

Just One Drop

Grade

1

Topic: Water
Grade: 1
Duration: 30 – 45 minutes

Students will measure how many litres of water they use.

Curriculum Expectations

- 1s17: Compare the basic needs of humans with the needs of other living things
- 1s23: Identify ways in which individuals can maintain a healthy environment for themselves and for other living things
- 1s34: Ask questions about and identify needs and problems related to objects and materials, and explore possible answers and solutions
- 1s35: Plan investigations to answer some of these questions or solve some of these problems
- 1s36: Use appropriate vocabulary in describing their investigations, explorations, and observations
- 1s37: Record relevant observations, findings, and measurements, using written language, drawings, charts, and concrete materials
- 1s38: Communicate the procedures and results of investigations for specific purposes, using demonstrations, drawings, and oral and written descriptions
- 1s47: Investigate some common devices and systems that use energy and ways in which these can be controlled manually
- 1s48: Describe different uses of energy at home, at school, and in the community, and suggest ways in which energy can be conserved
- 1s55: Ask questions about and identify needs and problems related to energy production or use in the immediate environment, and explore possible answers and solutions
- 1s56: Plan investigations to answer some of these questions or solve some of these problems;
- 1s57: Use appropriate vocabulary in describing their investigations, explorations, and observations
- 1s58: Record relevant observations, findings, and measurements using written language, drawings, concrete materials, and charts
- 1s59: Communicate the procedures and results of investigations and explorations for specific purposes, using demonstrations, drawings, and oral and written descriptions
- 1e2: Organize information so that the writing conveys a clear message
- 1e42: Ask questions about their immediate environment and offer personal opinions
- 1m43: Represent the results of measurement activities using concrete materials and drawings

Background Information

Every Canadian uses about 300 litres of water a day. We use almost six times as much water as some countries. This is because, compared to other countries, water here is “cheap”. When water bills are cheap, people are not as careful about how they use water.

A family of four uses 1,200 litres in one day. For example, one day’s use might include:

Toilet Flushing - 540 L	Bathing - 360 L
Kitchen - 72 L	Drinking - 60 L
Laundry - 48 L	Cleaning - 36 L
Water grass - 36 L	Car washing - 12 L
Other - 36 L	

Accountability

School administrators, teachers and students will be aware of creative ways to reduce water use in the school. Students will become more aware of what needs to happen to save water and feel good about doing it in their home and at school.

Teacher Notes

1. Materials: one cup per student and one bucket with litre gradients on the side.
2. Have students, after recess, go to a water fountain and take a drink. Put a cup (or other container) under their mouths to collect what does not go in their mouths.
3. Measure the amount of individual waste and total up the amount of water the class wasted by drinking in a water fountain.
4. Discuss with the class how they feel now that they see what didn't get into them and how much is going straight into the sewers.
5. What other ways is water being wasted in the school and at home (hand washing, tooth brushing, long showers, big baths, etc.)?
6. Create the water waste challenge: How many different ways can the class reduce our water wastage? Create an action plan for the home and school to try out some of these ideas and see if they can reduce the waste.
7. Share best plans with the rest of the school to explain ways to save water.

Home Extension

Measure the amount of water used with a bowl when they brush their teeth. Measure how many litres are used in a bath, shower or to do the dishes. Report back to class how much that is and what creative solutions they will try to use at school and home.

Lesson Comments

What did your students find?

Who did they tell?

What creative solutions did they come up with?