *Extant* great apes and their *extinct* ancestors. This includes humans.

hominin – The bipedal great apes, of which *Homo sapiens* are the only extant *species*.

homo sapiens – Modern humans; Us.

extinct – A species of organism that no longer has living members.

extant – A species of organism that has members alive today.

habitat – the place in which an organism lives to reproduce, find food, water and shelter.

primate – A diverse order of mammals, characterized by larger brains, flat nails, forward facing eyes, and arboreal adaptations.

species – A group of living organisms consisting of similar individuals capable of producing offspring.

ONLINE RESOURCES FOR TEACHERS AND STUDENTS

Click the link below to find additional online resources for teachers and students. These websites are recommended by our Museum Educators and provide additional content information and some fun, interactive activities to share with your class.

Learn more about taxonomy

- [Taxonomy - Naming, Classification, Systematization | Britannica](#)

Learn more about the Hominins discussed in this program

- [Homo erectus | The Smithsonian Institution's Human Origins Program](#)
- [Australopithecus afarensis | The Smithsonian Institution's Human Origins Program](#)
- [Ardipithecus ramidus | The Smithsonian Institution's Human Origins Program](#)

Learn more about the Hominid Vs. Hominin classification (Copy and Paste the link)

- <https://australian.museum/learn/science/human-evolution/hominid-and-hominin-whats-the-difference/>

Learn more about the definitions in the vocabulary section

- [Primate - Evolution, Behavior, Anatomy | Britannica](#)

CMNH Educators regularly review these links for quality. Web addresses often change so please notify us if any links have issues.

Cleveland Museum of Natural History <http://www.cmnh.org>