

Skills Worksheet

Vocabulary and Section Summary B

Time Marches On

VOCABULARY

After you finish the section, try this puzzle! Use the clues below to fill in the blanks. Then, unscramble the letters in the numbered blanks to answer the question on the next page.

1. the death of every member of a species

_____ 20 4 _____ 6 _____ 28

2. the standard method used to divide Earth's long natural history into manageable parts

_____ 19 _____ 15 _____ 25 _____

_____ 1 _____

3. what eras are divided into

_____ 17 22 _____

4. the largest divisions of geologic time

_____ 3 27 _____

5. the second-largest divisions of geologic time

_____ 12 2 _____

6. what periods are divided into

_____ 7 _____ 24 _____ 10

7. the process of organisms using sunlight to produce their own food

_____ 14 _____ 21 _____ 26 _____

8. a layer of gas in the upper atmosphere that absorbs harmful radiation from the sun

_____ 8 _____ 23 _____

Vocabulary and Section Summary B *continued*

9. organisms that contain a nucleus and other structures in their cells

9 5 18

10. single-celled organisms that lack a nucleus

16 13 11

11. What event describes the extinction of all the dinosaurs and about half of the animal and plant species?

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18

19 20 21 22 23 24 25 26 27 28

SECTION SUMMARY

Read the following section summary.

- The geologic time scale divides Earth’s 4.6 billion-year history into time intervals. These intervals include eons, eras, periods, and epochs.
- At certain times in Earth’s history, the number of different kinds of organisms has increased or decreased dramatically.
- Life on Earth developed more than 3.6 billion years ago, during Precambrian time. After cyanobacteria added oxygen to the atmosphere, more-complex forms of life evolved.
- A variety of marine organisms appeared at the beginning of the Paleozoic Era in what is called the Cambrian explosion. Near the end of the Paleozoic Era, the Permian extinction resulted in the disappearance of many organisms from the fossil record.
- Dinosaurs dominated Earth during the Mesozoic Era. They all became extinct during the Cretaceous-Tertiary extinction.
- Mammals have dominated the Cenozoic Era. Modern humans appeared during this era.

Skills Worksheet

Directed Reading B

Section: Change over Time (pp. 298–305)

1. One way to tell kinds of animals apart is by their _____.

DIFFERENCES BETWEEN ORGANISMS

_____ 2. How does adaptation help an organism?

- a. It helps the organism change colors.
- b. It improves its ability to survive and reproduce.
- c. It improves its ability to change species.
- d. It helps the organism become a fossil.

_____ 3. If living things have the same characteristics, they may be members of the same

- a. evolution.
- b. planet.
- c. species.
- d. fossil record.

4. Two organisms that can mate to produce offspring that can reproduce belong to the same _____.

5. When members of the same species live in the same place, they form a(n) _____.

6. Since life began on Earth, many _____ have vanished and many new ones have appeared.

7. Scientists have observed that species have _____ over time.

8. The inherited _____ in populations also change over time.

9. What can result as populations of organisms change?

_____ 10. The process in which populations change over time is called _____.

EVIDENCE OF CHANGES OVER TIME

_____ 11. Where is evidence that organisms have changed over time buried?

- a. within Earth's crust
- b. on the Internet
- c. in water
- d. in old books