



## Fix a Leak Week: Student Worksheet

Name: \_\_\_\_\_

### Save Water & Money

According to the Environmental Protection Agency (EPA) WaterSense partnership program, "an American home can waste on average, more than 10,000 gallons of water every year due to running toilets, dripping faucets, and other household leaks." That can cost your family a lot of money. That is why Waukesha Water Utility encourages you to use water wisely and check your home for leaks, during this year's national Fix a Leak Week. Try the activities and math problems on both sides of this sheet to see how fast water waste adds up.

### Little Leaks Waste Big Amounts of Water

SIZE OF LEAK (Diameter)	WATER WASTED EACH QUARTER (Assuming 80 lbs of pressure)
• 1/32" drip	18,500 gallons
• 1/16" trickle	74,000 gallons
● 1/8" stream	296,000 gallons
● 1/4" stream	1,181,500 gallons

#### **Toilet Leaks:**

Toilet leaks are one of the most common leaks. Toilet leaks tend to be invisible. Hundreds of gallons of water a day can be wasted on toilet leaks. The sound of water running in a toilet tank signals costly leakage. For this reason, it is recommended that toilets be checked for leaks at least twice each year.

#### **Activity #1: Test All Your Toilets for Leaks, with the help of your parent.**

Checking a toilet for leaks is easy!

Take lid off the back of the toilet tank.

Put ONE of the attached leak detection tablets into the tank of the toilet.

Do NOT flush the toilet.

Wait for 20 minutes.

If you have another toilet, test that toilet for leaks too by repeating the directions above.

If colored water from the dye tab appears in the bowl within 20 minutes, you have a leak.

Make sure to flush the colored water as soon as the 20 minutes is up, otherwise the coloring may stain.

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**Activity #2: Record your Data & Calculate How Many Gallons of Water Your Toilet Uses**

- How many toilets do you have? \_\_\_\_\_ Did you test all your toilets for leaks? \_\_\_\_\_
- Does your toilet leak? (Did the dye color appear in the bowl?) \_\_\_\_\_  
Toilet #1                      Toilet #2
- How old is your toilet? (The year of the toilet can be found on the underside of the tank lid. The date of the manufacture is often stamped into the porcelain.) \_\_\_\_\_  
Year                                      Year

- What is the size, make, and model of the toilet? (this information may be found in the toilet tank or under the tank lid.)

Toilet #1 \_\_\_\_\_  
Size                      Make                      Model

Toilet #2 \_\_\_\_\_  
Size                      Make                      Model

- Using a ruler on the outside of the toilet tank, measure the water level (Be sure to measure in feet – answers maybe recorded with decimals or fractions.)

Toilet #1 \_\_\_\_\_  
Tank Length              Tank Width              Side Water Depth

Toilet #2 \_\_\_\_\_  
Tank Length              Tank Width              Side Water Depth

- Calculate how many cubic feet of water is in the tank. (Multiply Length x Width x Depth) \_\_\_\_\_ cu. ft. \_\_\_\_\_ cu. ft.  
Toilet #1                      Toilet #2
- Calculate how many gallons of water your toilet uses for every flush. (Multiply the cubic feet x 7.47 = Gallons per Flush) \_\_\_\_\_ gals. \_\_\_\_\_ gals.  
Toilet #1                      Toilet #2



**\$100 Toilet Rebate**



- Is your toilet a pre-1994 toilet? (Look at your answer in #3) \_\_\_\_\_  
Toilet #1                      Toilet #2
- Does your toilet use 3.5 gallons/flush or more? (Look at your answer in #7) \_\_\_\_\_  
Toilet #1                      Toilet #2
- Does your family get a water bill from Waukesha Water Utility? \_\_\_\_\_  
 (Ask your parents)
- If you answered yes to #8, #9, and #10, your family could be eligible to get up to \$100 per toilet for replacing their old water guzzling toilet. Is your family eligible? \_\_\_\_\_  
Toilet #1                      Toilet #2
- Have you told your parents about this \$100 toilet rebate? \_\_\_\_\_

If your family is eligible, the old toilet needs to be replaced with a WaterSense 1.28 gpf toilet. Your parents can call the Waukesha Water Utility at (262) 521-5272 or visit our website for more information at [www.ci.waukesha.wi.us/waterhome](http://www.ci.waukesha.wi.us/waterhome).

\_\_\_\_\_ Parent Signature

\_\_\_\_\_ Date