

# Water We Good For?

Grade

5

Topic: Water  
Grade: 5  
Duration: 30 - 45 minutes

*Students will learn how to take a water audit of their home and school.*

## **Curriculum Expectations**

- 5s54: Demonstrate an understanding of the importance of conservation of energy in relation to the wise use of renewable and non-renewable energy sources
- 5s55: Design and construct devices that use a form of energy to meet a specific need or want, and investigate how the energy is transferred to a specified output
- 5s62: Formulate questions about and identify needs and problems related to protection of the natural environment, and explore possible answers and solutions
- 5s63: plan investigations for some of these answers and solutions, identifying variables that need to be held constant to ensure a fair test and identifying criteria for assessing solutions
- 5s65: Compile data gathered through investigation in order to record and present results, using tally charts, tables, and labelled graphs produced by hand or with a computer
- 5s66: Communicate the procedures and results of investigations for specific purposes and to specific audiences, using media works, oral presentations, written notes and descriptions, drawings, and charts
- 5s70: Identify the forms of energy used in the home, school, and community and identify the energy source for each
- 5s72: Explain ways in which technological innovations affect our use of natural resources and increase or decrease our ability to conserve energy
- 5s75: Identify ways humans use energy, evaluate the economic and environmental costs of each, and describe ways to avoid wasting energy
- 5e1: Communicate ideas and information for a variety of purposes (e.g., to present and support a viewpoint) and to specific audiences
- 5e2: Use writing for various purposes and in a range of contexts, including school work
- 5m113: Design surveys, collect data, and record the results on given spreadsheets or tally charts
- 5m114: Display data on graphs (e.g., line graphs, bar graphs, pictographs, and circle graphs) by hand and by using computer applications
- 5m115: Analyse how data were collected and discuss the reasonableness of the results
- 5m120: Evaluate data presented on tables, charts, and graphs and use the information in discussion

## **Background Information**

Source	Volume used each time
Drinking water	1/4 litre
Flushing toilet	19 litres
Brushing teeth	7 litres
Dish washer	75 litres [divided by # of people in house who contributed to what is inside]
Dish washing by hand	87 litres [divide by # of people in house who contributed to what is inside]
Load of laundry	152 litres [divide by # of people in house who contributed to what is inside]
Shower/bath	19 litres per minute the water is running

## **Accountability**

School administrators, custodians, teachers, parents and students will be aware of where water can be saved by monitoring use in the school and at home. Students will know how to reduce water use in the school and at home.

**Teacher Notes**

1. Materials: water logged work sheet for entering one week of every time student uses water can also be used for entire family, too.
2. Record every time students use water in their house and at school.
3. Using the categories provide in the background information chart the amount of water used. Remind the students they need to use water to be healthy but not to change their water consumption. The goal is develop water-use awareness. They may need to change categories as they go through the week and should look up the rates in litres of those uses on the Internet.
4. Supplement the chart with journal entries.
5. Share results. What do they think about how much they use in one day, one week and as one family? To put things in perspective an Olympic size swimming pool is 228,000 litres.

**Home Extension**

At home, have student take a look at how water is being used. Look for areas where money can be saved and water consumption be reduced.

**Lesson Comments**

What did your students find?

Who did they tell?

What creative water plans did they come up with?