

## Lesson 29

# The Value of Water

How much water is available for human consumption?  
How much is used during the day?  
Are there ways that water can be conserved?

**GOAL** To understand that water is a finite resource to be conserved.

**OBJECTIVES** Students will:

- ✓ conduct a demonstration showing the amount of water available
- ✓ examine how they use their water by “paying” for it
- ✓ think of ways to conserve water

**MATERIALS** copies of water dollars, paper, scissors, pencils

### CORE CURRICULUM CONTENT STANDARDS

- Math 1(1,2), 2(2), 4(1), 5(1)
- Science 3(4), 7(7), 8(2,3,6)
- Social Studies 11(1,4,5), 12(3), 13(2,4)

**VOCABULARY** finite, conservation, consumption

### PROCEDURES

1. Now that students are aware of how much water is available to them, have them think of how their day would be without water. What could they not do?
2. Explain that starting today and for 2 days they are going to have to examine how they use their water by paying for it.
3. Students will receive a chart with water use categories, amount in liters that is used, and the amount of water dollars required.
4. They will receive five sheets of water dollars that they will use. The “play money” will be used each time a student uses water at school or at home during this 2-day period. The dollar amount represents the amount of liters. They will receive 400 water liter dollars.
5. Have students cut out water dollars and write his or her name on the dollars.
6. They may make payments by placing dollars in a container labeled “Water Bank”.
7. Instruct students to keep track by recording how they spent their dollars and mark it in a log.
8. The next day, students discuss how they spent their water dollars. Questions to consider include: Did they have enough water for the two days? Did they need to conserve? How do they think they did?

### EXTENSIONS

1. Read the following statement: “Farmington River Watershed provides 100% of drinking water to 600,000 people in the Greater Hartford area.” How would they think or react differently knowing that how they protect or take care of their water and land could affect the water they

drink? Have students discuss in groups and present to class.

2. Is water a renewable or non-renewable resource? Discuss terms.

## RESOURCES

Denver Water Department, Colorado River Water Conservation District, Denver, Colorado

Farmington River Watershed Association, August 2003, *State of the Farmington River Watershed Report*, Farmington River Watershed Association, Inc.

Haskin, Kathleen M, *The Ways of the Watersheds: An Educators Guide to the Environmental and Cultural Dynamics of New York City's Water Supplies*, 1995, Claryville, NY: The Frost Valley YMCA

## GLOSSARY

**conservation** - preservation or restoration from loss, damage, or neglect

**consumption** - the utilization of economic goods or natural resources in the satisfaction of wants

**finite** - having bounds; limited

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### Lesson 3 – student sheet

## Water Use Chart

Use Category	Amount (liters)	Assumptions	Water dollars required	Potential savings	Water saving suggestions
Drinking	3	Daily requirement	3	None	
Water fountain	1	Each trip	1	None	
Toilet	20	Each flush	20	5	Tank displacement
Brushing teeth	40	Water on 2 minutes	40	35	Turn water off while brushing
Washing hands	20	Water on 1 minute	20	15	Turn off water while soaping hands
Shower	100	Water on 5 minutes	100	40	Take shorter shower/ turn off while soaping
Washing clothes	120	1 load	120	20	Wash full loads
Washing dishes	100	1 load, automatic dishwasher	100	17	Wash full loads, or Soap first then rinse
Washing car	100	Water on 5 minutes	100	60	Turn off water when not washing, wash less frequently
Lawn watering	250	Full lawn	250	150	Use native plants to reduce water needs

\$1 WATER DOLLAR	\$1 WATER DOLLAR	\$1 WATER DOLLAR	\$1 WATER DOLLAR	\$1 WATER DOLLAR	\$1 WATER DOLLAR
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