Name: _____

Date: _____ Period: _____

Worksheet: Erosion and Deposition

1. Which is the best evidence that erosion has occurred?
    a. a large number of fossils embedded in limestone
    b. a soil rich in lime on top of a limestone bedrock
    c. sediments found in a sandbar of a river
    d. a layer of basalt found on the floor of the ocean

2. For which movement of earth materials is gravity not the main force?
    a. snow tumbling in an avalanche
    b. moisture evaporating from an ocean
    c. boulders carried by a glacier
    d. sediments flowing in a river

3. Which sediment is the largest that could be carried by a stream flowing at a velocity of 100 cm/sec?
    a. sand
    b. cobbles
    c. silt
    d. pebbles

4. What can a stream flowing at a velocity of 100 cm/sec can transport?
    a. silt, sand, and pebbles, but not cobbles
    b. silt, but not sand, pebbles, or cobbles
    c. silt, sand, pebbles, and cobbles
    d. silt and sand, but not pebbles or cobbles

5. A glass sphere and a lead sphere have the same volume. Each sphere is dropped into a container of water. Which statement best explains why the lead sphere settles faster?
    a. The lead sphere has a higher density.
    b. The lead sphere takes up less space.
    c. The glass sphere has more surface area.
    d. The glass sphere has a smoother surface.

6. Which rock particles will remain suspended in water for the longest time?
    a. pebbles
    b. silt
    c. clay
    d. sand

7. Compared to a low-density spherical particle, a high-density spherical particle of the same size will sink through water
    a. more rapidly
    b. more slowly
    c. at the same rate

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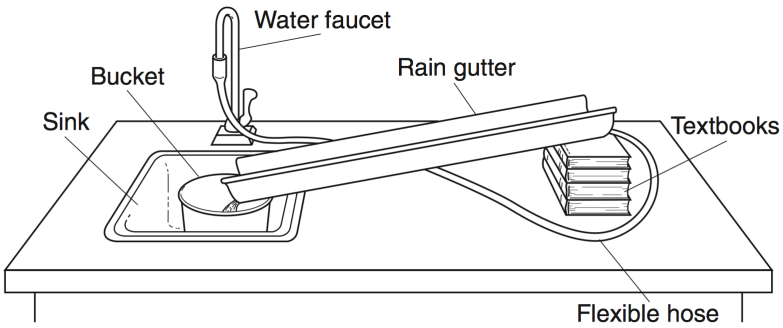
Base your answers to questions 8 and 10 on the diagram and data table below. The diagram shows the equipment used to determine the factors affecting the rate of erosion in a stream. The data table shows the time it took a 10-gram sample of quartz sand to move 100 centimeters down the rain gutter under various conditions.



Data Table

Rain Gutter Slope	Water Velocity	Erosion Time (s)	
		Fine Sand	Coarse Sand
5°	slow	20	60
	fast	15	40
10°	slow	15	40
	fast	10	30
20°	slow	10	30
	fast	5	15

8. In this experiment, the water velocity could be increased by
    a. decreasing the slope of the rain gutter
    b. increasing the amount of water from the faucet
    c. lowering the flexible hose
    d. widening the rain gutter

9. What is the relationship between the water velocity and the rate of erosion?
    a. If the water velocity decreases, the rate of erosion increases.
    b. If the water velocity increases, the rate of erosion increases.
    c. If the water velocity remains constant, the rate of erosion decreases.
    d. If the water velocity remains constant, the rate of erosion increases.

10. By adding more textbooks underneath the rail gutter, what happens to velocity?
    a. increases
    b. decreases
    c. remains the same