

Unit 2: CONSERVATION-SLOW THE FLOW

ACTIVITY 2



DO IT YOURSELF: SCHOOL WATER AUDIT

ACTIVITY DESCRIPTION

Individual water use can add up to a lot of water—now think of an entire school’s use! In this activity, students complete an audit of their school’s water use. Included, please find a questionnaire to help direct their inquiry. Contact your facilities manager or principal ahead of time so they can be prepared to help answer questions.

my time Discussion: 45 minutes; Homework: 20 minutes

my materials “Do It Yourself: School Water Audit” in the Conservation Student Guide

- essential questions**
- Do you know where your school uses the most water daily?
 - How many gallons does your school use each day/month/year?
 - What are the ways in which your school can reduce its water use?



lifeskills Participate in this fascinating study to see how much water a school uses and where. As a microcosm of a town, the students’ school can provide an inside view of the systems and responsibilities involved in meeting water demands. Here, students get a chance to be investigative reporters!

- directions**
- Obtain your school facilities manager’s name and contact information for the students. Perhaps invite him/her to your class to be part of organizing the audit and gathering information.
 - Review the audit questionnaire with your students.
 - Assign each student a question to research and answer.
 - After a few days, review what the students discovered and what their recommendations to the school for water use reduction would be.

CONTACT INFORMATION

Facilities Manager: _____

Custodians: _____

Principal: _____

School Cooks: _____

Unit 2: CONSERVATION-SLOW THE FLOW



ABOUT THE UNIT

Q Water is a valuable and limited resource in Colorado. Learn how much water is used doing every day activities. Share information about water management with your students and the ways they can participate in reducing water use both at home and at school.



objectives

- Increase awareness of our region’s semi-arid environment and the demands it places on our water resources.
- Understand the importance of water conservation.
- Engage in critical thinking about water use at home and at school and review how conservation reduces water consumption.

teacher preparation

- Review all information provided in both the Teacher Guide and the Student Guide.
- Make necessary copies or overheads of the Conservation Student Guide.
- Make necessary copies or overhead of “How Many Gallons?” in the Conservation Teacher Guide.
- Review the “Mizu Family Water Reduction Plan” calculations.
- Identify key personnel needed to help in “Do It Yourself: School Water Audit.”



Unit 2: CONSERVATION- SLOW THE FLOW

ACTIVITY 1



MIZU FAMILY: REDUCE YOUR USE!

ACTIVITY DESCRIPTION

Mike and Molly Mizu want new cell phones. To consider that request, their parents have challenged them to reduce the family’s monthly expenses. Mike and Molly decide to save money by reducing the monthly water bill. The students will work to calculate how much water the Mizus can save each month by implementing water conservation tips.



my time 45 minutes

my materials “Mizu Family: Reduce Your Use!” in the Conservation Student Guide
“Mizu Family: Water Reduction Plan” in the Conservation Student Guide

essential questions

- Why is it important to conserve water?
- How much water gets consumed in a given day?

lifeskills Students are introduced to water conservation and water billing concepts. This activity encourages students to use creative solutions to help achieve their goals and is a great way to increase awareness of real-life household management.

directions

- Review activity concept, including Mike and Molly’s cell phone dilemma and their water use reduction plan. Hand out “How Many Gallons?” chart or put it up on the overhead to review how much water basic household activities actually use.
- Brainstorm potential conservation efforts that Mike and Molly could use to reduce their family’s water bill. How much water do your students think the Mizus could save?
- Walk students through the first couple of water saving calculations in Molly and Mike’s Water Reduction Plan.
- Allow students to work on water calculations individually.
- Review correct answers with students.

Unit 2: CONSERVATION- SLOW THE FLOW

ACTIVITY 1



HOW MANY GALLONS?

Mike and Molly are amazed at how much water they use everyday. They discover it is pretty easy to find ways to reduce water use. Brainstorm with your students how to cut back water use.

AREA	ACTION	USAGE
BATHROOM	Running water	1 to 5 gallons/minute
	Leaky faucet	up to 2,700 gallons/year
	Toilet	1 to 5 gallons/flush
	Shower	2 to 5 gallons/minute
	Bathtub half full	up to 50 gallons
KITCHEN	Running water	1 to 5 gallons/minute
	Leaky faucet	up to 2,700 gallons/year
	Dishwasher	15 gallons/load
LAUNDRY	Washing machine	up to 50 gallons/load
OUTSIDE	Running hose/ water lawn	5 to 10 gallons/minute



answer key

MIZU FAMILY WATER ANALYSIS

AREA	ACTION	REDUCTION	SAVINGS
Showers/Bath	25 gallons/day	15 gallons/day	10 gallons/day
Toilet	56 gallons/day	16 gallons/day	40 gallons/day
Laundry	50 gallons/day	27 gallons/day	23 gallons/day
Dishwasher	30 gallons/day	15 gallons/day	15 gallons/day
Faucet	20 gallons/day	5 gallons/day	15 gallons/day
Leaks	10 gallons/day	0 gallons/day	10 gallons/day
TOTAL	191 gallons/day	78 gallons/day	113 gallons/day