

Lesson 27

Water Survey

How much water do I use?
How much does my family use?

GOAL To understand how much water is used in their family

OBJECTIVES Students will:

- ✓ calculate how much water they used for a week
- ✓ calculate how much each member of their family uses
- ✓ calculate a total family water usage

MATERIALS water survey, pencil, calculator

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 water usage

PROCEDURES

1. Begin by asking students how well they are able to conserve water. Have students bring home a survey to determine how much water they use.
2. Have students return the following day to tally water usage for the total class.

RESOURCES

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

water usage - the act of using water

How much water do I use?

1 What type of home do you have? _____ house _____ apartment _____ other

How many people live in your home?

If you have a dishwasher, how full do you usually load and run it?

_____ full _____ 1/2 full _____ less than 1/2

If you have a washer, how full do you load it?

_____ full _____ 1/2 full _____ less than 1/2

How many of each of the following do you have at home?

____ sinks _____ showers _____ bathtubs _____ toilets _____ outside spigots

How many showers are taken in your home in one week? _____ how many baths? _____

How many minutes is your family's average shower? _____

How many times is the toilet flushed every day? _____

6. Bathroom Use

Shower 5gal/min x _____ min/day x _____ days/week = _____

Toilet 5 gal (1.6 gal) x _____ flushed /day x _____ days/week = _____

Brushing Teeth 2 gal/min x _____ min/day x _____ days/week = _____

Shaving 2 gal/min x _____ min/day x _____ days/week = _____

Bath tub 36 gal x _____ min/day x _____ days/week = _____

Subtotal _____

7. Kitchen

Wash dishes 2 gal/min x _____ min/day x _____ days/week = _____

Dishwasher(full cycle=16 gal/short cycle 7 gal) x _____ washes/week _____

8. Other

Laundry (full cycle = 60 gal/short = 27 gal) x washes/week = _____

Total water used in your home = _____

Water used per person = _____