

## Post-Visit Lesson: *Be Water Smart!*



### Lesson Overview

Conduct this post-visit activity after the *Discover Our Water* classroom presentation to allow students to calculate their daily personal water use and think about other ways they use water directly and indirectly. Students also determine ways to be Water Smart.

### Arizona Department of Education Academic Standards

Please refer to the Arizona Department of Education Academic Standards file for the ADE standards addressed by this lesson.

### Learning Outcomes

Students will be able to:

- ➔ keep track of their personal daily water use for a day.
- ➔ use math skills to calculate total water use and estimate savings.
- ➔ describe ways they can personally conserve water.
- ➔ describe ways their families can conserve water.

### Materials

- ➔ Part One: *My Daily Water Use* - one per student

**Procedure** (estimated time: one day for water use tracking; one hour for the lesson)

#### Part One: Daily Water Use

1. Discuss how students personally use water. Ask them if they ever consider how much water it really takes to do these things.
  
2. Give each student a copy of *My Daily Water Use*. Assign students to keep track of their personal water use for one full day and do the following:
  - Record the number of times per day for each of the water activities listed in the table.
  - Check off the option for how they do that activity.
  - Multiply the number of times per day by the appropriate number of gallons per use to calculate their daily water use for each activity.
  - Add the totals for each activity to determine the grand total of their personal daily water use

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2. As a class or in small groups, have students discuss the variations in total water use. Ask them to determine how they can be Water Smart and use less water. Even if they are already Water Smart, are there other ways they can further reduce their use of water?

### **Part Two: More Ways We Use Water**

1. Discuss other ways that student and their families use water every day. Are there Water Smart ways that would decrease their water use for these activities? Discussion can include:

- **Kitchen Sink:** *Do you leave the water running while you're washing dishes? Or, do you turn off the faucet while washing dishes?* Water Smart method: Use a drain stopper and fill the sink with soapy water, then turn of the faucet while scrubbing dishes. Turn the faucet on to rinse. You can save up to 25 gallons when you wash dishes by hand!
- **Dishwasher:** *Do you run the dishwasher with only a few dishes in it? Or, do you run the dishwasher only when full?* Water Smart method: Most dishwashers use the same amount of water regardless of how many dishes are in it! So, choose to make the most of your water and run the dishwasher when full!
- **Washing Machine:** *Do you run the washing machine with only a few items of clothing in it? Or, do you run the washing machine only when full?* Water Smart method: Running the washing machine with a full load is the most efficient way to wash your clothes.

2. How else do students use water? Discussion should include: drinking, cooking, swimming, pets, house and yard plants, etc. Are there ways to be Water Smart when doing some of these activities? Discussion can include using a water bottle, desert landscaping, giving leftover water to a pet or plant, etc.

3. Discuss how water is used to manufacture and grow many things students use in their everyday lives without even thinking about it. Discussion should include: food, electronics, clothing, etc.

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*(continued)*

4. Ask students to take action and make a difference in their water use. Ask them to commit to three things they can do to be Water Smart. Check back in with them after a few days, a week, a month, etc. to help them keep their commitment to reducing their water use. Encourage them to involve their whole family for even more savings!

### Extension Ideas

- Calculate the total daily water use of the class. Then, calculate the total possible water savings, if everyone in the class used Water Smart methods. Finally, calculate possible water savings for for the total number of students at your school to demonstrate the potential savings if each student became more Water Smart.
- Have students conduct interviews at home to find out how their families use water. Students can then be “water consultants” and suggest how their family members can be Water Smart.






# My Daily Water Use

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## What's your personal water use per day?


First, record the number of times per day for each activity in the table below. Then, check off the option for how you do each activity. Next, multiply the number of times per day by the appropriate number of gallons per use to calculate your daily water use for each activity, and record this in the table.

Activity	Times per Day	Approximate Amount of Water per Use (gallons)	Total Amount of Water Used per Day for this Activity (gallons)
Brushing teeth 		<input type="checkbox"/> Water running = 2+ gallons <input type="checkbox"/> Water off = .25 gallons	
Showering 		<input type="checkbox"/> 10+ minutes = 20+ gallons <input type="checkbox"/> 5 minutes = 10 gallons	
Bathing 		<input type="checkbox"/> Full tub = 36 gallons <input type="checkbox"/> Half-full tub = 18 gallons	
Washing hands 		<input type="checkbox"/> Water running = 2 gallons <input type="checkbox"/> Water off = .5 gallons	
Flushing toilet 		<input type="checkbox"/> Older toilet = 5 gallons <input type="checkbox"/> Low-flow = 1.1 gallons	

Add the numbers in the last column to find out your total personal water use for an entire day: \_\_\_\_\_ gallons/day


## How Water Smart are you?

On the table above, circle the Water Smart method for each activity. Do you already use those methods in your daily life? Let's see how Water Smart you are by counting the circled methods that already have check marks:



**4-5 circled and checked**  
You are a graduate of the School of Water Smartness! You know all about water conservation!

**2-3 circled and checked**  
You're on your way to becoming Water Smart. Try adding one or two more Water Smart actions to get to the next level!



**0-1 circled and checked**  
Time to start saving water! It's easy to become Water Smart, with just a little practice every day!

**Bonus Question:**  
How much water could you save if you choose more Water Smart methods?  
\_\_\_\_\_ gallons/day

