

Skills Worksheet

# Directed Reading Chapter 4 Section 1

## 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 Chapter 4 Section 1 *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
- heat and pressure.
  - pressure only.
  - weathering and erosion.
  - cooling.
- \_\_\_\_\_ 17. A rock deep underground is primarily affected by forces of
- extreme heat and pressure.
  - cooling.
  - weathering and erosion.
  - heat only.

**ROCK CLASSIFICATION**

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

Directed Reading Chapter 4 Section 1 *continued*

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