

Water in Local Environments

Objective: Describe the distribution and characteristics of water in local environments.

Introduction: The quality of our drinking water is tested all over Canada. Each community has a water treatment plant where employees conduct a variety of tests to ensure that our drinking water is clear and safe to drink. Contaminated water can pose a number of risks to our health, and it is important we ensure the safety of drinking water and obtain water testing that meets all regulator requirements and quality standards in Canada. One of the tests that are done at local water treatment plant is the pH test. A simple pH test determines the acidity of the water, with the goal of it being as neutral as possible. A neutral pH ensures that the water is safe to travel through pipes and to drink.

Curriculum Connections:

Students will identify major factors used in determining if water is potable, and describe and demonstrate tests water quality.

Supplies / Materials:

- Science Journal
- Water testing bags
- Straws
- Water samples
- Tablets

Hook: Take your students on a tour of your local water treatment plant and observe the process the water goes through as it is



SCIENCE FOCUS

Lesson Subject

Science 8

Topic

Water Quality

Location

Classroom

Length

50 mins



testing and prepared to be safe drinking water for your community.

Intro Activity: Teacher leads a discussion about water quality testing, why it is important that the city tests the quality of our water, what they are looking for, how they clean water, what they add to our water to make it safe to drink.

Main Activity:

Students will conduct a series of tests with samples of water to determine clarity, salinity, and hardness of the water and to test for the pH level as well as the amount of chlorine in their water sample. Students are encouraged to sample water from a variety of sources (bottled, tap, local bodies of water, etc).

Conclusion / Review: In your science journal write a small reflection based on your results. Did anything surprise you? Do you feel confident that the water you drink is safe? What does the city do to help ensure our drinking water is safe?

Homework: Test the water at home, and share your results in your science journal to share with the class.

Resources:

1. http://www.lifewater.ca/drill_manual/Section_16.htm