

Personal Water Use Graph

Humans have water use choices. We now use more water than ever before in our homes, our factories and on our farms. Some of this water can be cleaned and recycled for immediate reuse. Some of it cannot. The world's population continues to grow and we need more and more water for all these people. We can make decisions to use water respectfully and carefully while conserving water as a part of daily life.

Part I Instructions

On a sheet of white paper, create a bar graph of the Daily Use of Water in the U. S.

Use	Water (gallons)
Bathing	18.5
Brushing teeth	2.6
Toilet flushing	23.8
Cooking and drinking	2.6
Cleaning	5.3
Water Lawn	25.0
Total number of Gallons used	

Use your data to construct an attractive, multi-colored bar graph. The bar graph dimensions must be at least 8 1/2 by 11 inches:

1. Label the X axis – Water Use
2. Label the Y axis – Amount of Water (gallons); use an appropriate scale (1s, 2s, 5s, 10s)
3. Use a different color for each use and label the bar.
4. Give the graph a title.

Part II Instructions

Complete your Personal Water Use Chart:

1. Complete the Personal Water Use Chart.
2. Determine the number of times you did each activity by adding the number from Sunday through Saturday. Record your calculations on the chart.
3. Calculate the total weekly water use by multiplying the total number of times by the estimated gallons.
4. Find the average weekly use by dividing by 7. Write this data in the margin.
5. Lastly, determine the total number of gallons used for the week, by adding all the data in the last columns.

After completing your Personal Water Use Chart, you will create a bar graph of the following:

- Bathing (combine washing face or hands, taking a shower, taking a bath & shaving)
- Brushing Teeth
- Toilet
- Cooking & drinking (getting a drink; cooking a meal)
- Cleaning (washing dishes by hand; running a dishwasher; doing a load of laundry)
- Water Lawn

Using the same procedure as in Part I, graph your personal water usage. Compare it to the bar graph you created of the average water usage of Americans.

Analysis Questions

Answer the following questions in complete sentence on notebook paper.

1. Which category comprised the greatest percentage of your water use? Was this surprising to you?
2. How does my water consumption compare to the national average?
3. Many people in rural areas in developing countries must still carry water from its source to their homes. If you were to carry the amount of water you used on an average day, and a gallon of water weighs approximately 8.3 lbs, how many pounds of water would you need to carry each day?

Continent / Country	Domestic Water Use* <i>(gallons per day per person)</i>
Africa	17
Egypt	53
Ethiopia	3
Mozambique	2
South Africa	44
Europe	71
Albania	91
United Kingdom	30
North America	137
Canada	208
United States	173
Central America	87
Costa Rica	145
Honduras	7
South America	75
Peru	43
Venezuela	101
Asia	31
Azerbaijan	77
Bangladesh	11
China	16

4. Compare your own total daily consumption to the per capita daily consumption patterns in selected countries around the world. How does your daily behavior rank in comparison? Where are the highest consumption rates? Where are the lowest?
5. Can you imagine doing all of your daily activities with amount of water that the average person uses in South Africa or Peru? What daily activities would you give up if you had to live on this amount of water? What would you keep? List them.
6. List at least five ways your family could decrease the amount of water used per month.