

Name \_\_\_\_\_

1. The diagram below shows a meandering stream flowing across nearly flat topography and over loose sediments.



If arrow length represents stream velocity, which diagram best shows the relative stream velocities in this section of the stream?

1) 2)

3) 4)

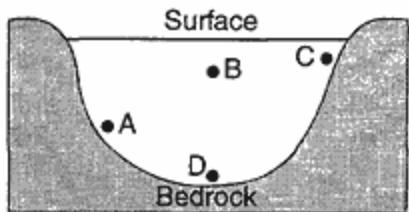
2. What change will a pebble usually undergo when it is transported a great distance by streams?

- 1) It will become jagged and its mass will decrease.
- 2) It will become jagged and its volume will increase.
- 3) It will become rounded and its mass will increase.
- 4) It will become rounded and its volume will decrease.

3. An increase in the velocity of a stream is most likely due to

- 1) an increase in stream discharge
- 2) an increase in the width of the riverbed
- 3) a decrease in the slope of the stream channel
- 4) a decrease in the amount of material held in suspension

4. The diagram below shows a cross section of a river. Letters A, B, C, and D represent points in the river.



At which point is the water most likely to have the greatest velocity?

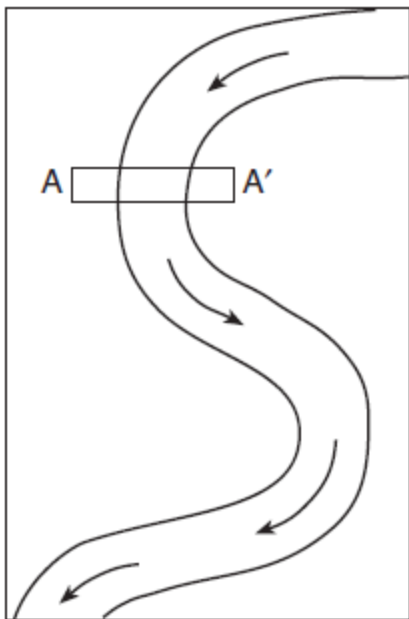
- 1) A
- 2) B
- 3) C
- 4) D

5. The diagram below shows a stream flowing past points X and Y. If the velocity of the stream at point X is 100 centimeters per second, which statement best describes the sediments being transported past these points?



- 1) At points X and Y, only clay is being transported.
  - 2) At points X and Y, only sand, silt, and clay are being transported.
  - 3) Some pebbles being transported at point Y are bigger than those being transported at point X.
  - 4) Some pebbles and cobbles are being transported at points X and Y, but not sand, silt, or clay.
6. The occurrence of parallel scratches on bedrock in a U-shaped valley indicates that the area has most likely been eroded by
- 1) a glacier
  - 2) a stream
  - 3) waves
  - 4) wind

7. The map below shows a meandering river. A–A' is the location of a cross section. The arrows show the direction of the river flow.



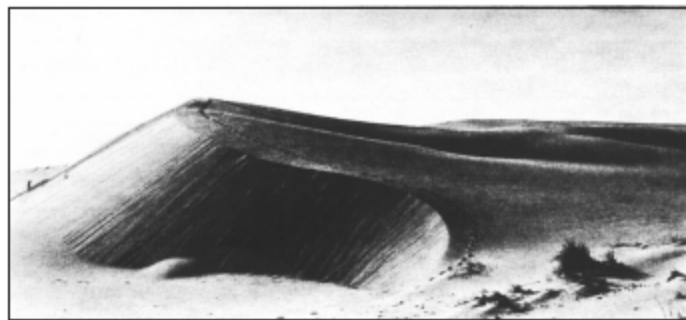
Which cross section best represents the shape of the river bottom at A–A'?

- 1)
- 2)
- 3)
- 4)

8. Which landscape characteristic indicates a landscape has been formed primarily by streams?

- 1) residual soil covering a large area
- 2) coastal sand dunes
- 3) V-shaped valleys
- 4) parallel hills of unsorted sediments

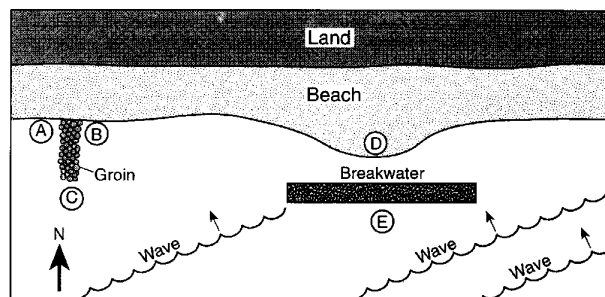
9. The photograph below shows a sand dune that formed in a coastal area.



This sand dune was most likely formed by

- 1) water flowing from the left
- 2) water flowing from the right
- 3) wind blowing from the left
- 4) wind blowing from the right

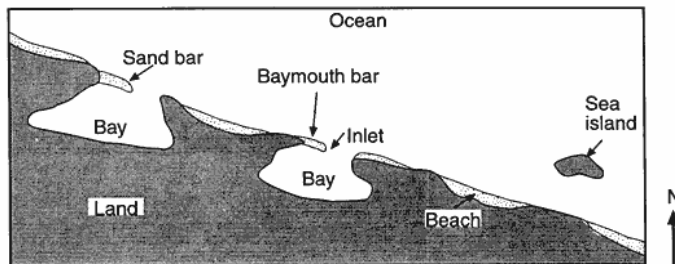
10. Base your answer to the following question on the diagram below, which shows ocean waves approaching a shoreline. A groin (a short wall of rocks perpendicular to the shoreline) and a breakwater (an offshore structure) have been constructed along the beach. Letters A, B, C, D, and E represent locations in the area.



