**Becoming Human  
www.becominghuman.org**

|  |
| --- |
| Objective: Students will understand the process that is used to collect fossils and determine relationships among extinct species with a focus on the evolution of the hominid species. |

Instructions: Access the website at [**www.becominghuman.org**--](http://www.becominghuman.org--)>  **Documentary**. Each section of this activity requires you to visit one of the areas at the site, watch video clips and explore multimedia. Notice the top menu bar which has the listing of the areas:

| Prologue | Evidence | Anatomy | Lineages | Culture |

You can use these links to easily navigate to the different sections.

**Prologue**

1. After watching the video in the prologue, list three questions you have about human evolution.

**Evidence-Watch the video**

2. Where is Hadar and why is it significant?

3. Why was the 3.2 million year old hominid fossil found in Hadar called "Lucy"?

4. What is a paleoecologist?

(Use the menu at the bottom titled "Related Exhibits" to access the exhibits related to evidence. The answers to the following questions can be found within the exhibits by reading thoroughly, you may have to search for them, the words in bold may give you clues about where to search. )

Evidence - Related Exhibits

5. The **scientific method** begins with an observation; information drawn from these observations rests on the principles of scientific thinking. What are the 3 principles of scientific thinking?

6. **Finding fossils** can be difficult, name 4 locations on the earth where significant hominid fossil finds occur.

7. When a fossil is found, **profiling** can be done to answer questions about the organism. How do scientists determine:

The species -

The age -

The sex -

The health -

**Anatomy-Watch the video**

8 What is the closest living relative to the human?

9. What is a common ancestor?

10. How does the human foot compare to the foot of a chimpanzee?

11. How does the skull of *Homo erectus* compare to the skull of *Homo sapiens*?

Anatomy - Related Exhibits

12. Humans are **like other primates** in many ways. Name two similarities between humans and other primates.

13. **Bipedalism** requires anatomical changes in bone structure to allow walking upright. Name one difference between the skeleton of a chimpanzee and a human that aids humans in walking upright.

**Lineages-Watch the video**

14. Where are most Neanderthal fossils found?

15. How did the face of Neanderthals differ from modern humans?

16. Suggest one reason why Neanderthals became extinct.

Lineages - Related Links

17. What is the **Missing Link** and why is it not an accurate term for hominid evolution?

18. How **humans populated** the globe is a question among paleoanthroplogists. Compare the "Out of Africa Theory" to the "Multiregional Theory"?

19. How does evolution explain the **diversity** of people throughout the world, like types of skin color?

**Finish for Homework!**

Final Project - - Using resources found at the becominghuman.org, choose one of the projects below.

* Choose four hominid species and create a chart that compares the three species in relation to age, diet, range, and other information. Include sketches of the skull. (The hominid profile section will help you here)
* Create a timeline of 10 important events or discoveries in paleoanthropology. Discuss the prevailing views of the time and how each of these new discoveries or conclusions led to a dramatic change in how scientists later viewed human evolution.
* Create a cladogram (a family tree) of the hominid species. Use branches to show the possible relationships of the different species.