

## Directed Reading B (Lesson 6-4)

### Section: Looking at Fossils FOSSILIZED ORGANISMS

**Circle the letter** of the best answer for each question.

1. The remains of an organism that is often preserved in sedimentary rock is called what?
  - a. sediment
  - b. fossil
  - c. cast
  - d. rock
2. Where are most fossils preserved?
  - a. in asphalt
  - b. in ice
  - c. in sedimentary rock
  - d. in metamorphic rock

### Fossils in Rocks

3. Which parts of an organism are commonly preserved in rock?
  - a. vital organs
  - b. skin
  - c. soft tissues
  - d. shells and bones

### Fossils in Amber

4. Amber often best preserves which of the following animals?
  - a. insects
  - b. fish
  - c. mammals
  - d. birds

Directed Reading B *continued*

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**Petrification**

**Circle the letter of the best answer for each question.**

5. Which of the following is an example of an organism whose tissue has been replaced by minerals?
- a. a shell preserved in rock
  - b. petrified wood
  - c. a frozen mammoth
  - d. an insect trapped in amber

**Fossils in Asphalt**

6. How long have the La Brea asphalt deposits been trapping and preserving organisms?
- a. for 1,000 years
  - b. less than 500 years
  - c. for at least 38,000 years
  - d. for 1 million years

**Frozen Fossils**

7. In 1999, in what material did scientists find preserved remains of a woolly mammoth?
- a. in asphalt
  - b. in ice
  - c. in wood
  - d. in amber

Directed Reading B *continued*

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### OTHER TYPES OF FOSSILS

Read the description. Then, draw a line from the dot next to each description to the matching word.

- |   |   |                 |
|---|---|-----------------|
| 8. any naturally preserved evidence of an animal's activity         | ● | a. mold         |
| 9. a cavity in rock where a plant or animal was buried              | ● | b. trace fossil |
| 10. an object created when sediment fills a mold and becomes a rock | ● | c. cast         |

### USING FOSSILS TO INTERPRET THE PAST

#### The Information in the Fossil Record

Circle the letter of the best answer for each question.

11. Which of the following statements about the fossil record is true?
- a. Most organisms never became fossils.
  - b. More is known about organisms' soft body parts than organisms' hard body parts
  - c. Fossils do not help scientists understand the history of life on Earth.
  - d. The fossil record is complete.

#### History of Environmental Changes

12. The fossil record does NOT reveal information about which of the following?
- a. past climates
  - b. ancient seas
  - c. the solar system
  - d. environmental change

Directed Reading B *continued*

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### History of Changing Organisms

**Circle the letter of the best answer for each question.**

13. What can scientists learn from studying the relationships between fossils?
- a. how old the oldest rock layers are
  - b. how life has changed over time
  - c. how many relatives each fossil had
  - d. how many organisms have existed in Earth's history

### USING FOSSILS TO DATE ROCKS

14. Which of the following species would make a good index fossil?
- a. a species that lived for a long period of time
  - b. a species that lived for a short period of time
  - c. a species that is found in many rock layers
  - d. a species that is still living

### Ammonites

15. Imagine that you found a *Tropites* fossil. How old is the rock surrounding it?
- a. about 10,000 years old
  - b. less than 1 million years old
  - c. about 220 million years old
  - d. 1 billion years old

### Trilobites

16. Imagine that you found a *Phacops* fossil. How old is the rock surrounding it?
- a. about 100 million years old
  - b. less than 200 million years old
  - c. almost 300 million years old
  - d. about 400 million years old