

Title: Testing Water Quality
Subject(s): Science and Technology, Mathematics
Level(s): Intermediate
Grade: 8
Focus: Environmental Education
File: OTF_OTF Testing Water Quality

Description:

This lesson is a hands-on inquiry activity examining physical and chemical water quality indicators. In the first period, students will focus on substances found in water and design a table to record water quality test data. The second period will be a field trip to a local stream or pond to do the physical and chemical water quality testing on water in their watershed. This lesson covers quantitative testing for temperature, pH, dissolved oxygen, free chlorine, phosphates and nitrates. As well, qualitative testing for clarity/turbidity and odour is covered. The actual tests conducted will depend on the water testing kit purchased. The last period will have students calculate the means of their results. Students will then examine their data, draw conclusions and determine some of the human and natural processes that could have contaminated the water.

Connections to Environmental Education

Students will use a range of resources, communication skills and technologies in addressing environmental questions. Students will learn about water as a resource and the impact of different human actions and technologies on the quality of water.

Files include:

1. Testing Water Quality: lesson Plan
2. Teacher Guide
3. Group Data Table and Checklist
4. Class Data and Mean Table
5. Test Results Interpretation Cards
6. Analysis