

Name: _____

1.

The map shows a stream flowing into a lake. Letters *A* through *F* represent locations in the stream and lake.

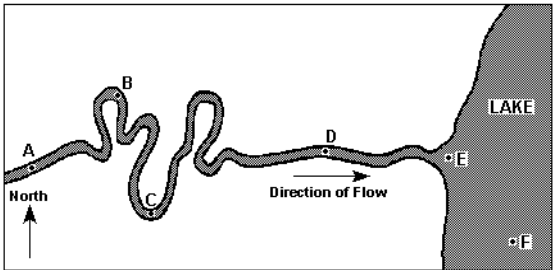
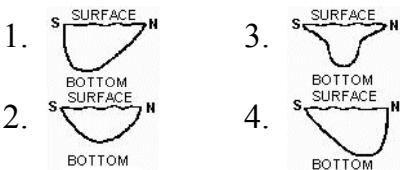


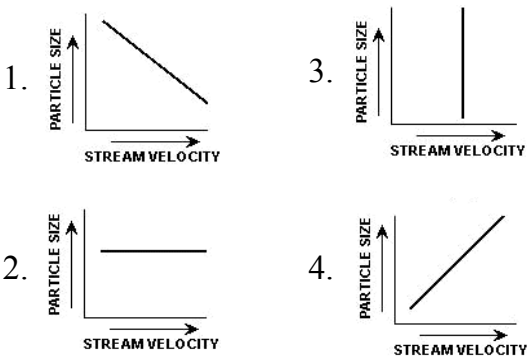
Figure 1

Which diagram best represents the cross section of the stream at location *C*? [Note that letters *N* and *S* represent the north and south sides of the stream.]



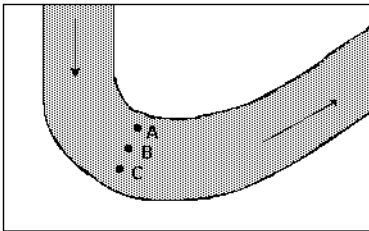
2.

Which graph best represents the relationship between a stream’s velocity and the size of the largest particles it can carry downstream?

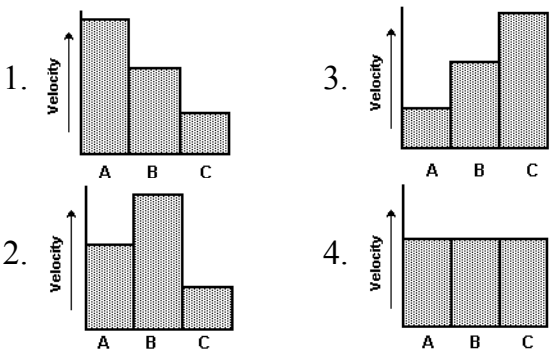


3.

The map represents a large stream meander (bend). The arrows show the direction of stream flow. Stream velocity was measured at surface locations *A*, *B*, and *C*.

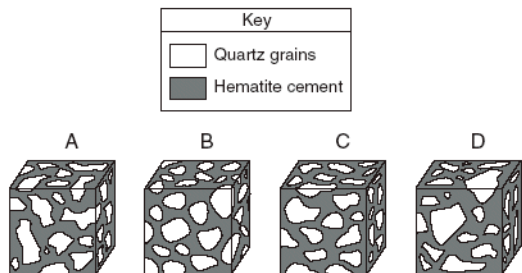


Which graph best represents the relative velocities of the stream at locations *A*, *B*, and *C*?



4.

The diagram below shows four magnified block-shaped sandstone samples labeled *A*, *B*, *C*, and *D*. Each sandstone sample contains quartz grains of different shapes and sizes. The quartz grains are held together by hematite cement.

