



Directed Reading A

Section: Time Marches On GEOLOGIC TIME

- _____ 1. How much geologic time do the layers of rock exposed at Grand Canyon National Park represent?
- a. 10 million years
 - b. 6 million years
 - c. 2 billion years
 - d. 6 billion years

THE GEOLOGIC TIME SCALE

- _____ 2. How many years of Earth's history do geologists study?
- a. 150 million years
 - b. 10 million years
 - c. 4.6 billion years
 - d. 10.2 billion years

3. Why have geologists created the geologic time scale?

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|---|----------------|
| _____ 4. the eon during which the earliest known rocks formed on Earth | a. Hadean |
| _____ 5. the eon in which we live | b. Archean |
| _____ 6. the eon from which scientists have found rocks and meteorites only from the moon | c. Proterozoic |
| _____ 7. the eon in which the first organisms with well-developed cells appeared | d. Phanerozoic |
8. What do the boundaries between geologic time intervals represent?

Directed Reading A *continued*

9. Number the following divisions of geologic time from largest to smallest.

_____ epoch

_____ eon

_____ era

_____ period

10. What is extinction?

11. What kinds of catastrophic events can cause extinction?

12. Describe the beginning of the Paleozoic era.

13. How did the Paleozoic era end?

14. Why is the Mesozoic era called the Age of Reptiles?

Directed Reading A *continued*

15. Why is the Cenozoic era called the Age of Mammals?

16. What probably caused the extinction of dinosaurs?

17. What unique traits probably helped mammals survive?

Vocabulary and Section Summary

Time Marches On

VOCABULARY

In your own words, write a definition of the following terms in the space provided.

1. geologic time scale

2. eon

3. era

4. period

5. epoch

6. extinction
