



AREA BEST LINKED TO

City of Kawartha Lakes, County of Haliburton and District Municipality of Muskoka



OBJECTIVES

- Learn to be creative in conserving water
- Raise awareness about the amount of water used by the average toilet
- Understand the importance of water conservation



CURRICULUM LINKS

GRADE FOUR:

Arts:

- D1.1: Create two- and three-dimensional works of art that express feelings and ideas inspired by their interests and experiences
- D1.3: Use elements of design in art works to communicate ideas, messages, and understandings

Science:

- 1.1: Analyse the positive and negative impacts of human interactions with natural habitats and communities (e.g., human dependence on natural materials), taking different perspectives into account (e.g., the perspectives of a housing developer, a family in need of housing, an ecologist)

GRADE SIX:

Arts:

- D1.1: Create two-dimensional, three-dimensional, and multimedia art works that explore feelings, ideas, and issues from a variety of points of view



MATERIALS

- Any 1-liter plastic pop, juice or milk bottle with screw cap
- Sand or gravel
- You can use two 1-liter bottles or even a 2-liter bottle depending on toilet tank size



BACKGROUND INFORMATION

This activity looks at how we can conserve water when we flush our toilets. Toilets make up for the highest amount of water used in a home in any given day including laundry day. The average person flushes a toilet 8-10 times a day. Older larger toilets can flush 13 litres of water per flush; slightly newer toilets can flush 6 litres of water per flush. The average number of people in a household is four creating 36- 40 flushes a day per family. In terms of water conservation most people are not doing a very good job at it. This activity is a simple way to improve the efficiency of almost any toilet. We can reuse simple materials that are found in recycle bins to help conserve water on a daily basis. Modern, high efficiency toilets can use as little as 1.6 litres of water per flush. But until toilets are replaced, try this simple activity under your parent's supervision to conserve water when you flush your toilets at home.



TOILET TANK CONVERSION

- **Step 1:** take the plastic bottle remove any paper or plastic on outside of bottle.
- **Step 2:** add sand or gravel to the bottle and fill about $\frac{1}{4}$ of the bottle.
- **Step 3:** fill the rest of bottle with water and replace lid (make sure to rinse off any excess dirt on outside of bottle).
- **Step 4:** with your parents help remove lid to toilet tank and carefully add bottle to side of tank free of any mechanisms (drop it in slowly to not spill any water).
- **Step 5:** replace lid!

You are now done! Your toilet will save 1-2 litres of water for every flush! This can convert your 6-liter flushing toilet into a 4-liter flushing toilet!

This simple activity will not only save up to 80 litres of water a day (for large toilets that can take 2 litre bottles) but will save the amount of times the septic tank has to be emptied a year, saving your parents money on utilities and septic services.

Congratulations not only did you reuse materials that would have been recycled but also you are doing your part to conserve water use in the bathroom.



RESOURCES/REFERENCES

- <http://www.toiletabcs.com/toilet-water-conservation.html>
- <http://www.wikihow.com/Convert-Any-Toilet-to-a-Low-Flush-Toilet>



FEEDBACK

We appreciate your feedback! Please let us know...

- Did this activity continue the learning your students engaged in at the Water Festival?
- What curriculum requirements did this activity satisfy?
- Was the activity easy to facilitate to your class?
- Did students have fun and learn something new about water?
- Please send photos of your class using these activities!

Please send comments and photos to: iheaven@outtolearn.ca