

Unit 7

Study Guide

Name

Date

Period

Directions: There are 4 major sections for this unit. Fill in the following information below as a study guide for your unit 7 exam. You will receive 5 extra credit points on your test if you turn this in 100% completed on the day of the exam. Your responses need to be close to the real answer and all questions must be answered to receive credit.

PART 1: Darwin & Theory of Evolution(Lesson 7.1):

1. Charles Darwin is an important scientist. What did he do and what theory did he propose?
2. Briefly describe the theory of evolution.

PART 2: Evidence for Evolution (Lesson 7.2):

3. State 3 pieces of evidence scientists use to support the theory of evolution.
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4. Bat wings and human hands are homologous structures. Explain what this term means.
5. What is adaptive radiation?
6. Explain divergent evolution.
7. What are strata?
8. Within strata, explain where the oldest fossils would be found.
9. Within strata, explain where the most complex organisms would be found.
10. What is a vestigial organ?
11. Give an example of a vestigial organ on the human body.
12. Would the DNA sequence of two organisms who are closely related be similar or very different? Explain your answer.

PART 3: Natural Selection (Lesson 7.3):

13 "Survival of the fittest" is often used to describe the process of natural selection. What does "survival of the fittest" mean?

14. Define selection pressure.

15. Name a selection pressure from the leafhopper activity.

16. Describe how a selection pressure can change a population.

17. Extinction often occurs during the Geakfeazel activity. Explain, in terms of natural selection, why extinction occurs.

PART 4: Natural Selection (Lesson 7.4):

18. Why is variation in a population important?

19. Explain why some forkbeaks were more likely to survive and reproduce than other forkbeaks?

20. What happens to the variety of beak types over time as competition for wild loops occurs within the habitat?

21. List two selection pressures from this lesson and then explain the adaptation they favor.

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PART 5: Speciation (Lesson 7.5)

22. What is speciation?

23. What are some ways speciation can occur?

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24. Explain one method scientists may be able to determine two organisms are not members of the same species.

25. Describe geographic isolation.

26. Geographic isolation may lead to speciation. Give an example of an organism that has undergone speciation as a result of geographic isolation and explain how this speciation has occurred.