



Theme: Water (Grades K-2)

Pre-Visit Activity #1

How much water do I use?

Overview:

In this activity students will gain a better understanding of water usage in their homes. They will keep track of water used and find ways to reduce water usage.

Objectives:

- Students will learn about different bodies of water.
- Students will learn how to interpret charts.
- Students will practice math skills and learn how to apply volume measurement for a recorded activity.

Materials:

- Pictures of rain falling
- Pictures of different bodies of water
- Gallon jug of water
- Water Usage Chart (attachment)
- Copies of "Water Usage Chart" (1 per student)

Introduction Discussion:

Begin a discussion with the students based on the following questions:

1. Where does water come from? (Show picture of rain falling.)
2. Where can we see large amounts of water on the earth? Show students pictures or a map of different bodies of water. Point out the different bodies of water.
3. In what ways do we use water inside of the home?
4. In what ways do we use water outside of the home?
5. What happens to the water after it is used inside of the home?
6. What happens to the water after it is used outside of the home?
7. Do you think we have plenty of water in the world to meet our needs?
8. Are we the only animals on Earth who use water? What other animals need water to survive? What else needs water to survive?

Activity:

1. Show the students a gallon jug or container of water (equal to a gallon) to give them a visual aid. Keep it out during the activity so they can use it as a reference.
2. Explain to the students that they are going to be doing an experiment to see how much water they use in a day.
3. Tell the students that they will be using the gallon to measure their water usage.
4. Explain to the students that they will be filling out a chart to record how much water they think they use in a day.
5. Give each student a copy of the "Water Usage Chart."
6. Show them how to fill out one block of the chart.
7. Have the students estimate on the chart how much water they think they typically use (in gallons) to perform their usual daily tasks.
8. After filling out their charts, tell the students how much water they actually use for those tasks and have them put this in their charts.

Average Amount of Water Used:

Brushing Teeth: 2 – 4 gallons

Taking a Bath: 35 – 40 gallons

Taking a Shower: 15 – 25 gallons

Washing Hands: 2 – 3 gallons each time

Using the Washing Machine: 50 gallons

Washing Dishes in the Sink: 9 – 20 gallons

Washing Dishes in the Dishwasher: 20 gallons

Flushing the Toilet: 2 – 7 gallons each time

Washing the Car: 20 – 30 gallons

9. Have students compare their charts to the actual amounts.

Discussion:

Do students use more or less water than they estimated? In which activities did the class use the most water? In which areas did the class use more water than what they thought? Which of the activities do they perform several times a day? Why is it important to save water? How can the students help to save water?

Water-Saving Suggestions:

1. Turn off the faucet while brushing your teeth.
2. When trying to reach the right temperature in the bath, do not let the water run until the water temperature is right. Rather, begin filling your bathtub up from the moment the faucet is on and make sure not to fill the bath up too much.

3. While in the shower, do two things at once: put shampoo on your hair and wash your body.
4. When washing your hands sing the song, "Twinkle, Twinkle Little Star" which is equal to the amount of time you should be using the water to wash your hands.
5. When washing your dishes in the sink, do not keep the faucet running; only use the water to rinse.
6. When washing the car, have your parents bring the car to a "Water Smart" car wash.

Suggested Reading:

1. ***Brother Eagle, Sister Sky: A Message from Chief Seattle*** illustrated by Susan Jeffers. A story about Native American beliefs and how each generation deserves to breathe fresh air, drink pure water, and enjoy all the beauty that the earth offers.
2. ***Common Ground: The Water, Earth, and Air We Share*** by Molly Garrett Bang. Explains how everyone in the world depends on each of us individually to protect resources and maintain respect for the environment.
3. ***I Am Water*** by Jean Marzollo. A first book about water in its different forms and uses.
4. ***Magic School Bus: At the Waterworks*** by Joanna Cole. Mrs. Frizzle, the science teacher, drives the magical school bus into a cloud where the children shrink to the size of water droplets and follow the course of the water through the city's waterworks system.
5. ***Magic School Bus: Se Salpica Toda*** by Joanna Cole. In Spanish, experience the earth's water cycle first hand as Mrs. Frizzle's class rises into the air, forms a rain cloud, and drizzles down to earth just like rain.
6. ***Magic School Bus: Wet All Over*** by Joanna Cole. Experience the earth's water cycle first hand as Mrs. Frizzle's class rises into the air, forms a rain cloud, and drizzles down to earth just like rain.
7. ***Splish, Splash, Splosh*** by Mick Manning and Brita Granström. Join the adventures of a young boy and his dog and ride the waves, float on rain-filled clouds, shoot down fast-flowing rivers and splash through sewers until you get where all water ends...and begins.
8. ***Water*** by Frank Asch. Aimed at very young children, this book artfully describes water in its many forms, its uses, and its role in our lives.
9. ***Water (My First Nature Book)*** by Andrienne Soutter-Perrot, Etienne Delessert (Illustrator). Explains water in its different forms and why every living thing needs water.
10. ***Water, Water Everywhere (Discovery Readers)*** by Melvin Berger, Gilda Berger, Bobbi Tull (Illustrator). A book about the water cycle, the distribution of water, and wastewater treatment.



Water Usage Chart

Name _____

What I Do To Use Water:	How Much Water I Think I Use (Estimate):	How Much Water I Really Use:
Brushing My Teeth		
Taking a Bath		
Taking a Shower		
Washing My Hands		
Using the Washing Machine		
Washing Dishes in the Sink		
Washing Dishes in the Dishwasher		
Flushing the Toilet		
Washing the Car		