

Assessment

Quiz**Section: Minerals and Rocks**

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- _____ 1. Feldspar is considered a _____ because it has a characteristic chemical composition and a definite internal structure.
- a. sedimentary rock c. igneous rock
b. mineral d. metamorphic rock
- _____ 2. An igneous rock forms when molten rock
- a. cools. c. crystallizes.
b. hardens. d. All of the above
- _____ 3. Why does obsidian, an igneous rock, appear smooth and glassy?
- a. Its crystals cool quickly. c. It has large, numerous crystals.
b. Its crystals cool slowly. d. None of the above
- _____ 4. Which of the following statements is *not* true about sedimentary rocks?
- a. They are formed from compressed layers of sediment.
b. They are formed when dissolved minerals fuse sediments together.
c. They may contain old rocks.
d. They are completely inorganic.
- _____ 5. Which of the following transforms sedimentary rocks into metamorphic rocks?
- a. seasonal heating and cooling c. extreme heat and pressure
b. Earth's magnetic field d. radioactive decay

In the space provided, write the letter of the term or phrase that best matches each description.

- _____ 6. states that the age of undisturbed rock layers increases with depth
- a. weathering
b. rock cycle
- _____ 7. physical and chemical processes that break down rocks
- c. absolute dating
d. principle of superposition
- _____ 8. method of determining the age of rocks based on radioactive decay
- e. relative dating
- _____ 9. describes the sequence of events that can change rock types
- _____ 10. determines the age of rocks by comparing rock layers to one another

Concept Review

21-3

Section: Minerals and Rocks

1. **List** four characteristics of minerals.

2. **Identify** the type of rock described in each of the following:

_____ a. will have small crystals if cooled rapidly

_____ b. may contain fossils

_____ c. forms as a result of heat and pressure

3. **Describe** how each of the following types of rock is formed, and give an example of each.

a. sedimentary

b. metamorphic

4. **Describe** how igneous rock can become sedimentary rock.

5. **Explain** why you would find the oldest fossils at the bottom of a cliff and the youngest fossils at the top of a cliff.

6. **Explain** how the radioactive decay of isotopes is used to determine the age of rocks.
