

Name: _____ Snapshot '07: Turbidity Location: _____

1. **Turbidity** is a cloudiness of the water. Light can penetrate farther in clear water than it can in turbid water. Turbidity can be caused by small plants, and animals, sand and mud. We will be measuring the turbidity of water in the Hudson River. Time: _____

Circle equipment used? Secchi disk Sight tube Turbidimeter

Reading	Reading 2	Reading 3	Average
(Make sure that you use the correct unit for the piece of equipment that you are using: : feet, cm, meters, JTU's or NTU's)			

2. **Chlorophyll** is a measure of the pigment in plants and algae that causes photosynthesis. Measuring this gives us an idea of how much is growing in the river. We will have to send this in to a lab to analyze. In order to get a reading we need to filter the water and "catch" all the particles in the water on a filter. Look at the filter record how much material has been collected there. This represents chlorophyll, as well as

Record the time _____

The number on the color chart best matching your sample _____

3. **Sediments** are small pieces of sand, minerals and organic matter found in water. When the water is calm many of the sediments sink to the bottom of the water and provide a place for plants to take root. We will be taking two samples of sediment from the floor of the Hudson. We will examine one of the samples and send one to a laboratory. The sediment core from the Hudson represents a period of time, but the amount of time is a mystery. Measure and record the length of the entire sediment sample. The material at the bottom is older than the material at the top. Study your sample to see if you notice any color changes or layers in the sample. If the color at the top of the sample is light brown, it is an indication that the surface was in contact with oxygen in the water. Measure the length of this layer. Usually the lower sediments have become darker, which shows that they have been out of contact with the oxygen in the river; this means that they are older. This darker, older section will often have a sulfur-like smell. Measure and record this section, too.

Length of entire sediment sample core: _____ (note units used)

Length of top layer of sediment sample core: _____ (note units used)

Length of second layer of sediment sample core: _____ (note units used)

What is the grain size like? Fine grain _____, larger grain _____ Mix _____

Is there a lot of plant material in the core? _____

Anything else you notice about the core? (colors, layers, shells etc.) _____