

World Water Day March 22

Overview and Purpose

This lesson is designed to teach children about World Water Day and the specific right of children highlighted by this UN Day; their right to safe water to drink (CRC Article 24).

Background Information for Teachers

World Water Day (March 22)

unwater.org/worldwaterday/index.html

Environment Canada—Water

ec.gc.ca/eau-water/default.asp?lang=En&n=24F409D1-1

The Council of Canadians

canadians.org/water/issues/World_Water_Day/resources.html

Water for Life

un.org/waterforlifedecade/

Grades

4 – 8

Materials

Book entitled *One Well: The Story of Water on Earth* by Rochelle Strauss

1-litre bucket (jug/container)

Chart paper divided into three sections: Know, Want to Know, Learned (KWL)

Know, Want to Know, Learned worksheet (printable copy attached)

Action Plan worksheet (printable copy attached)

Water Conservation checklist (printable copy in K-3 lesson)

Art supplies including re-art supplies (recycled materials)

Writing paper, writing materials, felt

Computers

Video camera (optional)

Global Themes

- Interdependence
- Sustainable Action

Activity One, Part One

- Begin by introducing March 22nd as World Water Day; a UN Day highlighting the need for clean and safe water for all people, all over the world.
- Present the bucket to the class and ask the class how many buckets of water they think they use each day. Explain that they use the equivalent of 300 containers of water per person each day. Ask the students what they use the water for and how they could reduce their personal consumption.
- Compare Canadian water consumption to other countries. What surprises you? What challenges do you see, based on this data, to make clean, safe water accessible to all people?

Country	Daily Water Consumption per Person (litres)
USA	575 l
Mexico	366 l
China	86 l
Kenya	46 l
Cambodia	15 l

*Taken from United Nations' *Human Development Report 2006*

- As a class, use the Know/Want to Know/Learn strategy to brainstorm the topic of water, and record the information on chart paper in the Know and Want to Know columns.
- Read aloud from the book entitled *One Well: The Story of Water on Earth* by Rochelle Strauss. Have the students listen for new concepts and facts they have learned about water. Stop at the end of each page, discuss the concepts and record new things learned on the chart in the Learn column.
- Discuss the right of every child to safe drinking water (CRC Article 24). What issues arise when you learn that all children everywhere should have access to clean water as outlined in the Convention?

Activity One, Part Two

- Divide the students into groups of 4. Distribute the Action Plan handout to each student. Review the components of the action plan.
- In groups, have the students create action plans to promote a greater awareness of water-related issues. The action plan could be based on the Want to Know section of the KWL chart.
- Ask students to put the plan into action. How will their plan of action be sustainable?

Discussion

Is the only shortage of water in developing countries? Are there some areas in developing countries where the right to water is being met? Explore water issues in Canada. Are there communities in Canada where the right to clean water is not being met? How do we advocate for the right to clean water in our own country?

Why do we have to think of our community, our country, and the global village when we make decisions about the use of water? What would happen if we only considered one perspective?

Extensions

Have students bring the water conservation checklist home. Ask them to check off all the ways they are able to save water with their families to celebrate World Water Day.

Research what companies are doing to conserve water. Write a paragraph summarizing the information.

Measure rainfall and compare it to rainfall in other countries. Graph the results.

Have the students graph daily water consumption per capita by country. Analyze the data.

Does the amount of rainfall in a country affect how the people in the country use water?

How is per capita water consumption calculated? What if the water is being used to develop materials for another country?

Purchase a rain barrel for your school and use the water for watering the school garden. Many municipal governments offer rain barrels for purchase. Or better yet, have the students design, create and evaluate the effectiveness of the rain barrels they have created. More information can be found here: harvesth2o.com/rainbarrel101.shtml.

Additional Resources

In the Water for Life kids' section, you will find different resources (games, videos, tales, etc.) that help kids to learn more about water, and inspire them and those around them to take action.

un.org/waterforlifedecade/kids.html

Water Canada is a web-based water magazine with current short news articles about water. Articles can be searched by National, Western Canada, Northern Canada, Ontario, Quebec, Atlantic Region and International.

watercanada.net/

Activities for the book *One Well* are available here: kidscanpress.com/Assets/Books/w_OneWell_1854/PDFs/OneWell_1854_teaching.pdf.

World Water Day Action Plan Worksheet

In small groups, create an action plan that promotes greater awareness of water-related issues.

- Action plan ideas include but are not limited to:
- public service announcement to be read during the morning announcements
 - posters
 - skits to be shared with younger classes
 - information to be put in the school newsletter
 - letters to government
 - cartoons
 - videos
 - 3-D displays
 - other ideas.

Brainstorm Your Action Plan

Your action plan must include but is not limited to:














- Facts learned in this lesson
- Actions we can take to become “Well Aware” found on pages 26 to 29 of the book One Well.

