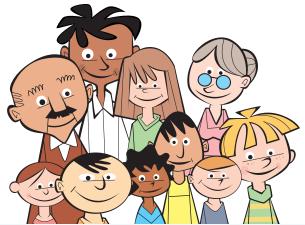
BECOMING AWARE OF THE VALUE OF WATER

LEVEL: ELEMENTARY SCHOOL AGE GROUP: STUDENTS AGES 8 AND 9



ACTIVITY SUMMARY

Students learn that it's important to conserve drinking water, that their actions have an effect on the environment, and to promote awareness among their peers about water conservation.

FINANCIAL AND COOPERATIVE SKILLS

- Understanding the effects of humans on the environment
- Using goods and services responsibly
- Prioritizing wants and needs



AGE GROUP



WHEN February and March



TIME REQUIRED 2 hours and 30 minutes

AREA OF LEARNING Environment and consumption

COMPETENCIES

DISCIPLINARY COMPETENCIES

Disciplines	Competencies	Learning progression
Mathematics	Mathematical reasoning	Interpreting data using bar graphsRepresenting data with bar graphs

AFFECTED DISCIPLINARY COMPETENCIES

Disciplines	Competencies
English	Write a variety of genres
Science and technology – Earth and space	Describe the effects of water quality on beings

NON-DISCIPLINARY COMPETENCIES

- Cooperation
- Putting creative thinking into practice



PREPARATION

STUDENTS LEARN ABOUT THE IMPORTANCE OF WASTEWATER TREATMENT AND USES OF DRINKING WATER.

TASK 1 LEARNING WHERE DRINKING WATER COMES FROM



TASK 1 OBJECTIVES

At the end of this task, students will learn that water must be treated for drinking, which entails costs.

Instructions

- Lead a discussion with students about drinking water.
- Visit the following sites together:

La magie de l'eau

TEACHER'S NOTES

Questions to discuss with students:

- Is all the water in the world suitable for drinking?
- Is saltwater (97.5% of the Earth's water) suitable for drinking?
- · Is it safe to drink rain water?
- Is lake and river water ok?
- · How do you get drinking water?

TASK 2 THE USES OF WATER



TEACHER'S NOTES

- Some uses for water at home: baths, showers, laundry, washing, drinking and cooking, toilet (discuss dual flush toilets).
- Examples of non-essential uses: washing the car, filling he pool, watering the lawn, etc.

TASK 2 OBJECTIVES

At the end of this task, students will understand that water is consumed for both basic and non-essential needs.

Instructions

- 1. Lead a brainstorm with students about the possible uses of water. Write ideas on large poster or on the board.
- 2. Form teams of 4 students.
- 3. Ask teams to make a list of the essential uses of water.
- 4. Go over it as a group and ask the teams to share their ideas.
- 5. Lead a discussion to get a class consensus about the essential uses of water.

EXECUTION

STUDENTS LEARN ABOUT HOW WATER IS USED EVERY DAY IN THE WORLD AND BECOME AWARE OF THE NECESSITY OF PRESERVING THIS NATURAL RESOURCE.

TASK 1 EVALUATING DAILY WATER USE





TEACHER'S NOTES

 Bring a 1 litre bottle of water to class so students can see what 1 litre looks like. For example, tell them that 10 litres represents 10 bottles.

TASK 1 OBJECTIVES

At the end of this task, students will be able to evaluate daily water use.

TASK 1 EVALUATING DAILY WATER USE (SUITE)

Instructions

- 1. Hand out **Daily Water Use** to students.
- 2. With students, observe how many litres are used for each action.
- 3. Ask students to fill out the water use sheet for one day.
- 4. Review it with students to establish how many litres they used in one day.

TASK 2 COMPARE AVERAGE USE PER PERSON





TASK 2 OBJECTIVES

At the end of this task, students will be able to compare water use in Quebec with other parts of the world.

Instructions

- Read Daily Water Use Per Person Around the World.
- 2. Ask students to illustrate the data with a bar graph, and add their personal consumption.
- 3. Lead a discussion about the differences between their use and that of people in other parts of the world.

TASK 3 FIND WAYS TO REDUCE WATER USE





TASK 3 OBJECTIVES

At the end of this task, students will be able adopt more responsible water use habits.

Instructions

- Make students aware that wasting and polluting water affect the environment.
- Ask students to calculate how many litres of water are used for each category on the sheet used in task 1, Daily Water Use Per Person Around the World.
- For each category, ask students what they can do to reduce their water use and avoid polluting water. Write their answers on the Reducing Water Use sheet.
- 4. With this information, ask students to make a poster promoting awareness among other students about wasting water.

TEACHER'S NOTES

 Wastewater is a source of pollution and is often directed to a treatment plant for purification and is then redirected back into the environment. However, some municipalities send wastewater directly back into the environment without treatment. As such, freshwater is becoming increasingly rare.

To learn more, go to Environment Canada's Wastewater Management page.

- 2. Suggested ways to reduce water use:
- Refrigerate water to avoid running the tap when getting a glass of cold water.
- Reduce time spent in the shower. A shower uses approximately 20 litres of water per minute.
- Take showers, not baths. A bath uses between 150 and 200 litres of water.
- Turn off the tap when you brush your teeth or wash your hands.
- Save rainwater to water your flowers or plants.
- Use a broom to clean your driveways, instead of a hose.
- Reduce your paper consumption because a lot of water is required to make paper.
- Avoid bottled water because plastic pollutes.
- Use non-toxic cleaning products.
- Don't pollute water: avoid throwing products that are harmful to the environment into the toilet or sink

Learn about more ways to save water:

- Environment Canada: Individual Action

 Conserving Water in the Home,
 Community and at Work
- Espace pour la vie: Reducing water consumption
- 3. Ask students to write at least 1 water use statistic and 1 way to save water on the poster. They should use a bar graph to compare Canadians' water consumption habits, or their own.



STUDENTS LEARN HOW THEIR ACTIONS AFFECT THE LIFE CYCLE OF DRINKING WATER.

TASK 1 THINKING ABOUT WATER USE



TEACHER'S NOTES

The aim of the task is to make students aware that their actions have an effect on the life cycle of drinking water.

TASK 1 OBJECTIVES

At the end of this task, students will be able to analyse how their water use affects the environment.

Instructions

- 1. Ask students to think about the consequences of their water use habits on the life cycle of drinking water. Hand out the **The Drinking Water Cycle** sheet to students and explain the task.
- 2. Have students write their answers.
- 3. Discuss as a group..
- 4. Ask students to use a different pencil and complete their answers.
- 5. Collect the sheets to evaluate their understanding of how their water use affects the environment.