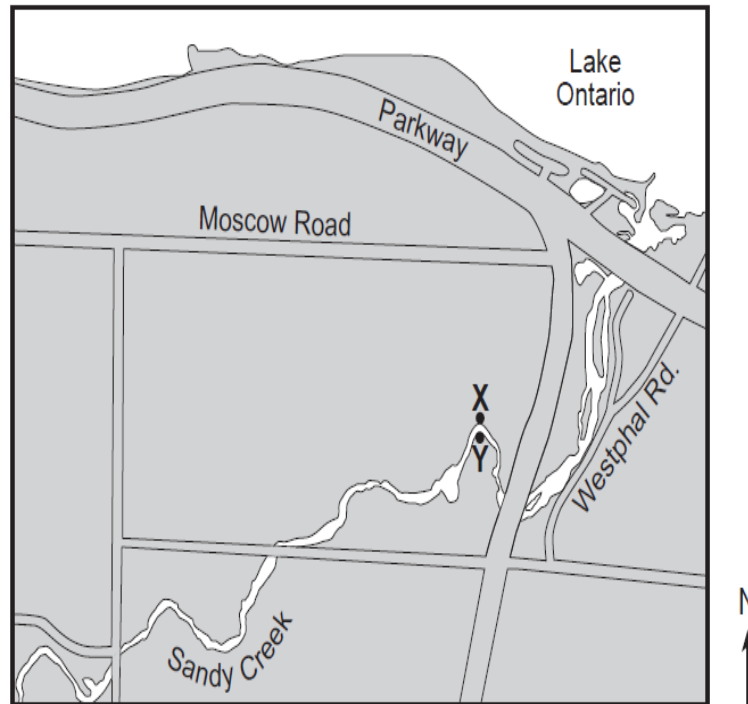


Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Earth Science: Erosion, Deposition, and Streams Lab

**PART ONE**

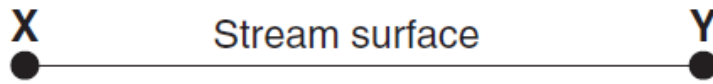
The map shows the location of Sandy Creek, west of Rochester, New York. X and Y represent points on the banks of the stream.



1. *In your answer booklet, draw a line to represent the shape of the stream bottom from point X to point Y. [1]*
2. Explain why sediments are deposited when Sandy Creek enters Lake Ontario. [1]
3. The symbols representing four sediment particles are shown in the key in your answer booklet. These particles are being transported by Sandy Creek into Lake Ontario. On the cross section *in your answer booklet*, draw the symbols on the bottom of Lake Ontario to show the relative position where *each* sediment particle is most likely deposited. [1]
4. Record the minimum velocity this stream needs to transport a 2.0-cm-diameter particle. [1]

Answers for questions 1-4 should be recorded on this answer sheet

1.



2.

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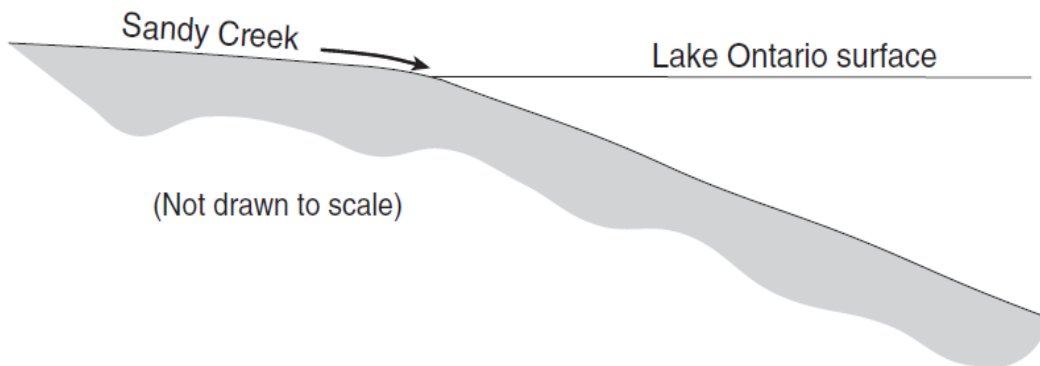
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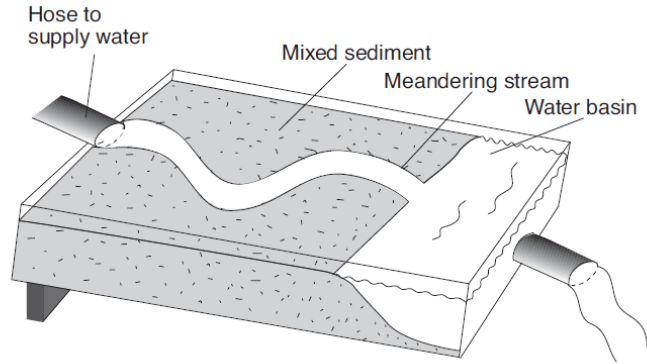
3.

