# Evolution and Fossils Study Guide

## Use pp. 194-211 and your notes

#### Define:

- 1. Relative Dating
- 2. Absolute Dating
- 3. Geologic Time Scale
- 4. Primate
- 5. Hominid
- 6. Homo Sapiens

#### Discuss:

- 7. Explain how fossils can be formed and how their age can be estimated.
- 8. Most rocks are found in which type of rock? Is it fair to say that we wouldn't have fossils without these types of rocks? Explain.
- 9. Describe the geologic time scale and the way that scientists use it.
- 10. What are two theories explaining the mass extinction of the dinosaurs?
- 11. How can continental drift and plate tectonics help to explain how organisms with similar features and characteristics can be found on two separate continents when they have never interacted before?
- 12. Describe the types of organisms that arose during the four major divisions of the geologic time scale.
- 13. Describe two characteristics that all primates share.
- 14. Describe three major groups of hominids.

## Use pp. -166-183 and your notes

### Define:

- 15. Adaptation
- 16. Species
- 17. Evolution
- 18. Fossil record
- 19. Selective breeding
- 20. Natural selection
- 21. Speciation
- 22. Variation
- 23. Gradualism equilibrium
- 24. Punctuated equilibrium
- 25. Vestigial structures
- 26. Explain how a modern whale could have evolved from an ancient mammal. Describe this ancestor and the evidence has been found to support this claim.
- 27. What are three reasons why a species would need to adapt and evolve to survive?
- 28. What type of evidence is used to support the belief that all organisms evolved from a common ancestry?
- 29. Describe the observations Darwin made on his journey.
- 30. Describe the four parts of Darwin's theory of evolution by natural selection.
- 31. Describe the process of speciation using Darwin's finches as an example.
- 32. Discuss how the evolution of Darwin's finches exemplifies natural selection.
- 33. Discuss the changes seen in the Peppered Moth population during the Industrial Revolution. How was this an example of punctuated equilibrium?