At which location will the beach first begin to widen due to sand deposition?

- 1) A
- 2) B
- 3) C
- 4) E

11. The map below shows some features along an ocean shoreline.

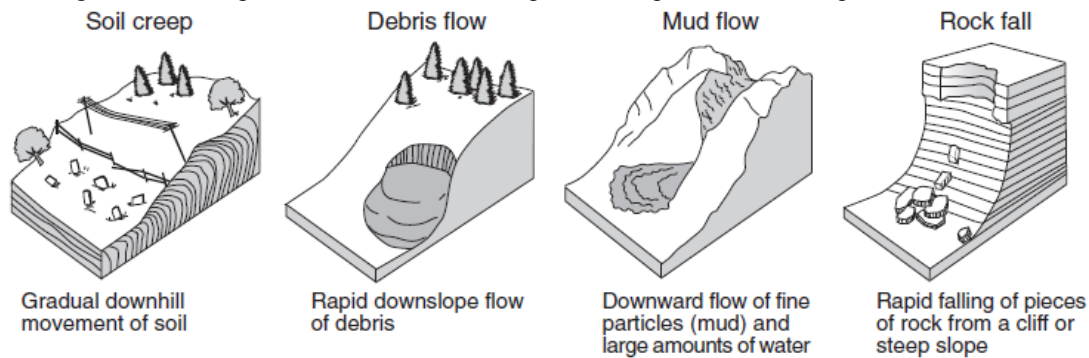


In which general direction is the sand being moved along this shoreline by ocean (long-shore) currents?

- 1) northeast
- 2) southeast
- 3) northwest
- 4) southwest

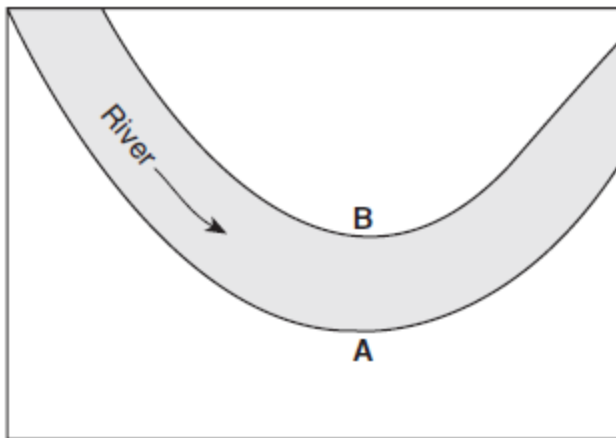
## Erosion Quiz Prep

12. The diagrams below represent four different examples of one process that transports sediments.



Which process is shown in these diagrams?

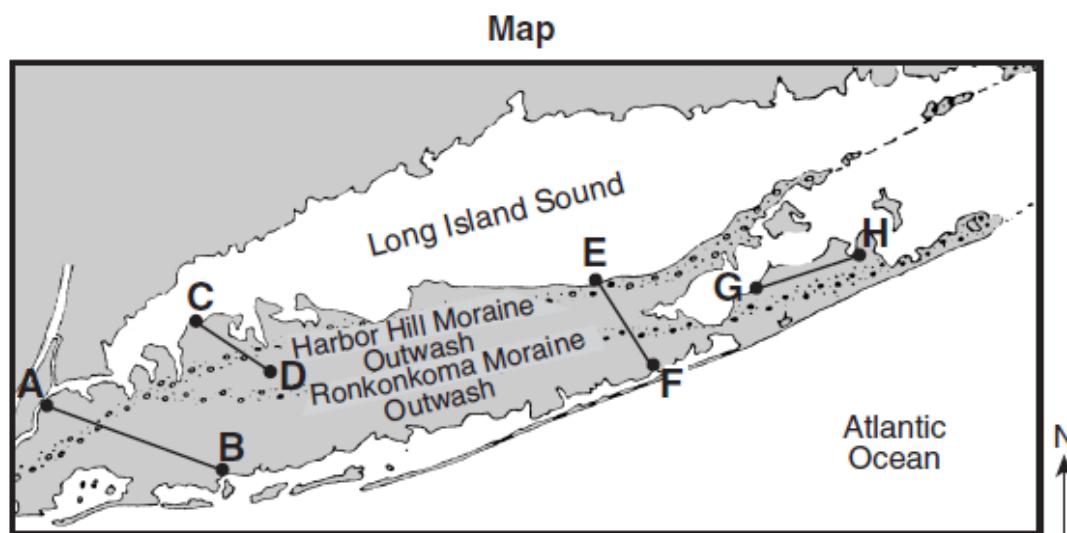
- 1) chemical weathering
  - 2) wind action
  - 3) mass movement
  - 4) rock abrasion
13. The map below shows the path of a river. The arrow shows the direction the river is flowing. Letters *A* and *B* identify the banks of the river.



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
14. Unsorted, angular, rough-surfaced cobbles and boulders are found at the base of a cliff. What most likely transported these cobbles and boulders?
- 1) running water
  - 2) wind
  - 3) gravity
  - 4) ocean currents

15. Base your answer to the following question on the map of Long Island, New York. *AB*, *CD*, *EF* and *GH* are reference lines on the map.



Which agent of erosion transported the sediments that formed the moraines shown on the map?

- 1) water
- 2) wind
- 3) ice
- 4) mass movement