

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ CLASS: \_\_\_\_\_



# Personal Water Eco-Audit Activity Sheet

Water is vital to the survival of everything on the planet. It might seem like the Earth has abundant water resources, but, in fact, less than one percent is available for human use. While human populations and the demand for freshwater resources are increasing, the freshwater supply remains constant. In this lesson, you have an opportunity to take a look at your water-consumption patterns and evaluate those patterns in a larger context—the context of a global understanding. (To download the full lesson plan and dozens of free lessons like this one visit [ecorise.org/freemium](http://ecorise.org/freemium).)

## Materials Needed:

- Calculator
- Sheet protector, clipboard, notebook or other way to keep activity sheet available and dry (optional)

## Guidelines:

- Record all of your water uses in a 24-hour period.
- Use the data chart to help you pay attention to *all* the water you use.
- Also be sure to think about the activities that are part of the running of your household as a whole. For example, you may not run the dishwasher or the washing machine or water the yard yourself, but those are activities that create a healthy home for you. Divide shared devices like the dishwasher, sprinklers, garden hose, etc. by the number of people in your home to determine the amount of water to attribute to YOUR use. If you are unsure how often the washing machine, dishwasher, garden hose, sprinklers and the like are used, ask your family members.
- After recording the data for your one-day period, add up the total use for each category. Then add the category subtotals together to get the amount of water you used in a day. Multiply this by 7 to get the total for the week and by 52 to get the total for the year.
- Divide each category subtotal by the total used to get the percent for each category.



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# Personal Water Eco-Audit Worksheet

Record all your water use in a consistent unit of measure (liters or gallons) below. See the charts on the next page for reference.

Personal Water Eco-Audit Data Collection							
Location & Fixture Type	Number of Uses per Day	Length of Use (if applicable)	Estimated Gallons/Liters per Use	Total Amount per Day (Liters or Gallons)	Total Amount per Week (day amount x 7 days)	Total Amount per Year (day amount x 52 weeks)	Percent of Total
Public Faucet							
Home Faucet							
Toilet							
Urinal							
Shower/Bath							
Clothes Washing Machine							
Dishwasher							
Sprinkler							
Garden hose							
Other							

## Questions:

1. How do your numbers compare with the national averages? What factors might account for the differences?
2. What was the majority of your consumed water used for? Why do you think this was the majority?
3. How much could you effectively reduce your personal water use?



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## Water Usage Reference Chart

For your reference, this chart lists common household appliances and fixtures and the amount of water they typically require. Note SI (metric) units and U.S. standard units are both provided. The gray columns represent typical (often older) appliances, and the non-gray columns represent high-efficiency (often newer) appliances.

Appliance	If the appliance is NOT high efficiency		If the appliance IS high efficiency (H.E.)	
	SI Units	U.S. Standard Units	SI Units	U.S. Standard Units
Home Faucet	11 L/min.	3 gal./min.	8 L/min.	2 gal./min.
Toilet, made: Before 1980 1980–1994 1994–present	19 L/flush 13 L/flush 6 L/flush	5 gal./flush 3.5 gal./flush 1.6 gal./flush	6 L/flush	1.6 gal./flush
Urinal	3.8 L/flush	1.0 gal./flush	1.9 L	0.5 gal./flush
Shower/bath (water running)	20.8 L/min.	5.5 gal./min	9.5 L/min.	2.5 gal./min.
Clothes Washing Machine: Front loader Top loader	110 L/load 170 L/load	29 gal./load 45 gal./load	57 L/load 114 L/load	15 gal./load 30 gal./load
Dishwasher: Before 1994 After 1994	45 L/load 21 L/load	12 gal./load 5.5 gal./load	11 L	3 gal
Residential Sprinklers	19 L/min./ sprinkler head	5 gal./min. sprinkler head	1.5 L/hr. (drip system)	0.4 gal./hr. (drip system)
Garden hose	19 L/min.	5 gal./min.	7.6 L/min.	2 gal./min.

**Sources:**

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