ACTIVITY DESCRIPTION:

This activity teaches water conservation and compares the water use habits (amounts and purposes) of pioneers to Canadians today. It encourages students to evaluate the impacts of their everyday actions on the natural environment.

MATERIALS

2 sinks in a counter model

2 large plastic jugs for measuring

4 plastic dishes

2 dish cloths

Measured bags

Make sure you have all items before the students arrive!

BEGIN THE ACTIVITY

What will I be doing?

You will be explaining how to conserve water while washing dishes and comparing how people washed dishes many years ago verses today.

Right now we're going to be looking at something that people do at home every day - washing the dishes. People did not always have running water to wash their dishes. Before running water was piped into homes, people had to haul all of their water from lakes, rivers, streams, town wells or pump it by hand from the ground and then carry it to where they needed to use it. They often did dishes in a big basin. If they needed warm water, they had to heat it over a fire or on a wood stove.

How many people here have helped with doing the dishes by hand before?
Does anybody know how much water the average York Region resident uses in one day? About 270 litres. In Europe people live like we do but each person only uses 140L of water each day. Why are we wasting so much water? Let's measure how much water we would use for doing the dishes. One of these faucets has an aerator and one does not. We're going to compare the 2 faucets for water use.

Get five student volunteers: one to time, one for each faucet (turning on and off) and one to hold each flow measure bag. Make sure the students are holding the bag VERY tightly. Have both students turn the faucets on at exactly the same time that the timer begins. Run the water for exactly five seconds. The bags are calibrated in L/min (litres per minute).
Which tap used the most water?
How much water did we save by using the aerator device? An aerator does what it sounds like, it adds air to the water to make it come out of the faucet with more pressure. It seems like there is more water than there actually is.

What can we do?

What can we do to make our faucets water watchers instead of water wasters? Use low flow aerators on them. Aerators on your faucet can reduce your water use by up to 50 per cent! If you do the dishes by hand, you should have an aerator on your faucet at home. Does anybody here have a dishwasher at home? Did you know that a dishwasher uses 35-45L per cycle? If a dishwasher uses the same amount of water every time we use it, how can we save water?

When using a dishwasher should we run it when there are only a few dishes if it uses the same amount of water when it's totally full of dishes? NO, we should only run it when it's completely full of dishes.

Why do we want to save water? All water that is piped to your home has to be treated to make it clean enough to drink even if we're not drinking it, that's hard to do and it costs a lot of money. Plus, we have to use chemicals to make the water clean again and that is a waste of resources. All water eventually ends up back out in the natural environment. Are humans the only ones who need water? No, plants and all other animals also need water to live.

All water is re-used. The water you use to brush your teeth has been used many, many times before. That's right; it's the same water that has been in clouds and rain drops, in rivers and in the bathtub. We all need water and we need to keep it clean for all living creatures. Water conservation is a big step towards that goal!

WHAT HAVE WE LEARNED?

Not to take water for granted and not to waste water! It can be used for more important things!

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