

Evolution Review Guide

1. Define Evolution.
2. What is a theory? How are theories developed? Can theories be disproven?
3. Who established the Theory of Evolution by Natural Selection? What was the name of the book he published? What island is famous for its relationship to the theory?
4. How are finches on the Galapagos Islands similar? How are they different?
5. How are turtles on the Galapagos Islands similar? How are they different?
6. What is diversity? How is evolution related to diversity?
7. How did geology help Darwin establish his theory?
8. What are variations and adaptations? Give examples.
9. Describe the process of Evolution by Natural Selection. (4 steps)
10. What causes the "struggle for existence"?
11. What is common descent, or descent with modification?
12. What is geographic distribution?
13. What are homologous structures? Describe the forearms of vertebrates (birds, turtles, etc).

14. How does comparative embryology show evidence of evolution?
15. What are vestigial structures (give examples)
16. How are new species formed? What is reproductive isolation? Define speciation.
17. What causes extinction? How does extinction affect the formation of new species?
18. What is macroevolution?
19. What is adaptive radiation (give examples)?
20. What is convergent evolution (give examples)?
21. What is coevolution (give examples)?
22. Compare gradualism to punctuated equilibrium.