The action plan must also answer at least one of the following questions, or a question your group develops:


















- How does Canada compare to other countries in terms of water use?
- What is Canada’s role in the use of water?
- What is the impact of Canada’s use of water on other countries, plants, and animals?
- What can be done to protect fresh water?
- What can be done to equally distribute fresh water?

Water Conservation Checklist













Celebrate World Water Day by saving as many buckets of water as you can at home with these simple tips:

-  Keep a pitcher of water in the refrigerator rather than running tap water until it is cool enough to drink.
-  Designate one glass for your drinking water each day, or refill a water bottle. This will cut down on the number of glasses to wash.
-  When washing dishes by hand with two sinks, partially fill one with soapy water and the other with rinse water. If you have one sink, gather washed dishes in a dish rack and rinse them with a spray device or in a pan full of hot water.
-  Use a spatula to remove food from dishes instead of pre-rinsing them in water before placing them in the dishwasher.
-  Only wash full loads in the dishwasher, and always use the energy saver or shortest cycle.
-  Soak pots and pans instead of letting the water run while you scrape them clean.
-  Wash fruits and vegetables in a pan of water. Reuse it to water your house plants.
-  Steam vegetables instead of boiling them in water to use less water and conserve more nutrients. When boiling vegetables, use only enough water to cover them, and use a tight-fitting lid.
-  Defrost food in the refrigerator for water efficiency and food safety instead of using running water to thaw food.
-  Dispose of garbage properly especially cooking fat and greases, household cleaners, paints, solvents, pesticides and other chemicals. If these substances go down the sink drain or are flushed down the toilet, they can harm the environment and piping system.
-  Install an aerator attachment on your sink faucets and reduce water use by 25 to 50%.
-  Wash only full loads of laundry, and use the shortest cycle possible.
-  Use the "suds-saver" feature if your washing machine has it. If your washer has an adjustable water-level indicator, set the dial to use only as much water as is really necessary.

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-  Use only cleaning products that will not harm the environment. Buy phosphate-free biodegradable detergents.
-  Check faucets, toilets, pipes, taps, hoses and the fittings of your washing machine for leaks, and repair them immediately.
-  Always turn your taps off tightly but gently so they don't drip.
-  Use a water-saving device in your toilet—a large yogurt container or plastic bottle filled with water or sand—to displace water in your tank and save water every time you flush.
-  If possible, replace your old toilet with a new, efficient 6-litre ultra low-flush toilet and save 50 to 70% per flush.
-  Only flush the toilet when necessary.
-  Take a short five-minute shower whenever possible. If your shower is equipped with a shut-off valve, turn off the water while you are soaping and shampooing, then rinse off quickly.
-  Fill the tub only one-quarter full when bathing.
-  Replace your showerhead with a new low-flow model with a flow rate of 9.5 litres per minute.
-  Turn the water off when washing, brushing your teeth or shaving. Fill a glass with water for mouth rinsing while brushing your teeth.
-  Rinse your razor by filling the bottom of the sink with only a few centimetres of warm water.
-  Wash your cars less frequently.
-  When washing your car, use a bucket and sponge, and then rinse it quickly using a trigger nozzle on your hose.
-  Go to a carwash that recycles water.
-  Clean your driveway or sidewalk with a broom instead of a hose.
-  When cleaning out fish tanks, give the nutrient-rich water to your plants.
-  Set sprinklers to water the lawn, not sidewalks and driveways.

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-  Put a large container out to collect rainwater off your roof. Use this water as an alternative to turning on the hose for newly transplanted material, window boxes, flower pots and container gardens. Rainwater is actually better for your plants as it does not contain any chlorine and is at an ambient temperature.
-  Soak your lawn weekly to strengthen grass roots and promote a healthy lawn. Use a sprinkler that delivers large flat droplets.
-  When you cut your lawn, leave it at least six centimetres long to provide shade for the roots. This will allow the soil to remain moist and require less watering.
-  Water your lawn in the early morning for best results. Two to three centimetres of rain or water once a week is plenty. Place empty tuna cans in various locations on your lawn while using the sprinkler to judge the amount of water being used.
-  Consider replacing your grass with drought-resistant plants and ground cover. You'll save water and time spent on upkeep. Ask your local gardener about drought-resistant plants that thrive in your area.
-  For hanging baskets, planters and pots, place ice cubes under the moss or dirt to give your plants a cool drink of water and help eliminate water overflow.
-  If you accidentally drop ice cubes when filling your glass from the freezer, drop them in a house plant instead.
-  Fill your pool 15 to 20 cm from the top to cut down on water loss from splashing. A swimming pool cover will prevent evaporation, keep debris out and keep heat in.
-  Avoid recreational water toys that require a constant flow of water. When kids want to cool off in the summer, use the sprinkler in an area where your lawn needs it the most.
-  Have young children bathe together.
-  Wash your pets outdoors in an area of your lawn that needs water.
-  Use rechargeable alkaline batteries instead of throwing away so many batteries. The mercury in old batteries will eventually leak out and poison the water it runs into.

Adapted from *Wise Use of Water*, Environment Canada, WaterUseItWisely.com