

CP Biology Study Guide: Test 4 – Evolution and Ecology (CH 10, 11, 13, 14, 16)

Use your study packets, text, and notes to answer the following questions and review for the test. Study guide due on the day of the test for extra credit.

1. Define evolution
2. Where inheritable variation does comes from? Why is variation important in a population?
3. How does variation contribute to evolution?
4. What observations did Darwin initially make regarding finches on the Galapagos Island?
5. Give examples of homologous, analogous, and vestigial structures?
6. Define homologous, analogous, and vestigial structures.
7. What are some causes of speciation in nature?
8. How can we use DNA to tell us the relationship between 2 different species?
9. What is artificial selection? Give examples
10. Describe: Stabilizing selection, Directional selection, and Disruptive selection
11. Explain and give examples of adaptations.
12. Whole developed the explanation that species evolve by keeping traits that their parents developed during their lives
13. Describe how the following evidence are for evolution: embryology, fossils, geography, and anatomy
14. Define species
15. What are the important factors that lead to natural selection?
16. Compare natural selection to artificial selection.
17. What are examples of abiotic and biotic factors in an ecosystem?
18. Define and give an example or a keystone species
19. How is biodiversity determined?
20. Define and give examples of the following: producer, consumer, heterotroph, autotroph, decomposer
21. How do most producers get energy?
22. What is a trophic level? Explain and give examples of primary consumer, secondary consumer, tertiary consumers, herbivore, omnivore, carnivore, detritivore, scavenger
23. What does a food web model represent?
24. Which two biogeochemical cycles depend directly on photosynthesis?
25. Fossil fuels are part of which of the following cycles?
26. Define and give examples of the following: niche, habitat, competitive exclusion, ecological equivalence, community.
27. Describe the following symbiotic interactions: mutualism, commensalism, parasitism
28. How is predation defined
29. How can introduced species disrupt ecosystems?
30. What is an umbrella species?
31. Which law was passed to protected endangered animals and their habitats