Name Date

Settle Down!

Student Worksheet

Find out how sediment forms and deposits. You will observe what happens when different sized particles are settled in water. You can create a model sedimentation tank to see how sludge and effluent are separated.

Materials: 3 cups of dirt, 1 cup of sand, 1 cup of pebbles, 2–5 small rocks (1 inch in diameter), 1 gallon of tap water, Salad oil, Turkey baster, Eye dropper, 4 clear plastic cups, numbered #1 to #4, Small aquarium, Bucket

Procedure

1. Mix the dirt and water in a bucket. Fill the baster with the mixture from the bucket and put it into cup #1. Record your observations.
2. Put the sand, pebbles and rocks into the bucket. Fill the cup marked #2 from the bucket and record your observations.
3. Pour salad oil into the bucket. Fill the baster from the middle of the mixture in the bucket and place its contents into cup #3. Take a baster full from the top of the bucket and put it in cup #4. Observe cups #3 and #4.
4. Without mixing the contents of the bucket, pour the remainder of the mixture into the aquarium. What happens after an hour? Five hours? One day? One week?

1. What was different about each sample taken? _____

_____

2. What did you notice about the samples in each cup? How would you remove the oil from the mixtures in #3 or #4? _____

_____

3. Can you remove the dirt from the bottom of the aquarium without mixing it with the liquid on top? _____

_____

4. How are your observations similar to what happens in ponds and streams in nature? _____

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For the Teacher:

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