**Worksheet: Human Evolution Web Quest**

A. **BBC News** <http://news.bbc.co.uk/hi/english/sci/tech/newsid_1333000/1333730.stm>

**Read “Gene data underline primate link”**

1) Which three species of ape did researchers compare to humans?

2) How long ago does this study suggest that the chimp and human lines diverged?

3) Which type of person did the team use for the human DNA?

4) How much did chimp and human DNA differ?    \_\_\_\_\_ %

5) Was human DNA more **similar** to gorilla DNA or orang-utan DNA?

6) How do these genetic differences arise?

7) How long ago did orang-utans separate from other apes?

1. **Palomar College, California** <http://anthro.palomar.edu/hominid/australo_1.htm>

**Read “Discovery of early Hominids”**

8) What feature distinguishes hominids from chimps and gorillas?

9) What change was taking place in the vegetation as australopithecines evolved?

10) What did hominids eat to supplement their protein and fat?

11) How old was the “Taung baby”?

12) Why did Dart conclude that this fossil was intermediate between apes and humans?

13) What had eaten some of the hominids from Swartkraus cave?

14) What is the scientific name of “Lucy”?

15) How old was Australopithecus anamensis ?

1. **National Museum of Natural History** <http://humanorigins.si.edu/evidence>

**Read “Evidence of evolution”**

16) What evidence gives clues about human behavior?

17) “Early human fossils have been found from more than \_\_\_\_\_\_\_\_\_\_\_\_\_ individuals”.

**Click on “Human Fossils”, then “Open the Family Tree”**

18) Which fossil species is the oldest on the chart?

19) Which **two** species lived at the same time as early *Homo sapiens* ?

**Click on “*Homo erectus*”**

20) When did they live?

21) In which country was the first fossil found?

22) How much did they weigh?

23) What did they eat?

**Go back to the family tree and click on one of the “*Australopithecus*”**

24) Which species did you click on?

25) Give a 3 sentence summary about this species:

26) What is one “unknown”?

1. **Becoming Human** <http://www.becominghuman.org/>

**Click on “Launch the Documentary” that says “Journey through the story of human evolution...” then click on “Evidence” then “Play the Documentary”**

27) How old are animal fossils from Hadar?

28) What joint was discovered in 1973?

29) Why was the 1974 fossil called “Lucy”?

30) What does a “paleoecologist” do?

31) What types of fossil fruit have been found here?

32) How did “Lucy” probably get away from predators?

**Click on one of the “Related Exhibits”**

33) Summarize the information in this exhibit:

1. **Palomar College, California** <http://anthro.palomar.edu/homo2/mod_homo_2.htm>

**Read “Neandertal”**

34) How long ago, and where, did Neandertals live?

35) Why did the fossil Boule examined walk hunched over?

36) What climate were Neandertals adapted for?

37) Why did adult Neandertals have multiple healed fractures?

38) How tall were adult Neandertals?

39) Why do new-born humans have such a small brain?

40) What does the DNA evidence suggest about the Neandertals?

41) Roughly how long ago did the Neandertals diverge from the line leading to modern humans?

42) What was unusual about the child’s skeleton found in Portugal in 1999?

43) What is the last secure date for a Neandertal site?

44)  What is one hypothesis for the disappearance of the Neandertals?

1. **BBC News** <http://news.bbc.co.uk/2/hi/science/nature/5343266.stm>

45)   When did Neanderthals first appear in the fossil record?

46)   What material in Gorham’s cave was tested for radiocarbon dates?

47)   What characteristics made this cave a “favored spot” for Neanderthals?

48)   What animals were Neanderthals in this area eating?

49)   What is the new explanation for why Neanderthals became extinct?

50)   Look at the map at the bottom of the article. Why do you think that all the sites less than 30,000 years ago are concentrated in southern Europe, not in northern Europe?

1. **National Geographic** <http://news.nationalgeographic.com/news/2004/10/1027_041027_homo_floresiensis.html>

**Read “Hobbit-like human ancestor found in Asia”**

51)   How much did the original female found here weigh?

52)    What weapons did these humans use to hunt?

53)   When did Homo erectus reach Flores?

54)    Apart from stegodon (elephant), what else did Flores humans eat?

55)     How tall are modern pygmies? Is this taller or shorter than these Flores humans?

56)     Why do mammals on islands often show dwarfism?

1. **BBC News** <http://news.bbc.co.uk/hi/english/sci/tech/newsid_1342000/1342392.stm>

**Read “Fishy clue to rise of humans”**

57) Early human bones from which three sites were studied?

58) What is “isotopic analysis”?

59) How much of the protein in the early modern human diet came from fish and waterfowl?

60) Which two items on the Neanderthal diet are **not** listed on the early modern human diet?

61) In what way were Neanderthals “victims of their own success”?