

**Directed Reading B** *continued*

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**COMPARING ORGANISMS**

- \_\_\_\_\_ **30.** Which of the following scientific fields provide evidence that organisms share common ancestors?
- a. physical education and comparative molecules
  - b. geology and geography
  - c. comparative anatomy and molecular biology
  - d. physics and chemistry
- \_\_\_\_\_ **31.** When scientists study the anatomy of organisms, they find that related organisms
- a. share all their traits.
  - b. share many traits.
  - c. share no traits.
  - d. have no traits.
- \_\_\_\_\_ **32.** Which of the following makes the human arm similar to a dolphin's flipper or a bat's wing?
- a. the ability to fly
  - b. the structure of the skin
  - c. the order of their evolution
  - d. the structure and order of bones
- \_\_\_\_\_ **33.** What does the similarity between humans, dolphins, cats, and bats indicate?
- a. that they all evolved recently
  - b. that their ancestors lived in the same place
  - c. that they share a common ancestor
  - d. that they are becoming more alike over time
- \_\_\_\_\_ **34.** Which of the following determines an organism's traits?
- a. its descendants
  - b. genetic information stored in its DNA
  - c. where it was born
  - d. what it looks like
- 35.** What does comparing DNA from two species tell scientists ?

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## Directed Reading B

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### Section: How Does Evolution Happen? (pp. 306–311)

1. List three things that scientists learned about Earth beginning in the 1800s.

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#### CHARLES DARWIN

- \_\_\_\_\_ 2. What did Darwin do in order to study plants and animals?

- a. He took a trip around the world.
- b. He studied theology.
- c. He formed theories.
- d. He became a doctor.

- \_\_\_\_\_ 3. What did Darwin do during his travels?

- a. He wrote a book about his theory.
- b. He observed plants and animals.
- c. He took photos of plants and animals.
- d. He visited all the continents.

4. Darwin noticed that the plants and animals on the \_\_\_\_\_ were similar to, but not the same as, those in Ecuador.

5. What was one way that finches on different islands differed from each other?

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6. What was the beak of each finch adapted to?

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#### DARWIN'S THINKING

- \_\_\_\_\_ 7. What puzzled Darwin about the Galápagos finches?

- a. They were so different.
- b. They should not have been there.
- c. They were too similar.
- d. They were similar but had unique adaptations.

- \_\_\_\_\_ 8. A characteristic that can be passed from parent to offspring through genes is a(n)

- a. species.
- b. breeding.
- c. trait.
- d. adaptation.