

# BEING A HYDROLOGIST

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## OBJECTIVES

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

1. Tell the different ways water is used at school and at home.
2. Give a verbal definition of the new terms hydrologist and hydrology.

**SUBJECTS:** English, Social Studies, and Fine Arts

**TIME:** 30 minutes over 2 days

## BACKGROUND INFORMATION

Water is absolutely essential for life as we know it. All living things require water for survival. Water is one of our most precious resources and, because of its importance in our lives, we must learn to respect water for what it is. 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 to help 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 everyday. 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.

Have each child play the role of a hydrologist. Hydrology has become an important science because of the need to understand our water system on earth and its usefulness in helping to solve our water problems before we feel the effects of a water shortage. Children can become familiar with the role of the hydrologist and how he/she finds solutions to our water problems.

## MATERIALS

- \*Pencils
- \*3 pieces of 12"x24" paper
- \*Marker

## **TERMS**

**Hydrologist:** A person that applies scientific knowledge and mathematical principles to solve water-related problems in society such as problems of quantity, quality, and availability.

**Hydrology:** The study of water, its properties, distribution on Earth, and effects on the Earth's environment.

## **ADVANCE PREPARATION**


- A. On three separate sheets of 12" x 24" paper, draw a large water drop and label as follows:  
Water drop #1 - What we know about how we use water;  
Water drop #2 - What we would like to know about how we use water;  
Water drop #3 - What we learned about how we use water. Place them in a convenient location for writing.
- B. (📖 P.15) Ask the students to turn to page 15 of their story books and look at the activity page entitled "WAYS WE USE WATER AT SCHOOL". Give out pencils to half the students. Divide the class into pairs.
- C. Copy List entitled – "WAYS I USE WATER AT HOME" and letter to parents for all students. Staple together.

## **PROCEDURE**

### **I. Setting the stage**

- A. Place the pictures of the water drops in a location convenient for adding information provided by the students.
- B. Begin by asking students where they use water at school and writing down what they say on Water drop #1. Ask the students where they use water at home and write down what they say on Water drop #2. Compare the school list to the home list. Then ask students if there is anything they would like to know about how we use water. Write what they say on Water drop #3.  
(English TEKS K.16B, 1.18F, 2.14D) (Social Studies TEKS K.6A,B, 1.6B, 2.7B, 2.8A) (TAAS Writing-Classificatory)

## II. Activity

- A. Pair students into groups asking each group (or student) to take their book with them. Use the page in the storybook entitled "WAYS WE USE WATER AT SCHOOL" and a pencil for recording ( P.15). Begin by explaining to students that they are all going to be hydrologists. Explain what hydrologists do and what hydrology is. Tour the school recording all the ways water is used at school. Return to the classroom, discuss findings and add any new ways that were discovered. Add to water drop #1.
- B. Give each student a copy of the list "WAYS I 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.

## III. Follow-Up

- A. On the day the students return List #2, discuss the different ways the students used water at home and add any new information to water drop #2. At this time discuss whether any of the things they would like to know on water drop #3 could be answered.

## IV. Extensions

- A. Have students draw pictures of the different ways water is used to raise animals, produce a garden, and cook a meal. **(Fine Arts TEKS K.2A,B,C, 1.2A,B,C, 2.2B)**.
- B. Have students keep a list of the different ways they use water from the time they get up in the morning until the time they go to bed. Ask the students to sequence morning to evening activities and then write them on the chalkboard. Highlight those activities that use water. Have students discuss how life would be different if they did not have water to do these things.  
**(English TEKS K.9C, 1.12C, 2.9C) (TAAS Reading-Sequential Order-Objective 2)**

## RESOURCES

"The Water Sourcebook: A Series of Classroom Activities for Grades K-2 Produced for Georgia Water Wise Council," Education Research and In-Service Center, University of North Alabama.

ACTIVITY SHEET  
(Storybook P.15)

## **BEING A HYDROLOGIST**

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List #1-WAYS WE USE WATER AT SCHOOL

	Tally how many?
Total?	
Drinking fountains	
Toilets	
Sinks	
Dishwashers	
Ice cube makers	
Water heaters	
Washing machines	
Sprinkler system	
Outside fountains	
Outside water faucets	
Others	

**ACTIVITY SHEET**  
(Copy Page for Students)

## **BEING A HYDROLOGIST**

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List #2-WAYS I USE WATER AT HOME

	Tally how many	How many in all?
Sinks		
Toilets		
Bathtubs/showers		
Water heaters		
Dishwashers		
Ice cube makers		
Washing machines		
Steam iron		
Humidifiers		
Outside water faucets		
Pools		



Dear Parent,

We are studying the different ways in which we use water both at school and at home. Your child will be completing a checklist of the different ways he/she uses water around the home. Please assist your child in completing the attached form and help him/her to discover any other ways that may not be listed by adding them to the list. In order for us to complete our study your child must return the list by \_\_\_\_\_.

Thank you for your assistance in our study of water conservation.

Sincerely,