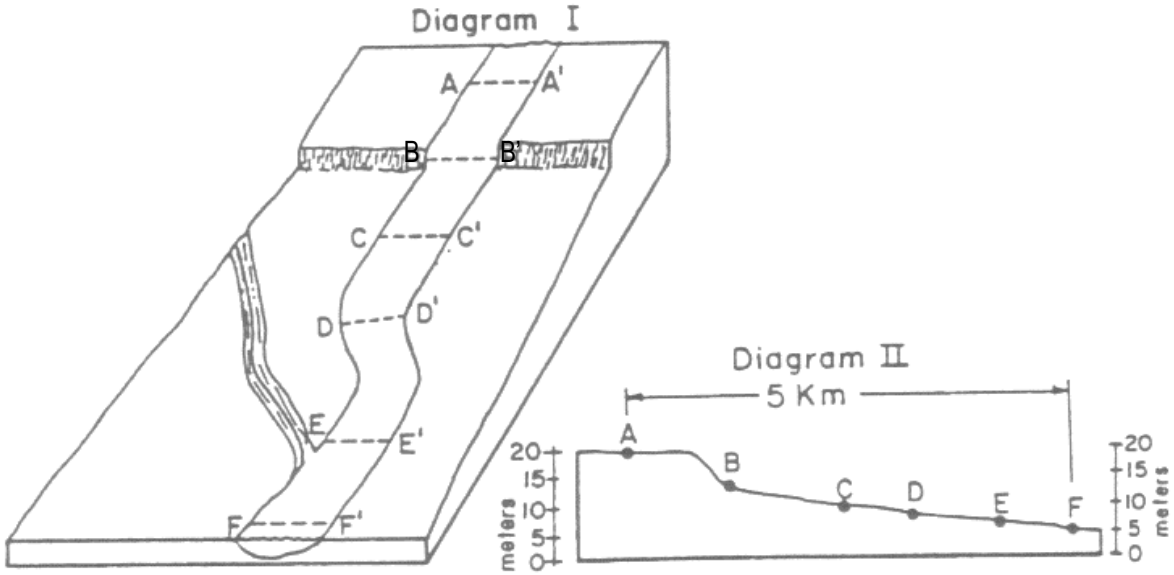
Erosion and Deposition

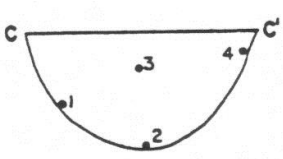
Questions 1-4: Diagram I shows the paths of two streams over the Earth's surface. Diagram II shows the side-view profile of the major stream.



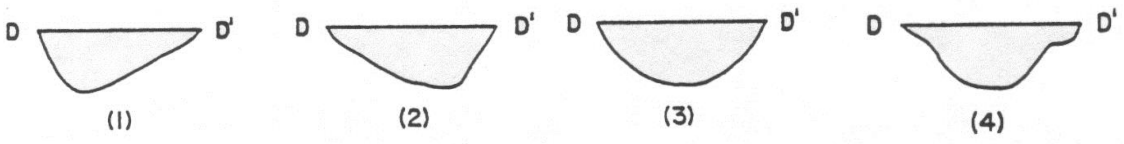
1. At which location would the stream velocity be the greatest?
   1 A
   2 B
   3 C
   4 D

2. The greatest volume of water would most likely be moving past which location?
   1 F-F'
   2 B-B'
   3 C-C'
   4 D-D'

3. The diagram to the right shows the cross-section of the stream at C-C'. At which position in the stream channel would the velocity of the water be the greatest?
   1 1
   2 2
   3 3
   4 4

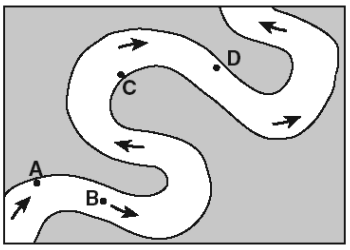


4. Which cross section best represents the shape of the stream at D-D'?

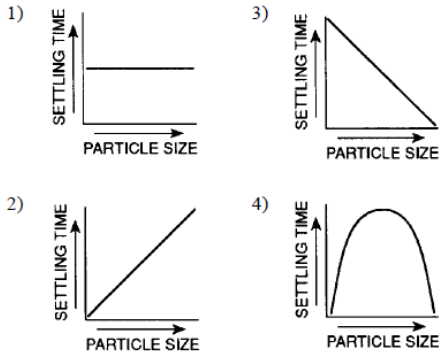


5. A decrease in the velocity of a stream will most likely cause an increase in
   (1) the amount of sediment carried by the stream
   (2) the size of the particles carried by the stream
   (3) deposition within the stream channel
   (4) abrasion of the stream channel

6. The map to the right shows a meandering stream. Points *A, B, C,* and *D* represent locations along the stream bottom.
At which location is the greatest amount of sediment most likely being deposited?
(1) *A* (3) *C*
(2) *B* (4) *D*



7. In a soil sample, the particles have the same shape but different sizes. Which graph best represents the relationship between particle size and settling time when these particles are deposited in a quiet body of water?



8. Clay, silt, and sand are added to a jar of water. The jar is shaken and then allowed to stand quietly for a number of hours. The result of this demonstration could be best used as a model to show that
(1) particles with the lowest density settle the fastest
(2) particles with the largest diameter settle the fastest
(3) water has a higher specific gravity than clay, silt, and sand
(4) the bottom layer of a series of sediments is the youngest

9. The four particles shown in the table below are of equal volume and are dropped into a column filled with water. Which particle would usually settle most rapidly?
(1) *A*
(2) *B*
(3) *C*
(4) *D*

Particle	Shape	Density
A	flat	2.5 g/cm^3
B	flat	3.0 g/cm^3
C	round	2.5 g/cm^3
D	round	3.0 g/cm^3

10. A stream entering a lake deposits sediments on the lake bottom in the pattern shown on the map below.
Which corner of the map is nearest to the point where the stream flows into the lake?
(1) northeast (NE) (3) southeast (SE)
(2) northwest (NW) (4) southwest (SW)