**Wetland in a Pan Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Hour \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Learning targets; Students will describe the relationships among precipitation, runoff, and wetlands. Students will relate the importance of wetland functions to their own needs and daily lives.**

**Review:**

1. Define runoff in your own words.

2. Describe a watershed.

3. Compare and contrast a stream and a lake.

4. Why are wetlands important?

**Part 1:**

**You will see several photos of different kinds of wetlands such as marshes, swamps and bogs. Please answer the following as we view them as a class.**

**Marshes;**

Describe/sketch

What kind of animals might live here?

**Swamps;**

Describe/sketch

What kind of animals might live here?

**Bogs**

Describe/sketch

What kind of animals might live here?

**Part 2 lab activity: Creating the watershed in a pan**

**Materials**

**-Modeling clay -long shallow pan -watering can**

**- soil - pollution**

**1. Place your clay/dirt in the pan. It should cover half the pan and slope downward. This represents your land.**

A. Pour some water on your land and describe what happens?

B. **PREDICT DO NOT PERFORM** what will happen if you place a sponge at the bottom of your land, and then pour the water (rain) on your land?

**2. Empty the water out of your pan be careful not to lose any land! Place a sponge in the pan at the base of the land representing a wetland as a buffer zone between the land and the body of water. Pour some water on the land.**

C. Describe what happens. What does the sponge do?

D. What would happen if a wetland is destroyed and houses or other developments are built in its place? (This is happening a great deal in the industrial world today)

**3. Raise your hand and wait patiently for Ms. Murphy to add pollution to your watershed.**

E. What happened when Ms. Murphy added pollution to your watershed? Did the sponge help protect the body of water? Did it absorb some of the pollution?

**4. Remove the sponge (wetland), raise your hand and patiently wait for Ms. Murphy to add some pollution to your watershed.**

F. Compare and contrast what happened the second time Ms. Murphy added pollution to your watershed.

**5. Before moving on please clean up your land area. Clean your pollution off of your sponges and watersheds. Dump the water in the appropriate sinks. DO NOT PUT SOIL DOWN THE DRAIN (Avoid the one by the computer) Have Ms. Murphy check in your lab supplies and check your lab area. Get a stamp of approval before moving on.**

**X\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Once you have your stamp of approval answer the following questions. All questions in this activity should be answered using complete sentences and a restate!!**

G. How would the pollution affect fish, other wildlife and plants in this watershed?

H. How might a lack of wetlands affect us as a people?

I. How might we prevent these undesirable events from happening?

J. What is the point of this lab? Why do you think Ms. Murphy had her class perform this lab today?