

**Directed Reading B** *continued*

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- \_\_\_\_\_ **12.** What is a fossil?
- a.** a layer of sediment
  - b.** a living organism
  - c.** a very old organism
  - d.** the trace or remains of an organism that lived long ago

- 13.** How is a fossil usually formed?

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- 14.** What is the timeline of life that scientists have made by studying fossils called?

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- 15.** How are fossils organized in the fossil record?

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- 16.** Fossils in newer layers of Earth tend to resemble current \_\_\_\_\_.

- 17.** In older layers of Earth, are fossils more likely or less likely to resemble today's animals or plants?

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- 18.** What does comparing organisms in the fossil record provide evidence for?

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**EVIDENCE OF ANCESTRY**

- \_\_\_\_\_ **19.** The fossil record provides evidence about
- a.** the age of rocks.
  - b.** the order in which species have existed.
  - c.** the number of layers Earth has.
  - d.** the composition of minerals.

**Directed Reading B** *continued*

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\_\_\_\_\_ **20.** In fossils and in living things, scientists find evidence of

- a.** common ancestors.
- b.** rock layers of Earth.
- c.** the age of rocks.
- d.** the composition of minerals.

**21.** As scientists study fossils and living organisms, they may draw models to illustrate their \_\_\_\_\_ about how species are related.

**22.** What is the model that shows the relationship between species called?

\_\_\_\_\_

**23.** What does each branch in this model represent?

\_\_\_\_\_

**24.** List two groups of animals that may share a common ancestor with whales.

\_\_\_\_\_

\_\_\_\_\_

**25.** Scientists use information about organisms to sketch out

a(n) \_\_\_\_\_ that includes all known living things.

**EXAMINING ORGANISMS**

**26.** In addition to studying fossils, how can scientists learn about an organism's ancestors?

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\_\_\_\_\_

**27.** List three things about whales that tell scientists that whales are not fish.

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**28.** What do these traits show about whales?

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**29.** What does a whale body contain that hints it had an ancestor that lived on land?

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