

TEACHER'S GUIDE

WATER WIZARDS

DEADLY WATERS

Review

Remind students of what they learned in the last activity.

Purpose

The purpose of this activity is to allow students to become familiar with different kinds of pollution that can affect water, as well as animals and plants that live in water.

Preparation

Review "Why Is This Important?" with students. Tell the students that they are going to be divided into research teams and given a river to analyze for pollution (can be done individually).

Materials

10 different colors of construction paper (3 sheets each)
writing or graph paper (in workbook)
glue
1 teaspoon

Experiment for "Do This..."

1. Make 100 tokens of each of the 10 colors of construction paper (1/2" squares). Put all the tokens in a container. This is pollution.
2. Cut out explanation of each kind of water pollutant and glue to a different color construction paper. These will be the pollution keys. Tape each key to the wall or blackboard at a level where students can read them.
3. Divide students into groups of three. Explain that they are scientists who are going to determine how polluted a river is. Explain that the graph represents a river. Have them name the river and list the names of the scientists who investigated the rivers.
4. Give each research team a teaspoon of pollution (construction paper). Each team will need access to a glue stick or glue.
5. The teams should separate the colored tokens into piles and then glue all squares of the same color in a row on graph paper to make a bar graph.
6. Have teams come one at a time to the pollution keys and read out loud about the biggest pollutant in their river. All the pollutants should be discussed by the end of the activity. Have teams label each pollutant on their graph.
7. When they have the bar graphs completed and have compared the team's results, tell them that any quantity above two units of each kind of pollutant is considered damaging to wildlife habitat. In their hypothetical rivers, what pollutants would be likely to cause the most damage to wildlife and wildlife habit? Give examples and discuss the kinds of damage that could be caused.
8. Post "rivers" in the hall or bulletin board so students can see how each river is polluted differently.

Reinforcement in "Can You Tell Me..."

Have students answer questions individually or as a group. Encourage creativity. Let students complete Water Wizard Workout as time allows.

Extension

1. Review "Water Wizards Home Brew" for students. Encourage students to share with their parents and incorporate activities into their daily life. Let students share results in class.
2. Have water pollution specialist visit the class or have the class Adopt-A-Stream near school.