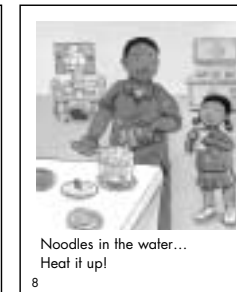
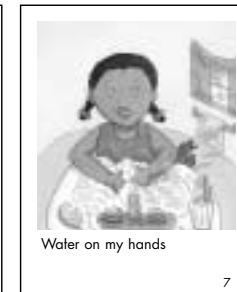
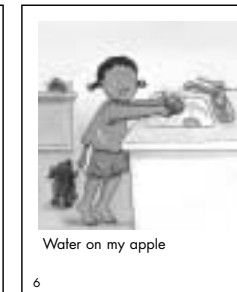
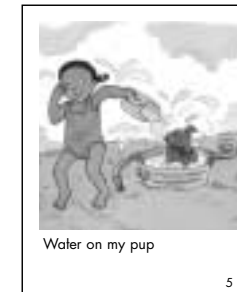
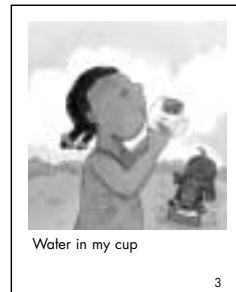
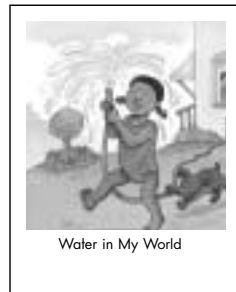


# Water in My World



## CONTEXT



We live in a world bathed in water. Between 60 to 70 percent of the human body is made up of water. Every day in the United States, on average, each person uses about 74 gallons of water. (This figure is based on indoor consumption in a single-family home and assumes that no water-conserving fixtures have been installed.) This includes everything from drinking and cooking to dishwashing—but does not reflect the water used to create the energy that powers

the house or to produce the food and other items used within it!

Despite its abundance, water is a precious resource—particularly fresh water. Only 1 percent of the earth's water supply exists as fresh, unfrozen water. Another 2 percent is frozen. The rest is salt water. Conserving water and using it wisely ensures that water is available for our daily needs as well as for our regions' needs and also saves money.

## SCIENCE EXPLORATION

### Key Questions

What does water feel like? What does it taste like? Does it have a smell? Tell students they will be exploring ways in which we use water.

### Materials

- Water-drop shapes cut from construction paper—make them about the size of your hand, so that they are large enough to contain a sentence or two, and make lots of them (Enlist the aid of your students in cutting out drops in advance of the activity.)
- Bucket, or a cutout construction-paper bucket

### Procedure

1. Discuss water usage with your students. Ask them how they used water this morning. Write their suggestions on the drop cutouts. Have each child put the drop containing his or her suggestion into the bucket or attach it with tape to the construction-paper bucket.
2. Encourage students to look around the room. How is water used in the classroom? Do they see any water? (Perhaps the classroom has a sink, a water fountain, or an aquarium or terrarium.) Do any of the art supplies require the addition of water to work? Add these observations to the bucket, too.
3. Encourage students to continue looking for ways water is used throughout the day or week. Add these observations to the bucket.

### Discussion

Water is used for more than drinking! It is used for washing, cleaning, and cooking. Our dependence on water extends outward from our home, too. It is used to make energy; produce food, medicine, and other goods; clean and maintain buses and other vehicles; extract resources used to make goods; and much more.

## CROSS-CURRICULAR EXTENSIONS

### Art

Involve students in mixing powdered tempera with water to make paint. Have them use the paint to create illustrations showing how we use water in our daily lives. Watercolor painting also can be used to demonstrate how we use water in creating artwork.

### Math and Cooking

Together, make fruit drinks out of water and concentrate, such as orange juice, apple juice, and lemonade. Use the terms for various measurements so that children grow accustomed to the everyday role of science and its terms in our lives. Have a taste test, then invite students to draw a picture of a glass filled with their favorite. Use the illustrations to create a bar graph showing the results.

### Math and Science

Americans use about 74 gallons of water per person every day. How much is 74 gallons? If possible, enlist the help of students and parent and guardian volunteers to collect 74 empty one-gallon plastic milk and juice jugs over the course of a few weeks. You don't need to fill them with water to demonstrate "how much" 74 gallons is—simply line them up. The jugs can be used for other projects when you are done with this demonstration (they make useful planters), or can be put into your local recycling program.

Involve your students in figuring out how much water is used in appliances and daily life and use the information to create an illustrated book. What household devices use the most water? (For example, up to 40 percent of a household's use of water may be due to toilet flushing!) Children can cut out pictures of appliances and fixtures from magazines to illustrate this book. You can find statistics about water consumption online at sites such as <http://www.awwa.org/pressroom/statswp5.htm>. The Web site [http://www.ficus.usf.edu/docs/water\\_calculator/calculator.htm](http://www.ficus.usf.edu/docs/water_calculator/calculator.htm) features a water-usage calculator and questionnaire that you may wish to modify for your classroom use. The Web site [http://abe.www.ecn.purdue.edu/~agenhtml/agen521/epadir/grndwtr/water\\_usage.html](http://abe.www.ecn.purdue.edu/~agenhtml/agen521/epadir/grndwtr/water_usage.html) features a pie chart breaking down use of water in the average home.

### Music and Movement

Share activity-based songs about water in our everyday lives with your students, such as "Brush Your Teeth" (found in *The Book of Kids' Songs* by Nancy Cassidy), "The Itsy-Bitsy Spider," and "Rain Song" (sung to the tune of "If You're Happy and You Know It") found on the Web site <http://www.childfun.com/themes/weather.shtml>. Encourage children to use hand and body motions to act out the songs.

### Science

Ask your students, "How many glasses of water do you think we need to drink every day?" Write their guesses on the board. See whose guess comes the closest to the average of six to eight 8-ounce glasses. Have a student volunteer use such a glass to measure eight