

For more fun and conservation-related experiments, please visit www.plumbingexcellence.org



6.

EXPERIMENT 4: Water Usage

Challenge: Discover the uses of water in our daily lives and why water is important. Think in terms of reducing water waste!

Use the graphs to discuss which activities use the most/least amounts of water, and which activities seem to be the most wasteful uses of water.



QUESTIONS:	 How much water did you use for everyday functions?
	 How much does that add up to for you, your family, your neighborhood, your city, your state, your country, your world?
	My goodness that's a lot of water!
	• What if you were able to save one gallon of water each day?
	What if everyone in your family did the same? How much water

could we save if the whole world cut back one gallon a day? (Hint: 295.7 million in US; 6.4 billion global)

YOUR WATER LOG

You would probably be amazed at the amount of water you actually use. Keep track of your water use over the course of a week. It could help you find a few ways you can save water. Water use away from home can account for about twenty percent of your weekly use—so keep track of those uses as well.

	SUN	MON	TUES	WED	THURS	FRI	SAT	AVERAGE	ACTUAL	TOTAL	
Bathroom								·			
Toilet flushes								x 5 gallons			
Showers								x 25 gallons			
Baths								x 35 gallons			
Brush teeth								x 2 gallons			
Shave								x 4 gallons			
Kitchen											
Cooking								x 5 gallons			
Dishes by hand								x 6 gallons			
Dishwasher								x 10 gallons			
Garbage disposal								x 5 gallons			
Utility Room											
Wash clothes								x 60 gallons			
Outdoors											
Wash car								x 100 gallons			
Water lawn								x 9 gallons per min			
Other											
TOTAL DAILY											



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Did you know?

A person living in Sub-Saharan Africa uses 2.5 to 5.5 gallons of water a day. But, on average, each person in the US uses 80 to 100 gallons of water a day. **Source: U.S Geological Survey (USGA). www.ga.water.usgs.gov** Estimates vary, but each person uses about 80-100 gallons of water per day. Are you surprised that the largest use of household water is to flush the toilet, and after that, to take showers and baths? That is why, in these days of water conservation, we are starting to see toilets and showers that use less water than before. Many local governments now have laws that specify that water faucets, toilets and showers only allow a certain amount of water flow per minute. In fact, if you look really close at the head of a faucet, you might see something like "1.5 gpm," which means that the faucet head will allow water to flow at a maximum of 1.5 gallons per minute.



EXPERIMENT 4: Water Usage

Instructor's Guide

ALIGNMENT WITH ILLINOIS STATE BOARD OF EDUCATION GOALS

State Goal 11: Section A: 2a, 2b, 2c, 2d, 2e and 2f Section B: 2f Section B: 2a

State Goal 13:



WHAT'S HAPPENING?

Students become aware of just how much water they use, and how quickly it adds up.

WHAT COULD GO WRONG?

Students may need reminding and/or incentives to fill out their Water Logs.

LINKS

www.watercan.com Water calculator tool: http://www.tampagov.net/dept_water/con servation_education/Customers/Water_use _calculator.asp

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WHAT ELSE CAN KIDS LEARN?

Try and dry up

Ask students to identify activities in their daily lives that do NOT require the use of water in one way or another. Is there such a thing? For instance, technically all energy produced by the body to perform any function essentially requires water.

Thirst for knowledge

Have students search online for the average water usage in various countries. A person in the US uses an average of 80-100 gallons a day. Ask the students what they would you be willing to give up if they lived in a country that used only 30 gallons a day? 20 gallons a day?

YOUR FEEDBACK

Were the instructions clear? Did the class stay interested? Email us at feedback@Get2KnowH2O.org and let us know what you think. We would like to share your suggestions with other teachers and give you credit for your great ideas!