

Directed Reading A

Section: The Rock Cycle

- _____ 1. A naturally occurring solid mixture of one or more minerals or organic matter is called
- an element.
 - a rock.
 - a compound.
 - an atom.
- _____ 2. The continual process by which new rock forms from old rock is called
- deposition.
 - erosion.
 - the rock cycle.
 - compaction.

THE VALUE OF ROCK

3. Rocks have been used by humans throughout history for tools, weapons, and _____.

PROCESSES THAT SHAPE THE EARTH

4. The process in which water, wind, ice, and heat break down rock is called _____.
5. One reason that weathering is important is because it breaks rock down into fragments, or _____, from which sedimentary rocks are made.
6. The process by which sediment is removed from its source is called _____.
7. During _____, sediment is deposited in bodies of water and other low-lying areas.
8. Sedimentary rock can be made when sediment is pressed and cemented together by _____ dissolved in water.
9. Movement within the Earth that causes buried rock to be exposed at the Earth's surface is called _____.
10. When uplifted rocks reach the Earth's _____, weathering, erosion, and deposition begin.

Directed Reading A *continued*

ILLUSTRATING THE ROCK CYCLE

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

- | | |
|---|----------------------------|
| _____ 11. magma in the Earth's crust that has risen to the surface and cools and solidifies | a. magma |
| _____ 12. rock that is forced downward and is altered due to heat and pressure | b. sediment |
| _____ 13. rocks that are partially or completely melted | c. igneous rock |
| _____ 14. igneous rock at the Earth's surface that is weathered and wears away | d. sedimentary rock |
| _____ 15. sediment that washes down into rivers and oceans and is pressed and cemented together | e. metamorphic rock |

ROUND AND ROUND IT GOES

- _____ 16. A rock at the Earth's surface is primarily affected by forces of
- a.** heat and pressure.
 - b.** pressure only.
 - c.** weathering and erosion.
 - d.** cooling.
- _____ 17. A rock deep underground is primarily affected by forces of
- a.** extreme heat and pressure.
 - b.** cooling.
 - c.** weathering and erosion.
 - d.** heat only.

ROCK CLASSIFICATION

- _____ 18. Scientists study rocks using what important criteria?
- a.** composition and texture
 - b.** the depth at which they formed
 - c.** elevation
 - d.** the pressure under which they formed
- _____ 19. What is the chemical makeup, or mineral content, of a rock based on?
- a.** the size of its grains
 - b.** the positions of its grains
 - c.** the shape of its grains
 - d.** its composition

Directed Reading A *continued*

- _____ **20.** A rock that consists mostly of the mineral quartz will have a composition very similar to
- a.** basalt.
 - b.** siltstone.
 - c.** quartz.
 - d.** limestone.
- _____ **21.** What do the size, shape, and positions of the grains that make up a rock determine?
- a.** the rock's texture
 - b.** the rock's size
 - c.** the rock's color
 - d.** the rock's composition
- _____ **22.** What factors can affect the texture of a sedimentary rock?
- a.** the length of time the magma had to cool
 - b.** the temperature the rock was exposed to
 - c.** the color of the rock
 - d.** the size of the grains that make up the rock
- _____ **23.** What factors can affect the texture of an igneous rock?
- a.** the length of time the magma had to cool
 - b.** the size of the rock
 - c.** the minerals that cement the rock together
 - d.** the pressure and temperature the rock was exposed to

Section Review

The Rock Cycle

USING KEY TERMS

Complete each of the following sentences by choosing the correct term from the word bank.

- rock
- composition
- rock cycle
- texture

1. The minerals that a rock is made of determine the _____ of that rock.
2. _____ is a naturally occurring solid mixture of one or more minerals.

UNDERSTANDING KEY IDEAS

- _____ 3. Sediments are transported or moved from their original source by a process called
 - a. deposition.
 - b. erosion.
 - c. uplift.
 - d. weathering.

4. Describe two ways that rocks have been used by humans.

5. Name four processes that change rock inside the Earth.

6. Describe four processes that shape Earth's surface.

Section Review *continued*

7. Give an example of how texture can provide clues as to how and where a rock formed.

CRITICAL THINKING

8. **Making Comparisons** Explain the difference between texture and composition.

9. **Analyzing Processes** Explain how rock is continually recycled in the rock cycle.

INTERPRETING GRAPHICS

10. Look at the table below. Sandstone is a type of sedimentary rock. If you had a sample of sandstone that had an average particle size of 2 mm, what texture would your sandstone have?

Classification of Clastic Sedimentary Rocks	
Texture	Particle Size
coarse grained	> 2 mm
medium grained	0.06 to 2 mm
fine grained	< 0.06 mm
