

Water Pollution
Grade: 3rd_4th

Goal: The learner will be able to demonstrate how much water would be needed to dilute pollution.

Objectives: Upon completion of this activity, the learner will be able to:

1. Determine knowledge of pollution
2. Determine how pollution can be diluted.
3. Determine what we can do to help.

Materials:

2 Large plastic Jars
10 Plastic drinking glasses
Water
food coloring (red, blue, or green)
medicine dropper

Safety: Be careful of spilling water on the floor.

Procedures:

1. Pre-Assessment
 - A) Determine knowledge of pollution through discussion.
2. Exploration:
 - a. Hand out materials
 - b. Fill large jars with water
 - c. Add 30 drops of food coloring to the water in one jar.
 - d. Number glasses from 1 to 10
 - e. Fill glasses 1 and 2 half full of the colored water. Glass 1 is the control.
 - f. Add clean water to glass 2 until it is full. Compare with Control (glass #1)
 - g. Pour half the water from glass 2 into glass 3.
 - h. Add clean water to glass 3 until it is full. Look for a color change.
 - i. Repeat this procedure through glass # 10. Compare the water in the glasses.

Assessment/Evaluation:

Write a statement describing how the pollution was cleaned up in the experiment.
Compare the food coloring to the pollution in the river. Tell how the river could be cleaned up.

Extension:

Compare water pollution in other communities to your community.

Think of changes we can produce in our own families and communities to deal with pollution of various sorts.

Integration:

Math:

* Students will estimate the percentage of pollution in each of the glasses in the experiment and make a graph to show the percentages.

Social Studies: Students will go on a pollution walk and identify pollution.

Students will have a clean up day on and around the school groups. This will be a school wide project.

Language Arts:

Students will write an essay on how they can help prevent pollution.

Exploratory Arts:

*** Students will make a “Pollution” collage using pollution scraps found at home and in the classroom.**