



Activity Theme: Water Conservation

Grade 5

Activity Type: Relay Race

How Much Do We Use?

Activity Overview: This activity aims to educate and empower students to become active guardians of their water supply. This activity is designed to inform students about the amounts of water used for daily household routines.

Objectives:

- To learn how water is used during daily household tasks
- To describe methods of water conservation

Materials:

Predict the amounts:

- 3 mini pools (1 representing Lake Ontario, 2 for the teams)
- 2 litre pop bottles
- Laminated cards with amounts of bottles needed for activities

Setup: Place all of the pop bottles in the pool. Have the laminated cards ready to give to the students.



Takedown: Dump one mini pool full of bottles into the other, ensuring all of the pop bottles are in one pool. Place laminated cards back into the bin.

Sanitization: Spray the laminated cards with disinfectant between groups.

Reminders

*Before you start your presentation check with the teacher or chaperone that the entire group is present and ready to start. Remember that **doing** an experiment and **discovering** the answer is more powerful than watching and listening to someone, so try to involve as many children as possible.*

Part 1: Introduction

Say: "Welcome to How Much Do We Use! This activity will teach you about the amount of water that is used for common daily household tasks. Today we will be reminded to use water wisely by being water conservers at home, not water wasters."

Pick up one of the pop bottles.

Say: "This bottle contains 2 litres of water."

Ask: "Does anyone know where we get our water from?"

Answer: If they live in Mississauga, Brampton, or Bolton, it comes from Lake Ontario. If they live in certain parts of Caledon, their water may come from a well. Explain to them that the pool represents their water source.

Part 2: Activity

Say: "For this activity, you will be split into 2 teams and each team will be given a card **that tells you how many bottles to collect**. Each team will need to go to the mini pool (which represents the lake) to collect the number of bottles it takes to represent the amount of water needed for different activities during the day. You will carry the bottles over to your team's mini pool."

Divide the students into 2 teams. Explain that one team will be "Water Conservers." The other team will be the "Water Wasters." Remind the students that this is just for the purpose of the activity, and you know that when they go home, they will all be Water Conservers!

Each team should designate a "counter" who will count the bottles as they are placed in each team's mini pool. Give each team their card and allow the students to collect their water.

<u>Water Wasters</u>	<u>Water Conservers</u>
2 flushes with a regular toilet = take 6 bottles	2 flushes with a water-efficient toilet (uses less water with each flush) = take 5 bottles
5-minute shower with a water-wasting showerhead = take 12 bottles	5-minute shower with a water-saving showerhead = take 10 bottles
Brushing your teeth for 3 minutes with the tap running = take 1 bottle	Brushing your teeth for 3 minutes with the tap off and using a large glass full of water to rinse = do not take any bottles

When the students are done, Say: "Great job everyone! Now let us compare how much water each team used."

Ask: "Why do you think the Water Wasters used so much more water?"

Answer:

- Using a toilet that uses more water per flush
- Using a showerhead that uses more water per minute
- Brushed teeth with the tap running

Say: “The amounts of water you picked up are about half of what you would really use at home. That is a lot of water! How can you conserve water at home?”

Answer: Taking shorter showers, turning off the tap while brushing your teeth, using more water-efficient appliances, etc.

Say: “Can I have 3 volunteers go and collect one 2-litre bottle each? Did you all know that in some countries, people get less than 6 litres of water each day and this water is not even safe to drink. That is less than these 3 bottles! In Canada, the average person uses more than 170 of these bottles each day! So always remember how lucky we are to live somewhere that we can turn on the tap and have safe, clean, drinking water.”


Part 3: Wrap-up

Say: “Thank you for being such a great group! We hope you learned about some ways you can be Water Conservers at home! Remember that:

- Our water supply is not endless. Only one percent of the world’s water supply is available for drinking.
- Hot water for showers, laundry, and washing dishes uses energy. It is important for us to conserve energy as well!
- Water conservation is a good way of life. It is not hard to conserve water; it does not change our lives drastically. Think about water – and when you do – think about conserving it.”

Background Information

Water conservation is about wasting less water, using water more efficiently, and stopping the misuse of water. The average Canadian uses **329 litres** on a daily basis. The average in Peel Region is **291 Litres**. Our water supply is not endless. Only 1% of the world’s water supply is available for drinking, and sources are constantly being depleted. All living things require water. You pay for water and wastewater treatment. The less water you use the more money, water, and energy you save.



<u>Water Wasters</u>	<u>Water Conservers</u>
2 flushes with a regular toilet = 12 litres	2 flushes with a water-efficient toilet (uses less water with each flush) = ~10 litres
5-minute shower with a water-wasting showerhead = 48 litres	5-minute shower with a water-saving showerhead = 38 litres
Brushing your teeth for 3 minutes with the tap running = 5 litres	Brushing your teeth for 3 minutes with the tap off and using a large glass full of water to rinse = ½ litre

Vocabulary:

Conservation – the act of conserving means to prevent the waste of or loss of a resource (such as water)