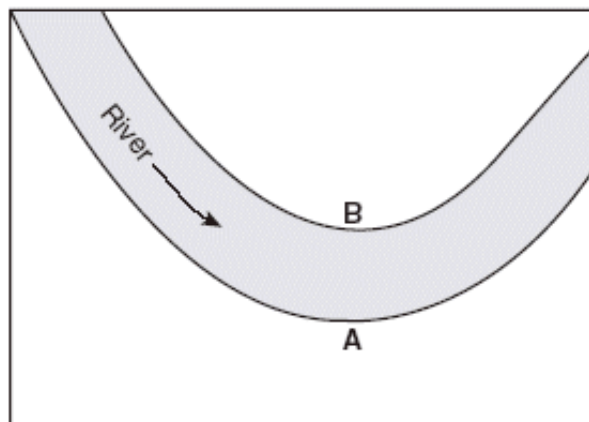


In which sample did the quartz grains undergo the most abrasion during erosional transport?

1. *A* 3. *C*
2. *B* 4. *D*

5.

The map below shows the path of a river. The arrow shows the direction the river is flowing. Letters *A* and *B* identify the banks of the river.



The water depth is greater near bank *A* than bank *B* because the water velocity near bank *A* is

1. faster, causing deposition to occur
2. faster, causing erosion to occur
3. slower, causing deposition to occur
4. slower, causing erosion to occur

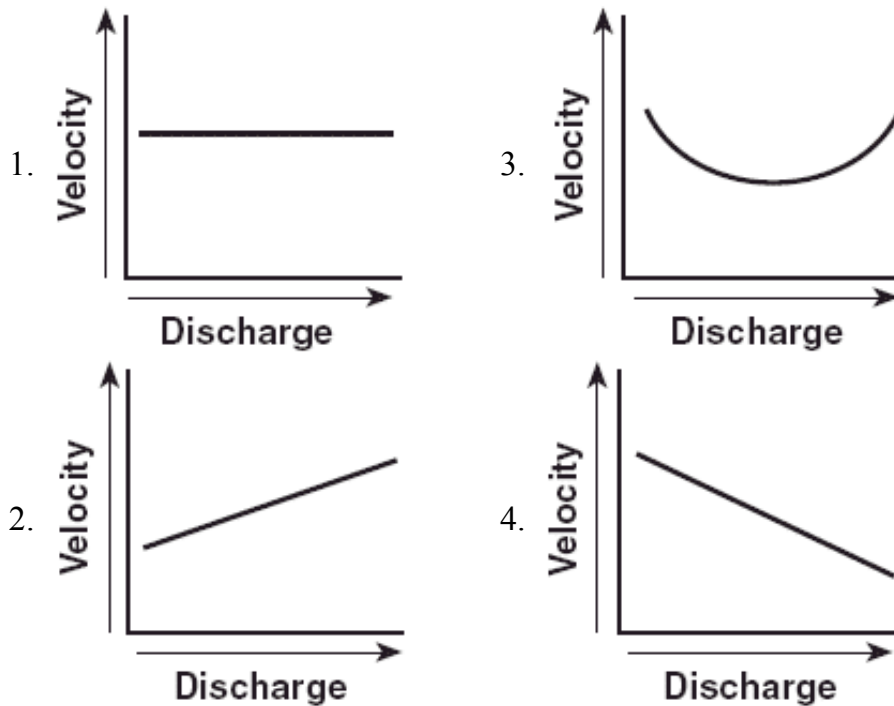
6.

Which of the following sediment sizes can a stream flowing at a velocity of 5 centimeters per second transport?

1. clay, only
2. silt and clay, only
3. sand, silt, and clay, only
4. pebbles, sand, silt, and clay

7.

Which graph best represents the relationship between the discharge of a stream and the velocity of stream flow?



8.

Heavy spring rains cause the velocity of a stream to increase from 10 cm/s to 100cm/s. As a result of the increase in runoff, the largest diameters of the sediment particles being transported could increase from

- | | |
|---------------------|----------------------|
| 1. 0.1 cm to 10 cm | 3. 1.0 cm to 6.4 cm |
| 2. 0.2 cm to 2.3 cm | 4. 6.4 cm to 25.6 cm |

9.

