Water Works

Students will calculate the amount of water they use and determine ways to reduce it.

Learning outcomes

By the end of this activity, students:

✓ will have determined and discussed their daily water use

✓ will have identified strategies and initiatives for reducing water use

✓ will have worked to reduce their daily water use

There is only ONE option for this challenge.

Please complete the challenge to determine how many litres (L) of water you can save.

Important

Please respect all school and governmental guidelines and restrictions surrounding COVID-19. Review the 2022 CEDC COVID-19 policy **here**.
This challenge does NOT require students to participate in an in-person event.

Water Works

Activity: Calculate how many litres of water you use

Students will calculate the amount of water they use and determine ways to reduce it.

Materials

Computers for research, Water Works worksheet (attached).

Proof to be submitted

Total number of litres saved (submitted through the online form), copy of completed worksheet (attached).

Activity

As a class, brainstorm different ways people use water (directly and indirectly). Lead a class discussion about water issues that exist in our society and why water is a precious resource.

Explain to students that they are going to calculate their water use for one day. Distribute the Water Works worksheet (attached) and instruct students to complete the first half (Day 1) of the worksheet. The following class period, ask them to share their total water use in groups or as a class. Calculate a class total and ask your students' to share their reactions to this number; then discuss water conservation strategies.

Have students track their water use for a second day, completing the second half (Day 2) of the Water Works worksheet. Have students share their new calculations with the class, and calculate a class total again.
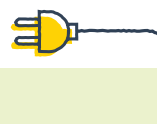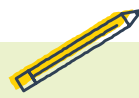
Calculate your class savings by **subtracting** your Day 2 total from your Day 1 total. Enter the answer in the online form as your proof for the challenge.

Activity extension option: Using the resources provided on the website, have students research how much water they use indirectly. Divide students into groups and give each group a different item (jeans, plastic, coffee, a hamburger, etc.). Ask students to calculate how much water is used to make their item. Share with us what you've learned about indirect water use at **@Energy_Lit** and **@CanGeoEdu**.

Teacher tip

World Water Day is Tuesday, March 22, 2022. Have your students share how much water is used to produce everyday items and materials by making a virtual presentation or posters for your school.

Water Works

Worksheet - Day 1

This worksheet is for offline tracking only. You must complete the online form in order to receive credit.

Average water consumption for daily functions

- Flushing toilet (low flush): 6 litres
- Brushing teeth (tap off): 1 litre
- Brushing teeth (tap on): 10 litres
- Cooking: 20 litres

- Hand washing dishes: 35 litres
- Flushing toilet (old flush): 13 litres
- Bath: 150 litres
- 1 load of laundry: 225 litres

- Dishwasher: 40 litres
- Showering (5 minutes): 100 litres

Use the following chart to track your water use.

DAY 1

A: Water function	B: Average water consumption (see table above)	C: Number of times used in one day	D: Total litres (B x C)

Total litres of water used on Day 1 : _____

Water Works

Worksheet - Day 2

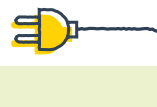**This worksheet is for offline tracking only. You must complete the online form in order to receive credit.**

DAY 2

A: Water function	B: Average water consumption (see table above)	C: Number of times used in one day	D: Total litres (B x C)

Total litres of water used on Day 2 : _____

Day 1 total - **Day 2 total** = **TOTAL WATER SAVED**

[ ] - [ ] = [ ]

Water Works

An example from previous years of how this challenge can be completed:

The Gillis Green Team used books to help learn about water as they completed this challenge. Students completed their sheets over March Break, and World Water Day was the date for when students' sheets were due.