

Topic: Evolution Study Guide

Summary: Students will fill out a worksheet with information on what they will be tested on.

Goals & Objectives: Students will be able to explain natural selection, the evolution of populations, and example evidence.

Time Length: 20 minutes

Standards: CA Biology 7a, 7b, 7c 7d, 8a, 8b, 8c, 8d, 8e.

Materials:

Textbook, class notes, and pencil or pen

Procedures:

Hand out this worksheet before introducing evolution. Students are to fill in this worksheet while you teach. Students then use this worksheet as a central place to study from to prepare for a test or quiz.

Accommodations:

Students with an IEP may work with a partner filling in the definitions.

Evaluation:

Each question is worth ½ point, for a total of 15 points.

Evolution Study Guide

(Write definitions or explanations)

1. What famous islands did Darwin study? _____

To where did he compare the island's plants and animals? _____

2. What was the name of his famous book about evolution? _____

3. What is fitness? Describe survival of the fittest _____

4. What is descent with modification, and how do fossils help show it? _____

5. What are fossils? Give examples. _____

6. What are the two ways of dating fossils? Explain both. _____

7. What is adaptation? _____

8. What is a population? Give an example. _____

9. What is artificial selection? _____

10. What is divergent evolution? _____

11. Explain the process of natural selection. _____

12. What is a homologous structure? Give an example. _____

13. What are vestigial organs? Give examples. _____

14. What are the two types of mutations? _____

15. Explain 1st mutation type _____

16. Explain 2nd mutation type _____

17. What is gene shuffling? _____

18. Draw a directional selection graph on the right and

describe _____

19. Draw a stabilizing selection graph on the right and

describe _____

20. Draw a disruptive selection graph on the right and

describe _____

21. What is genetic drift? _____

22. What is an ecological race? _____

23. How does isolation relate to speciation? _____

24. What is speciation? _____

25. What defines a species? _____

26. What are gene pools? _____

27. What is convergent evolution? _____

28. What are analogous structures? _____

29. What is the model for slow changes of evolution over time? _____

What is the model for rapid changes separated by no changes over time? _____

30. What is extinction? _____
