

SETTLING RATE LAB

In this lab, we will be looking at how quickly different sediments (represented by beads) settle when deposited (dropped) into a container of water. We will look at three sets of data. In the first experiment, we will drop beads of different sizes into the water, then beads of different densities, and finally beads of different shapes. Use the data found at <http://tinyurl.com/settling-rate> to draw line graphs for the 3 experiments. Then answer the questions that follow.

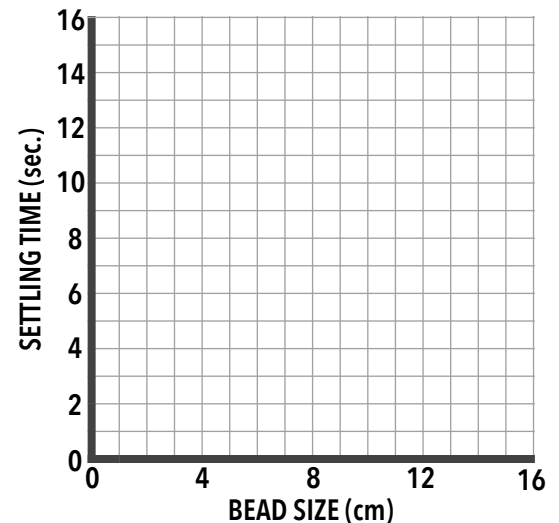
EXPERIMENT #1

What is the relationship between particle size and settling **time**?

What is the relationship between particle size and settling **rate**?

Which size of sediment will settle fastest when dropped into water?

CLAY SILT SAND PEBBLE COBBLE BOULDER

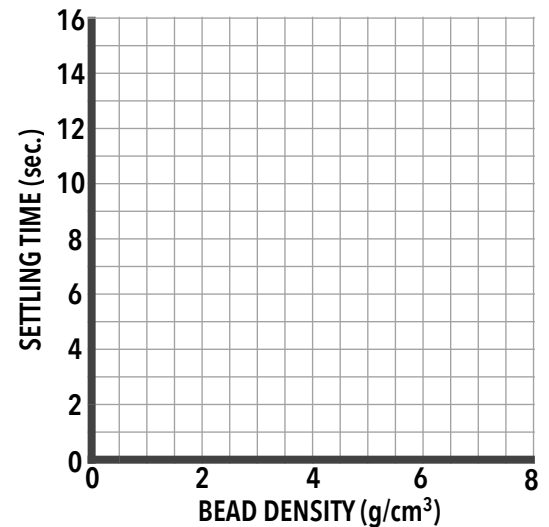


EXPERIMENT #2

What is the relationship between particle density and settling **time**?

What is the relationship between particle density and settling **rate**?

Why do you think this relationship is true? Explain.



EXPERIMENT #3

What is the relationship between particle shape and settling **time**?

What is the relationship between particle shape and settling **rate**?

Why do you think this relationship is true? Explain.