Key	
□	Small pebble
△	Sand
○	Silt
×	Clay

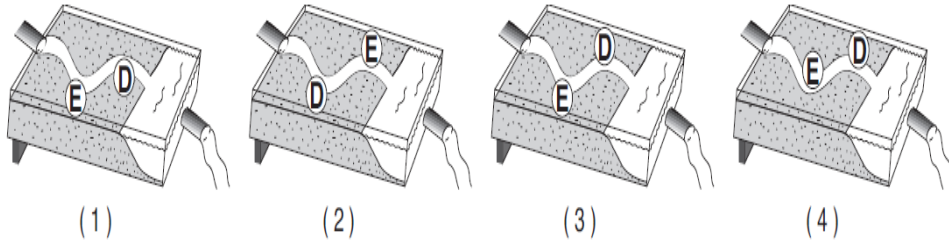


4. \_\_\_\_\_ cm/s

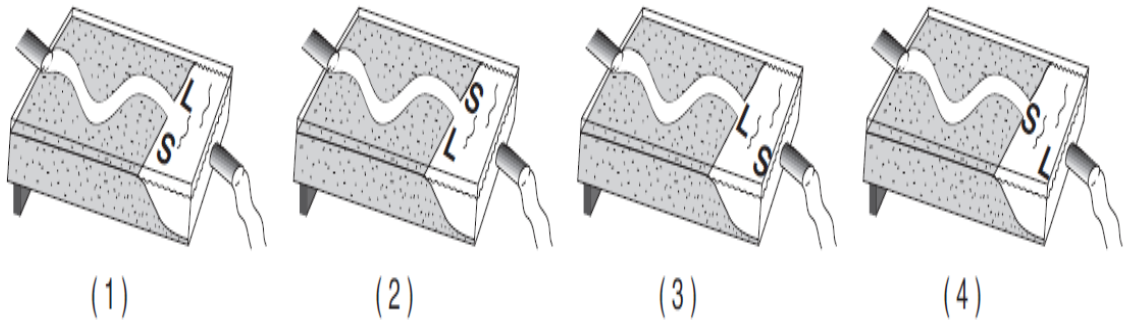
**PART TWO**



5. Which diagram best represents where erosion, *E*, and deposition, *D*, are most likely occurring along the curves of the meandering stream?



6. Which diagram best represents the arrangement of large, *L*, and small, *S*, sediment deposited as the stream enters the water basin?

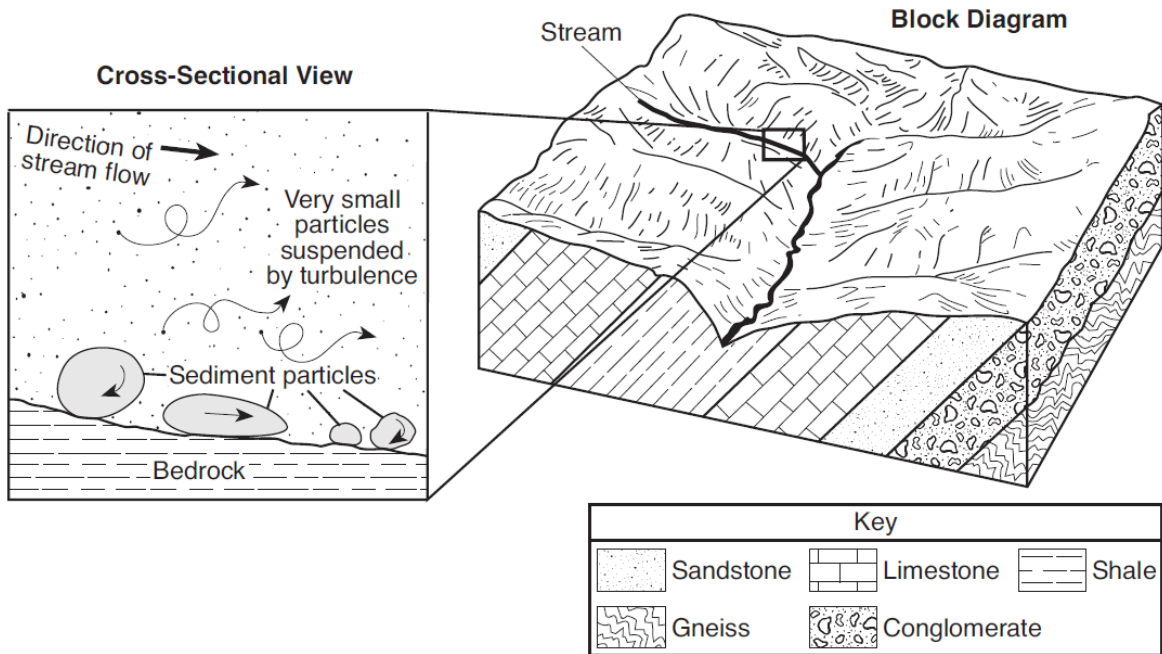


7. How can the model be changed to increase the amount of sediment transported by the stream?

- (1) decrease the temperature of the sediment
- (2) decrease the slope
- (3) increase the size of the sediment
- (4) increase the rate of the water flow

**PART 3 –**

Base your answers to questions 8-11 on the cross-section and block diagram below.



8. After measuring the actual size, identify the name of the largest particle shown on the stream bottom in the cross section. [1]
9. What process is responsible for producing the rounded shape of the particles shown on the stream bottom in the cross section? [1]
10. Identify the type of rock shown in the block diagram that appears to be the most easily eroded. [1]
11. How does the shape of a valley eroded by a glacier differ from the shape of the valley shown in the block diagram? [1]