

Quiz #10
Chapter 6 – Early Primate Evolution

1. What is taphonomy?
2. Which is most likely to be preserved by fossilization?
a. brains b. skin and internal organs c. bones and teeth d. hair
3. What is stratigraphy?
4. Under what conditions could older strata be found on top of younger strata?
5. What would be revealed by the disappearance of an index fossil in subsequent layers of strata?
6. How old is the earth?
a. 65 million years b. 4.5 billion years c. 45 million years d. 6.5 billion years
7. In which era did primate evolution begin?
a. Paleozoic b. Mesozoic c. Cenozoic
8. When did the first mammals appear?
9. When did the first dinosaurs appear?
10. What was the Jurassic Period known for?
11. What caused the extinction of the dinosaurs? When did this happen?
- 12.
13. The Mesozoic spans from _____ years ago.
a. 4.5 million to 60,000 b. 4.5 billion to 543 million c. 5.43 billion to 45 million
d. 248 million to 65 million

14. We live in the _____ epoch.

- a. Holocene b. Cenozoic c. Quaternary d. Phanerozoic

15. Match These

Lithostratigraphy

a. based in faunal succession using index animals

Biostratigraphy

b. uses volcanic ash to correlate across regions

Tephrostratigraphy

c. correlates time based on geological deposits

15. Which of the following is a relative dating technique? (select as many as apply)

- a. radiocarbon b. stratigraphy c. fluorine analysis d. potassium argon e. geomagnetic polarity

16. What are examples of absolute/chronometric dating techniques?

17. T/F The half-life of an isotope refers to the amount of time it would take for half of the original amount to decay.

18. What is the half-life of radioactive carbon? (re: carbon 14 dating)

19. As carbon-14 decays, what does it convert into?

20. What is the half-life of radioactive potassium? (re: potassium/argon dating)

21. Since potassium/argon dates volcanic rock, how can this technique be used to date early hominid fossils?

22. Luminescence dating works best on:

- a. bone b. volcanic rock c. organic remains d. burned objects like pottery, bricks and hearthstones

23. What dating technique was used to expose the Piltdown Hoax?

24. T/F Potassium-argon dating usually cannot be used to date samples less than about 500,000 years old.

25. T/F Carbon-14 dating can be used to date sites that are less than 400,000 years old.

26. The best parts of the skeleton for sexing human remains are:

- a. pelvis b. limb bones (arms and legs) c. skull d. vertebral column

27. A person who has a full set of adult teeth is mostly like to be:
a. between 10 and 18 years old b. over 18 years old c. over 35 years old
d. over 65 years old
28. Human dentition reveal that we are:
a. herbivores b. vegans c. carnivores d. omnivores e. frugivores
29. What is an epiphyseal union?
30. At what age do the human epiphyses begin to close?
31. What is trephination? Why was it performed?
32. What is the provenience of a fossil?
33. What is continental drift?
34. What did continents did Pangaea consist of?
35. When did South America and Africa separate?
36. T/F There are no known anthropoid fossils in N. America
37. When did North and South America merge together?
38. What did the earliest primates look like?
39. The earliest primate-like fossils are _____million years old.
a. 65 b. 55 c. 15 d. 5 e. 1.6
40. Where were the earliest primate-like fossils found? _____
41. The first undisputed primate fossils were found in what is now:
a. Africa b. East Asia c. South and Central America d. Europe and North America
42. T/F Plesiadapiforms had binocular vision.
43. T/F The earliest primates may have been nocturnal.

44. Match the ancestral form with the present day primate.

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|---------------------|------------------------------------|
| 1. Plesiadapiformes | a. Orangutans |
| 2. Adapidae | b. Anthropoid Primates (old world) |
| 3. Omomyidae | c. Humans |
| 4. Aegyptopithecus | d. Lemurs and Lorises |
| 5. Sivapithecus | e. Southeast Asian gliding mammals |
| 6. Australopithecus | f. Tarsiers |

45. T/F New World monkeys “rafted” to South America from Africa

46. Why is Fayum, Egypt a significant archeological site? (types and ages of fossils)

47. Who was aegyptopithecus?

48. What percent of fossil primates have so far been uncovered?

49. How long ago did apes appear in the fossil record? _____

50. Who was gigantopithecus?

51. T/F There are no clear candidates for the missing link between apes and early humans.

52. Compare and contrast r-selection vs. k-selection.

53. When and where did monkeys first emerge?