Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 4 Test Review

1. On which islands did Darwin study the finches and tortoises?

2. What was the name of Darwin’s work? Why did he wait to publish it?

3. What was Lamarck’s theory of evolution?

4. What is an anatomical homology? Give an example.

5. What is a vestigial structure? Give an example.

6. What percentage of all species that have ever lived is now extinct?

7. Define gene pool.

8. What is genetic drift? Which type of population is most affected?

9. What is “survival of the fittest” another name for? Explain what this concept means.

10. Define adaptation. Give examples of adaptations that can be passed on.

11. Natural selection results in changes in the \_\_\_\_\_\_\_\_\_\_\_\_ characteristics of a population.

12. Natural selection affects \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

13. How does natural selection affect the frequency of genes in a population?

14. Explain temporal isolation. Give an example.

15. Explain geographic isolation. Give an example.

16. Explain behavioral isolation. Give an example.

17. What is speciation? What is necessary for speciation to occur?

18. If a new mutation occurs in a population, what determines if it becomes common or disappears?

19. What is a cladogram? How can you tell which organisms are most related?

20. In a cladogram, the evolutionary innovations that separate the different groups are called

21. Similar characteristics in different species indicate that they probably share a common \_\_\_.

22. What is Pangaea?

23. Looking at various rock layers, how can you tell which layer is the oldest?

24. Compare punctuated equilibrium and gradualism.

25. Explain adaptive radiation and how it relates to Darwin’s finches.

26. If a species is not able to adapt to an environmental change, what will happen?

27. Would a more or less specialized organism stand a better chance of adapting to changing environmental conditions?

28. Why are scientific names necessary?

29. Explain how to use a dichotomous key.

30. List the levels of taxonomic classification in order.

31. What characteristics are important for identifying protists? Fungi? Plants? Animals?

32. Two different species with the same genus name are closely \_\_\_\_\_\_\_\_\_\_.

33. Which level of classification indicates the closest relationship (most similar organisms?)

34. What distinguishes Archaebacteria from Eubacteria? What do they have in common?

35. What distinguishes a protist from a bacterium? What do they have in common?

36. What distinguishes a plant from a fungus? What do they have in common?