PERSONAL WATER METER

Grade Level: All ages

Summary: Students will keep track of their water usage by using a 'Water Meter'.

Time Frame: Up to one week

Materials: Personal Water Meter template, index cards, 2 colors of yarn or ribbon (red and white is preferred), scissors

Preparation: Print out enough 'Water Meters' for each student to have their own.

Procedure:

1. Have students list ways in which they use water. Ask them to estimate how much water they think they use each day.

2. Construct a Personal Water Meter using the template below. Tell each student they will keep track of how much water they use each day for a week (or other predetermined time period). Remind students they need water to remain healthy and should not change their water consumption for the purpose of this activity. The goal is to develop an awareness of their water use.

3. Every time students use water, they should slide the yarn or ribbon to indicate the number of gallons used. The junction of the two colors indicates the current amount. Each morning, students should record the previous days total and return the ribbon to the beginning. For water uses that involve the entire family, students can divide the amount of water by the number of family members (i.e. dishwasher or laundry, etc). Recording can happen in a journal, create a daily bar graph, etc. as long as it is consistent throughout the week.

4. Have students share their results with the rest of the class. What do they think about the amount of water they used each day? How does it compare with their estimation at the beginning of the week? Are there ways in which the students can do a better job conserving water (i.e. taking shorter showers, turning off the water when brushing teeth, etc)?

A Step Further: This water meter brings into consideration direct water usage, but does not include the water required to grow their food, make their clothes, produce electricity, etc. What would happen to their water meter if indirect uses were used?

	Personal Water Meter																				
Liters	10	20	30	40	50	60	70	80	90	100	10	20	30	40	50	60	70	80	90	200	10
Gallons																					
Canonio		10					2	20			30				40			50			
Flushir Brushir Dishwa Dish w	Drinking Water1 cup is about 1/16 gallon or 1/4 liter Flushing toiletabout 5 gallons or 19 liters Brushing Teeth (w/ water running)about 2 gallons or 8 liters Dishwasherabout 20 gallons or 76 liters Dish washing by hand																				
(water running)about 30 gallons or 113 liters (sink with stopper)about 10 gallons or 38 liters Load of laundryabout 40 gallons or 151 liters Shower/Bathabout 5 gallons or 19 liters per minute water is running																					

Making a Personal Water Meter:

Cut out the Water Meter template and paste on an index card.

Cut 2 pieces of different colored ribbon or yarn, each about $\frac{1}{2}$ longer than the length of the water meter ruler

Overlap the ends of the ribbon or yarn and tie, tape, or glue the end of one to the other.

Cut a slot at each end of the paper water meter ruler and insert the ribbon or yarn into one slot. Thread the other end through the other slot and tie, glue, or tape the two loose ends together. The yarn or ribbon should be tight, but be able to slide smoothly through the slots.

This activity was adapted from: *Project WET Curriculum and Activity Guide*.