



Water, Water Everywhere

ACTIVITY 1: How Do We Use Water?

ACTIVITY 2: Is there Enough Water for Everyone?

BACKGROUND INFORMATION

Water is absolutely essential for life. All living things require water for survival. Fresh water is one of our most precious resources, and, because of its importance in our lives, we must learn to respect water. Therefore, the practice of water conservation is an important concept to teach young children.

The first step in teaching young children how to conserve water is helping them become aware of where water is used and how much water is used in daily living.

This lesson will help children become aware of the many different ways we use water in our daily lives. Water is used for food production, power generation, transportation, recreation, heating, cooling, fire fighting, cooking, and bathing. At school and at home, water is used both indoors and outdoors. Cleaning, cooking, drinking, and toilet water account for most of the water used indoors. Outdoors we use water for watering lawns and gardens, and

washing cars. Much more water is used at school than in the home because of the size of the location and the number of people in the school, but water can be conserved in both places.

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GRADE LEVEL **1-2**

At the end of this lesson, the students shall be able to do the following:

- Describe where they see water;
- Describe how and when they use water;
- Describe how water is used other than directly by people (crops, soccer fields, etc)
- Describe that water is a limited resource and identify simple water saving techniques.

Sunshine State Standards:

SCIENCE:

How Living Things Interact with their Environment

Standard 2:

The student understands the consequences of using limited natural resources. (SC.G.2.1)

SOCIAL STUDIES:

People, Places, and Environments Standard 2:

The student understands the interactions of people and the physical environment. (SS.B.2.2)

Sources

Log onto www.FloridaSprings.org and visit the "Protecting Springs/ How You Can Help?" section of the site. Also see, [Educational Resources/ Links](#) to learn about sources such as the local Water Management District, Florida Project WET and others offering excellent resources for water conservation and education.

ACTIVITY 1: How Do We Use Water?

Have the students play the role of scientists who are studying water.

Explain that it's their jobs to understand how water is used so that they can help conserve or save water.

PROCEDURE

Classroom Activity 1

A. Place the pictures of the water drops in a location convenient for adding information dictated by the students.

B. Begin by informing students that they are scientists studying water at school, home and in their communities. During the exercise introduce how we use water for recreation, drinking and other things.

1. Start by asking students to identify places outdoors where they see water and record their answers on **Water Drop #1**. Ask students to talk about the difference between the Atlantic Ocean or the Gulf of Mexico and freshwater like springs, lakes and rivers. Student responses will vary from comments like the ocean has waves and sharks to one is salty and one is not, and so on.

2. Ask students where they use water at school and write down what they say on **Water Drop #2**.

3. Ask the students where they use water at home and write down what they say on **Water Drop #3**.

4. Ask students to think about other ways that water is used away from the home or school (farming, businesses, factories, etc.) and write their answers on **Water Drop #4**. You may need to remind/prompt students with examples. Do crops and livestock need water? Do factories need water to make products? Do water parks function without water?



5. Compare the home, school and "other" list.

6. Exploring sources of water. After this exercise, ask the students to discuss where they think water for drinking and bathing comes from. Probe with students to find out the sources of our drinking water – the ocean, a river, lake, rain, etc. Many students will identify faucets and hoses as the source of water. Explain that water comes from nature (the ground, lakes, rivers, etc.) and is brought into the school and the house in pipes so we don't have to travel to water sources to get it.

7. After asking students where water comes from, ask them where it goes to after we use it. Explain to them that "the drain" or the "the gutter" are like the faucet and the hose. They help us move water back to the sources.

Home Activity

A. Give each student a copy of the list of items from **Water Drop #2: How We Use Water at Home** attached to a copy of the Letter to Parents. Explain to the students that they are to complete the list at home in the same manner they completed the list at school. The list is to be returned on the day specified.