Which groups of particle sizes can be transported by a stream that has a velocity equal to 20 cm/s?

1. only boulders and cobbles
2. boulders, cobbles and pebbles larger than 0.4 cm
3. only pebbles larger than 0.4 cm and sand
4. pebbles smaller than 0.4 cm, sand, silt, and clay

10.

Base your answer to the question on the map below, which shows a meandering stream as it enters a lake. Points *A* through *D* represent locations in the stream.

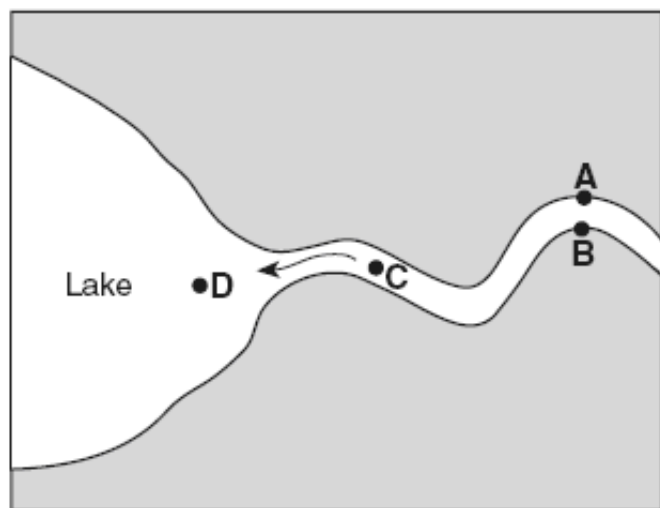
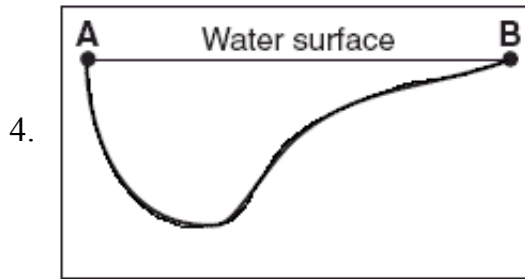
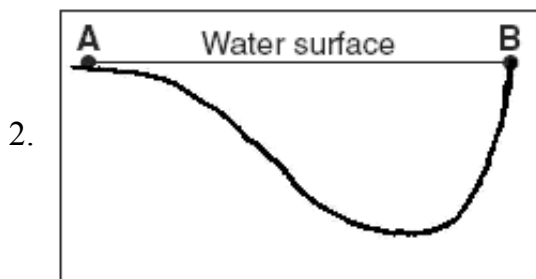
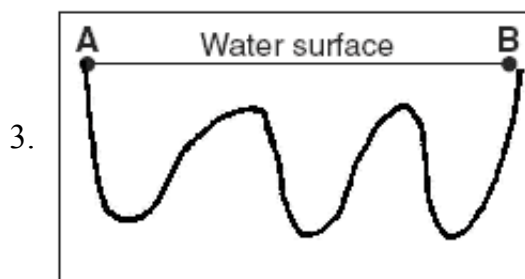
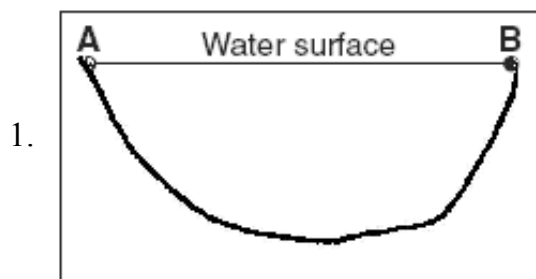


Figure 2

Which cross-sectional view correctly shows the general shape of the stream bottom between points *A* and *B*? The water surface line has already been drawn.



Answer Key for Review - Running Water (Erosion)

1. 1	5. 2	9. 4
2. 4	6. 3	10. 4
3. 3	7. 2	
4. 2	8. 2	