Answer key

Directed Reading A

SECTION: CHANGE OVER TIME

1. differences
2. B
3. C
4. species
5. population
6. species
7. change
8. characteristics
9. New species form.
10. evolution
11. A
12. D
13. A dead organism is covered by a layer of sediment. Over time, the organism is completely covered. Minerals in the sediment may gradually replace the organism with stone or the organism may leave an imprint on the surrounding rock.
14. the fossil record
15. by the fossils' ages and physical similarities
16. organisms
17. less likely
18. exist
19. B
20. A
21. hypotheses
22. by a branch
23. Answers may vary and may include any two of these: camels, llamas, pigs, peccaries, hoofed grazing animals, and hippopotamuses.
24. ancestors
25. tree of life
26. that their knowledge is not complete
27. by examining living organisms
28. Whales breathe air, give birth to live young, and produce milk.
29. tiny hip bones
30. B
31. B
32. D
33. C
34. A

SECTION: HOW DOES EVOLUTION HAPPEN?

1. Scientists learned that Earth is much older than previously thought, gradual processes have changed Earth's surface, and that Earth had a fossil record.
2. A
3. B
4. GalE1pagos Islands
5. Their beaks were different.
6. obtaining food
7. D
8. C
9. The finches were descended from South American finches blown to the islands by a storm. Over many generations, the finches adapted to life on the island.
10. He spent several years analyzing evidence and gathering other people's ideas.
11. C
12. A
13. B
14. to produce plants and animals with desired traits
15. to produce stronger or quicker horses
16. to produce larger fruit
17. offspring
18. competition
19. survive
20. evolve
21. that the Earth was old enough to allow for slow changes
22. *On the Origin of Species by Means of Natural Selection*
23. natural selection
24. C
25. A
26. B
27. D
28. how organisms inherit traits, or why organisms show so much variation
29. genes
30. offspring
31. selection

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