



JOB ASSIGNMENT #4

# Be a Home Water Inspector



Get your family involved to find out how much water you use inside your home. Ask an adult to help you conduct an inspection and track down leaks. Tools you will need:

- Pencil and paper
- Food coloring

Let's focus on the bathroom since that is where over half of the water is used indoors.



## #1

**Inspect toilet water use.** Ask an adult to place a drop of food coloring in the toilet tank. Wait 10 minutes without flushing the toilet to see if the color shows up in the toilet bowl. If it does, there is a leak and the flapper needs to be replaced. Flush the toilet after testing to avoid staining the toilet bowl.

*Did you know a leaking toilet can waste about 200 gallons of water every day? That would be like flushing your toilet more than 50 times for no reason!*

Toilet	Leak? (Yes or No)	If yes, enter 200 gallons/day	Gallons/flush (A)	Number of flushes/day (B)	Gallons/day Multiply A x B
1			1.6		
2			1.6		
3			1.6		
Total gallons/day leaked			Total flush gallons/day		

**Multiply total flush gallons/day by 365 days/year to get \_\_\_\_\_ gallons/year.**

*Did you know the typical toilet uses 1.6 gallons/flush? Toilets older than 1994 use 3.5 gallons/flush or more! EPA WaterSense labeled toilets use less than 1.3 gallons/flush.*

**How much water would be saved per flush by replacing an old 3.5 gallon/flush toilet with a 1.3 gallon/flush toilet? \_\_\_\_\_ gallons.**

(That's 18 glasses of water that could be used for drinking instead of flushed down the toilet!)





## #2

**Inspect shower water use.** Estimate the total number showers taken each day by everyone at home. Ask each person living in your house how many minutes they spend in the shower, add them up and divide by the number of people at home to get an average number of minutes.



Number of people living at home	Average number of showers taken/day (A)	Average number of minutes in shower (B)	Gallons shower water use/day (Multiply A X B)

**If the average shower time decreased by 2 minutes per day, how much water would be saved? \_\_\_\_\_ gallons/day \_\_\_\_\_ gallons/year**

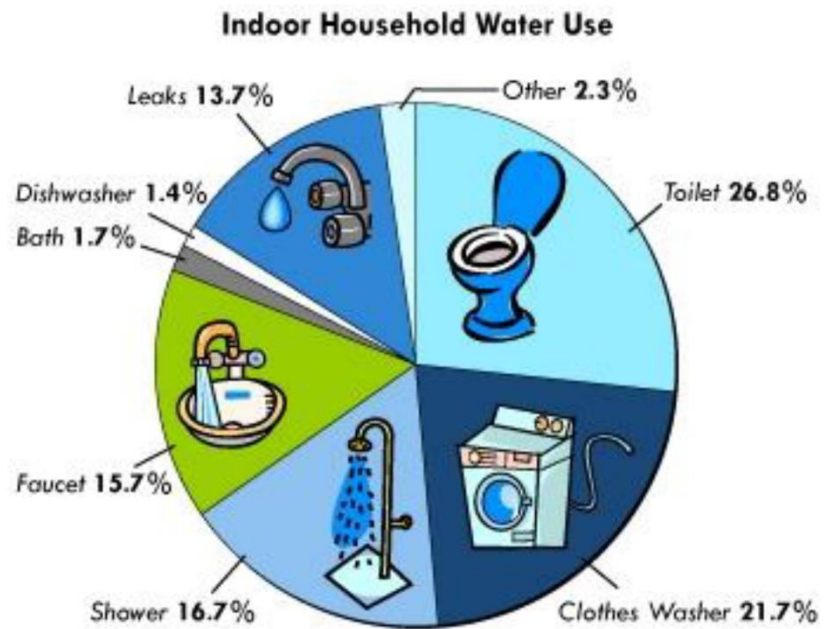
**If a bathtub holds 50 gallons, how many bathtubs could you fill with the gallons/year your family could save? \_\_\_\_\_ bathtubs**

## #3

**Inspect other water uses inside your home.**

Looking at the chart to the right. If one person uses a total of 45 gallons/day indoors, how many gallons would be used for each type of activity (shower, toilet, etc.)?

Use the grid on the next page to multiply that number by the number of people living at home to estimate how many gallons are used at home.



Source: Awwa Research Foundation (1999)



## Calculating Indoor Household Water Use

	Percent	Gallons (A)	Number of people at home (B)	Daily household use in gallons (A x B)
Toilet	26.8			
Clothes Washer	21.7			
Shower	16.7			
Faucet	15.7			
Leaks	13.7			
Other	2.3			
Bath	1.7			
Dishwasher	1.4			
<b>Total</b>	<b>100</b>			

As Home Water Inspector, it's your job to recommend ways your family can reduce water use at home. What would you propose as the top 3 actions your family could take to save water?

(Hint: The website <http://epa.gov/watersense/kids/index.html> might give you some ideas)

**#1** \_\_\_\_\_

\_\_\_\_\_

**#2** \_\_\_\_\_

\_\_\_\_\_

**#3** \_\_\_\_\_

\_\_\_\_\_

Find out more ways to save water at your water provider's website:

Northglenn – [www.northglenn.org/mywater](http://www.northglenn.org/mywater)

Thornton – [www.ThorntonWater.com](http://www.ThorntonWater.com)

Westminster - [www.ci.westminster.co.us/Environment/WaterUseConservation/Conservation.aspx](http://www.ci.westminster.co.us/Environment/WaterUseConservation/Conservation.aspx)