Science Log – 4th

Topic: Watersheds

Learning Goals:

1. Construct and interpret a model of the water cycle.

What do you already KNOW about the topic?	What do you WANT to learn about the topic?	What did you LEARN about the topic?

Vocabulary

Watershed	An area over which surface water flows to a single collection place **Major Watershed systems:** Chesapeake Bay, North Carolina Sounds, Gulf of Mexico
Tributary	Smaller rivers or streams that flow into a larger river or stream.
Estuary	A place where fresh and salt water mix (i.e. a bay, salt marsh, mouth of a river).
Runoff	Precipitation that travels across the surface of the Earth in uncontrolled streams, rivers, drains, or sewers.
Turbidity	Dirtied water, measured by the amount of particles floating in water that causes light to scatter.
Dissolved Oxygen	Oxygen that exists between the molecules in which organisms breathe.

Science Log – 4th

Water Quality Testing

Supplies: pH test strip, container, water sample

Directions:

1. Collect a sample of water from a source of your choice (sink, puddle, stream, lake, river)
2. Dip the pH strip into your water sample.
3. Remove your test strip from the water and wait for 15 seconds before reading it.
4. Compare your test strip to the provided pH key.
5. Record the results.
6. Repeat steps 1-5 with a different water source.

Water Sample Collection Location	pH Level	What does this pH tell you about the quality of this water for humans, animals, and plants?

My Watershed

Supplies: white printer paper, pencil, washable markers (brown, red, blue), black permanent marker, spray bottle, tray/cookie sheet

Directions:

1. Choose places to use basic shapes to draw the following with a pencil:
    a. House
    b. Wastewater Treatment Facility (circle)
    c. Farm (rectangle)
    d. Factory (L-shaped block)

Science Log – 4th

2. Color in your shapes using washable markers as follows:
    a. Wastewater Treatment Facility (circle) – BROWN
    b. Farm (rectangle) - BROWN
    c. Factory (L-shaped block) – RED
3. Trace the house using the permanent maker.
4. Push the outside edges towards the center of the paper to slightly crumpled the paper.
5. Use the permanent maker to trace along the high points or raised creases of your paper to create the hills, mountains, and ridges.
6. Use a blue washable marker to trace over inverted or flat creases to create your waterways.
7. Set your paper on a tray and spray or sprinkle water over the paper.
8. Observe the changes to the waterways as the pollutants enter the watershed from different features on your watershed model.

9. Explain what you observed happening in your watershed.

_____

_____

_____

_____

_____