B. After students return lists add new items to **Water Drop #2**. Move on to Activity 2.

GRADE LEVEL

1-2

TIME: 30 Minutes

MATERIALS:

4 Pieces of poster board or 12x24" paper
Markers

ADVANCE PREPARATION

A. On four separate sheets of 12" x 24" paper, draw a large Water Drop and label as follows:

Water Drop #1 –

Where we see water

Water Drop #2 –

How we use water at home

Water Drop #3 –

How we use water in school

Water Drop #4 –

Other places water is used.

Place the water drops on the chalk or bulletin board or other convenient location.

B. Prepare a worksheet entitled **Ways I use Water at Home**. Provide instructions for parents to work with their child to identify and list every possible use for water indoors and outdoors at home.



ACTIVITY 1: Is there Enough Water for Everyone?

Classroom Activity 2

Ask if any of the students do anything special at home to conserve or save water. Some students' families may actively conserve water by using rain barrels outside, having rules about turning off water when brushing teeth, or taking shorter showers, etc. Probe to see if any students recognize that their parents or families are actively using water saving techniques at home.

Explain again that we do not have an unlimited supply of fresh water. Also, introduce the idea that in many parts of the world, people have much less water than we do.

1) Now explain the next activity. Tell students that because our fresh water supply is limited, all fresh water is now delivered to the school and our homes by truck and we are only allowed to have a certain amount of water. The bucket will represent the truck or the daily delivery of water.

2) Give 10 students each a 16 oz cup. Have them line up at the "truck" to receive their daily delivery of water. This represents the only water that they will get for the day to drink and to use for bathing, cooking and washing clothes. (You will have already put 100 ounces of water in the bucket).

3) Distribute the daily ration of water by filling the cups nearly full. Depending on how high you fill the glasses only about 7 students should receive water before it is empty. Discuss what happened. The class ran out of water. Three people or three families will suffer because there was not enough water. Probe with students and talk about ways that they can be sure that everyone gets water from the next day's water delivery. Keep track

of ideas on a board or add them to a previous list if you have discussed water saving techniques.

4) Have students pour water back into the bucket and then distribute the 10 oz. cups to the same students or new students.

5) Tell students that it's the next day and they are now conserving or using less water. Talk about some of the water saving techniques that have been discussed: taking short showers; watering the lawn less; turning off the water when brushing teeth, etc.

6) Repeat the truck delivery steps above. All students with the 10 oz cups will receive water and there will even be water left over. The smaller cups represent the students' efforts to save water. Congratulate them and let them know they've helped protect water and the environment.

Extensions

- Have students view the "**Anatomy of Water: The Journey of Water**" interactive presentation at www.FloridaSprings.org to introduce water cycle and human use concepts.

- Have students draw pictures of different ways that water is used; give groups of students categories like "Water for Fun," "Water for Bathing," "Water for Animals," "Water for Plants" and have them come up with the ideas for their drawings. Have students create lists of ways they can reduce the amount of water used at home and at school. This can be turned into a bulletin board presentation in the school.

- Water Connections. Have students correctly connect/link pictures of common water outlets (faucet, dishwasher, sprinkler,

GRADE LEVEL

1-2

TIME: 30 Minutes

MATERIALS:

1 Bucket

Qty 10 - 16 oz plastic cups

Qty 10 - 10 oz plastic cups

(Choice of cups sizes may be different based on availability)

Paper towels for spills!

ADVANCE PREPARATION

Follow-Up From Activity 1

A. After the students return their list from home add to the Water Drop lists any new ways that water is used at home or for other purposes.

B. Explain that, while every time we turn on the faucet water comes out, we do not have an unlimited supply of water. Discuss in broad terms the concept of drought and how for many years Florida did not receive enough rain, which is where most of our drinking water comes from.

shower head, fire hose, etc.) with water uses (showering / soap, dishes, lawn, glass of ice, fire, etc.).

Assessment

- Tell students that they will only have three jugs of water to use for the whole day. One jug has water from the drinking fountain, one jug has water from a nearby lake and one cup has water from a mud puddle. Ask them which jug they would use for drinking, which they would use for bathing and which they would use to water their plants. Ask them to explain their use of each type of water.