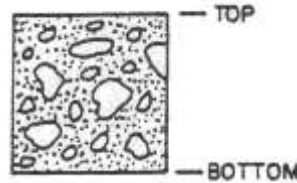


Agents of Erosion

1. On Earth today, which is responsible for moving the greatest amount of material?
 - (1) running water
 - (2) groundwater
 - (3) wind
 - (4) glaciers
2. The diagram below represents a cross section of a soil deposit from a hill in central New York State. The deposition was most likely caused by

- 1 a glacier
- 2 a wind storm
- 3 a stream entering lake
- 4 wave action along a beach



3. Which erosional force acts alone to produce mass movements such as avalanches and landslides?
 - (1) gravity
 - (2) running water
 - (3) wind
 - (4) sea waves
4. Which rock material most likely has been transported by wind?
 - (1) large boulders with sets of parallel scratches
 - (2) jagged cobbles consisting of interlocking crystals
 - (3) irregularly-shaped pebbles which contain fossils
 - (4) sand grains in the desert
5. Which agent of erosion was primarily responsible for forming the long, narrow, U-shaped valleys in the Finger Lakes region of New York State?
 - (1) wind
 - (2) landslides
 - (3) continental glaciers
 - (4) meandering streams
6. Which property would best distinguish sediment deposited by a river from sediment deposited by a glacier?
 - (1) mineral composition of the sediment
 - (2) thickness of sediment layers
 - (3) amount of sediment sorting
 - (4) age of fossils found in the sediment

7. The photograph 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



8. The photograph below shows a large boulder of metamorphic rock in a field in New York State. The boulder was most likely moved to this location by
 - (1) glacial ice
 - (2) wind
 - (3) a stream
 - (4) volcanic action



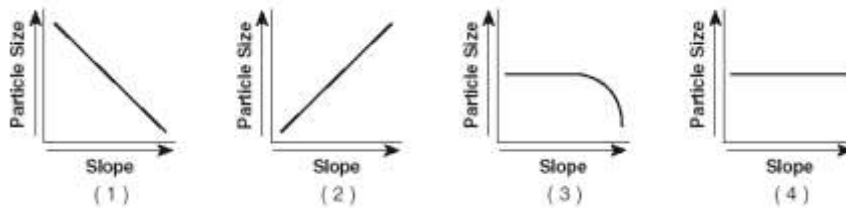
9. What change will a pebble usually undergo when it is transported a great distance by streams?

- (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.

10. A stream flowing at a velocity of 100 cm/sec can transport

- 1 silt, but not sand, pebbles, or cobbles
- 2 silt and sand, but not pebbles and cobbles
- 3 silt, sand, and pebbles, but not cobbles
- 4 silt, sand, pebbles, and cobbles

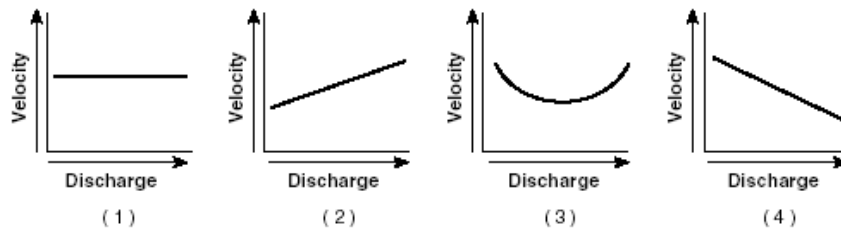
11. Which graph best represents the relationship between the slope of a river and the particle size that can be transported by that river?



12. Which agent of erosion most likely formed the drumlins found in New York State?

- (1) running water
- (2) moving ice
- (3) wave action
- (4) mass movement

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



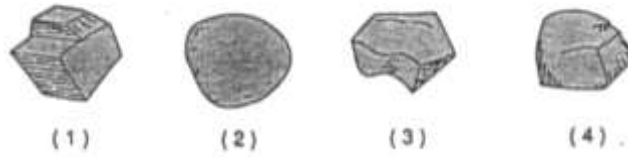
14. A brief, heavy rainstorm occurs in the mountains. How will the volume of water and the rate of erosion in the stream change shortly after the rainstorm?

- (1) The volume of water will decrease and the rate of erosion will increase.
- (2) The volume of water will increase and the rate of erosion will decrease.
- (3) Both the volume of water and the rate of erosion will decrease.
- (4) Both the volume of water and the rate of erosion will increase.

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

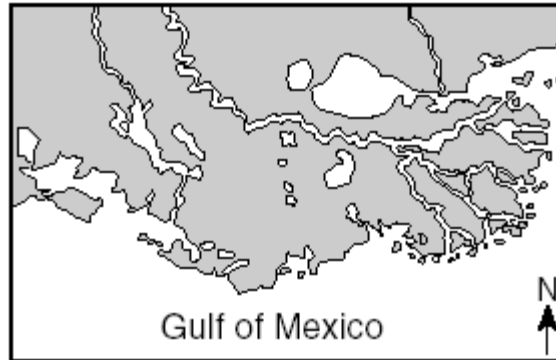
- (1) residual soil covering a large area
- (2) coastal sand dunes
- (3) V-shaped valleys
- (4) parallel hills of unsorted sediments

16. Which of the particles below was eroded by a stream for the longest period of time?



17. The map below shows the large delta that formed as the Mississippi River emptied into the Gulf of Mexico. Which process was primarily responsible for the formation of the delta?

- (1) glacial erosion
- (2) cementation of sediment
- (3) deposition of sediment
- (4) mass movement



18. Sediments found in glacial moraines are best described as

- (1) sorted and layered
- (2) sorted and not layered
- (3) unsorted and layered
- (4) unsorted and not layered

19. Parallel grooves etched in bedrock is evidence of erosion by

- (1) gravity
- (2) glaciers
- (3) wind
- (4) water

20. Which material could best be carried in solution (dissolved) by a stream?

- 1 sand
- 2 salt
- 3 clay
- 4 silt

21. The diagram shows the surface features of a landscape.

Based on the features shown, which erosional agent had the greatest effect on tree growth and the structures that humans have built on this landscape?

- (1) running water
- (2) moving ice
- (3) prevailing wind
- (4) mass movement

