

Water Usage

Sources: <http://www.get2knowh2o.org/student/Exp4.pdf>
<http://water.usgs.gov/edu/wateruse.html>

As most of northwest Ohio experienced the water crisis in early August, it's become very important for all of us to become aware of our water usage. Please use this activity in the classroom to help students at any grade level learn about everyday water usage and its value as a natural resource. Discover the uses of water in our daily lives and why water is important.

WHAT YOU NEED:

- Daily water usage log
- Graph and chart paper
- Pencils
- Markers
- Erasers
- Rulers

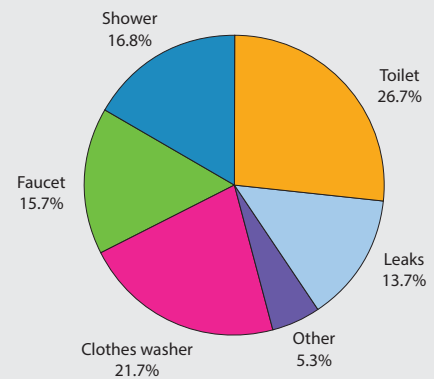
STEP BY STEP:

1. Read the list of ways you use water on "Your Water Log" (see next page). Add other ways you use water.
2. Track your use of water using the Water Log. Estimate the volume of water used for each activity.
3. After 2-3 days, add up the total amount of water used for each category, by student and by class.
4. Construct graphs to represent your usage data. Consider using pictures of milk cartons or soda bottles in your graphs to help visualize the volume.
5. Discuss the ways in which we use water every day, and how dependent we are on this resource.
6. 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 TO ASK:

- 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?
- 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)

How Much Water Do We Use?



Source: American Water Works Association Research Foundation, "Residential End Uses of Water," 1999

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 | | | | | | | | | | |
| Washing hands | | | | | | | | | | |
| Toilet flushes | | | | | | | | x 5 gallons | | |
| Showers | | | | | | | | x 25 gallons | | |
| Baths | | | | | | | | x 35 gallons | | |
| Brush teeth | | | | | | | | x 2 gallons | | |
| Shave | | | | | | | | x 4 gallons | | |
| Kitchen | | | | | | | | | | |
| Drinking | | | | | | | | | | |
| 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 | | |
| Other | | | | | | | | | | |
| TOTAL DAILY | | | | | | | | | | |

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.!