

Name: _____

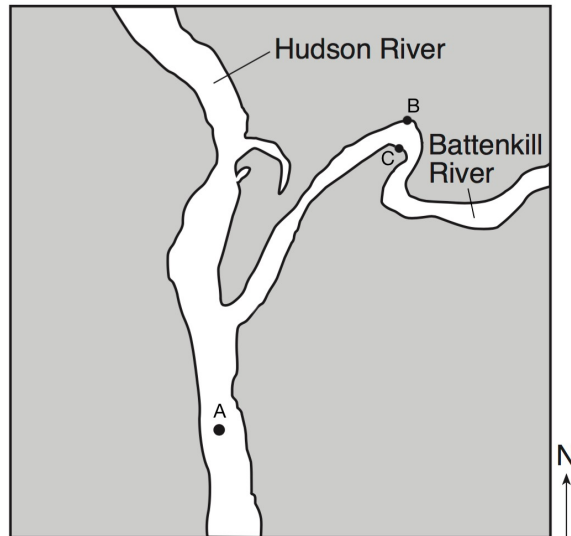
Date: _____ Period: _____

Surface Processes

The Physical Setting: Earth Science

Supplemental: Running Water I

Directions: Base your answers to questions 1 through 4 on the map and table below. The map shows the area where the Battenkill River flows into the Hudson River north of Albany, New York. Point A indicates a location within the Hudson River. Point B and C represent locations along the Battenkill River bank. The table shows the densities of four common minerals found in Hudson River sediments.



Mineral Density	
Mineral Name	Density (g/cm ³)
amphibole	3.3
feldspar	2.6
garnet	4.2
quartz	2.7

1. Identify the largest particle that can be carried at point A when the velocity of the river is 50 cm/s.
2. Describe the most likely changes in the size and shape of individual particles of sediment as they are transported downstream by the Battenkill and Hudson Rivers.
3. Some of the sediments transported by the Hudson River came from metamorphic rock. Identify one foliated metamorphic rock that contains all four minerals listed in the mineral density table.
4. On the diagram below, draw the cross sectional view of the general shape of the stream bottom between points B and C. The water surface has already been drawn.

