

It's Not that Much!

Grades 2-5 Post-Visit Activity #1

Materials needed: broom, role cards, 3 small pieces of used paper for each student (about 3x3 inches) *Adapted from the International Office for Water Education*

Purpose: To help students understand that we all affect water quality and that a little pollution by each of us goes a long way to harm water quality.

Directions:

- Make enough copies of the role card page so that each student will have one role assigned to them. Introduce the activity and hand out the role cards and 3 pieces of paper to each student. One student will need to serve as the “rain.”
- After you have given each student a role card and 3 small pieces of used paper, have them write one thing on each piece of paper that may cause water pollution according to their role card.

Example: If a student were given a role card that says “urban home” the student might write:

1. Oil from car leaks on driveway
 2. Fertilizer on yard
 3. Cleaner from windows ran down driveway
- Write the headings “Agriculture, Mining/Logging, Urban Home, Waste Disposal, and Construction” on the board. You may need to define these with your class.
 - Have each student fill out their three papers (one source of water pollution for each sheet), wad them up and scatter them around on the floor. Have the “rain” sweep up the papers from one small area, about the size of 1 or 2 desks.
 - Unfold the papers. Read aloud each paper and decide what type of pollution it would be. Use tape to stick the pollutants under the appropriate heading on the board. Ask: Does pollution from a small area affect water quality?
 - Have the “rain” sweep the rest of the pollutants up and add these to the appropriate category. Was the oil from one car harmful to water quality? Even though each student only added three pollutants, look at how fast they added up.
 - Facilitate a discussion on how to help protect water quality.

For an extension, students may write up their plans to help protect or restore water quality. Encourage your students to look into joining a group like the Stream Team or start one in your school.

www.piercecountycd.org/streamtm.htm

Make copies of this paper and cut out the individual roles. Make sure you have enough roles for everyone in your classroom.

ROLE CARDS

You are a farmer who grows daffodils and tulips.	You are in charge of an airport.	You are a rancher who raises sheep or cows.
You own a large logging company.	You own a gas station with large underground tanks.	You operate a zoo.
You are in charge of a landfill.	You own a major construction company.	You are in charge of city streets.
You have an urban home with a large lawn and garden.	You like to work on your car at home.	You operate a large grocery store.
You are in charge of a home and like to keep it clean.	You drive 30 miles to work every day.	You are the principal of a large elementary school.

School Water Quality Survey

Grades 2-5 Post-Visit Activity #2

Materials needed: Watershed map from previous activity, paper, crayons, *School Water Quality Survey* form

Purpose: To get students involved in community water quality issues.

Directions:

- The EnviroChallenger Educator will leave a map of the Tacoma watersheds during the lesson. Make copies and have students work in pairs to color in the watershed where your school is located if you have not already done so.
- Now, have the students work through the *School Water Quality Survey* in partners. You may wish to invite in the school custodian or grounds keeper to help answer some of the questions on the survey. Make sure to cover any school regulations and safety considerations with the students before heading outside to do the fieldwork.
- Once the teams have completed their surveys, have a group discussion about factors in and around the school contributing to water quality. Ask the class if they think that the school could improve the water quality of the local watershed by changing some of the practices used or by posting educational and informational signs around the school.
- If the storm drains are not marked, contact the EnviroChallenger or contact Stream Team to see how you can help, www.piercecountycd.org/streamtm.htm

To wrap up this lesson, have the students suggest ways to help improve the water quality of the school's watershed. You may also have them write up their plans.

School Water Quality Survey

Water Quality Survey for _____ Elementary

Date: _____

SWQS Team: _____ and _____

Locate and list the number of storm drains in the school parking lot and along any roads running along the school property. **Ask your teacher for safety instructions.**

Number of storm drains in parking lot: _____

Number of storm drains along roads: _____

Are the storm drains marked with stencils or stickers? **YES NO SOME**

How many spaces does the parking lot have? _____ spaces

Do you notice any oily/wet spots in the parking lot spaces? **YES NO**

Does the school have a grass playground or a dirt/sand playground? **GRASS DIRT**

Are there any other areas that have plants on the school property? **YES NO**

Does the school water the grass and plants? **YES NO**

Does the school use any fertilizer on the grass and plants? **YES NO**

Does the school use any pesticides on the school grounds? **YES NO**

Does the school use cleaners on the outside school walls or windows? **YES NO**

Can you find other possible sources that may harm water quality in the school's watershed? **YES NO**

If yes, list. _____
