

"The Case of the High Water Bill"

featuring Detective Drippy Holms



Looking for Clues

Leaks can be sneaky, they can be hidden and hard to find. Water may secretly and slowly be trickling from a pipe or a fixture somewhere in your home. Detective Drippy Holms is on the case and he needs your help and keen eye to find those sneaky leaks lurking around your home.

Lets start with the toilet - did you know a silent toilet leak can waste more than 200 gallons of water a day?

Clue: If a toilet continues to run for 7 days how much water is wasted _____

How much water is wasted in 30 days? _____

Activity: A leaking toilet may waste about 8 gallons per hour, or 200 gallons per day. You likely have a leaking toilet if:

- You can hear water running through the toilet when it is not in use.
- You can see water running down the sides of the bowl long after it has been flushed.
- To get the toilet to stop running you have to jiggle the handle.



Checking a toilet for a silent leak is easy:

1. Remove the lid from the tank.
2. Squeeze 10 drops of food coloring into the toilet tank.
3. Wait 30 minutes without flushing the toilet. Then check the toilet bowl.

If the water in the bowl has changed color, then you will know that water is leaking from the tank.

The Leaky Faucet... did you know that a slow drip can waste as much as 20 gallons of water each day? A dripping faucet can waste over a hundred gallons of water every month. Each drip may seem like a tiny amount of water but, they all add up quickly.



Drop per Second	Per Day Loss in Gallons	Per Month in Gallons
One Drop	4.5	139.5
Two Drops	9	279

Clue: If a faucet leaks at the rate of 1 drip per second, how many gallons of water does it waste in a day? _____



How many gallons are wasted in a year? _____

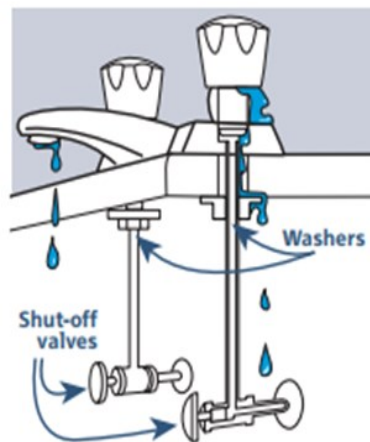
Activity: Some faucet leaks are easy to spot—the faucet may drip from the spout, even when the handle is turned off, this is a sure sign of a leak. However, not all faucet leaks are that obvious, they can leak in places other than the spout. Be sure to check for pooling water under the sink. Worn washers and seals are the cause of most leaks. Dripping worn-out rubber washers should be replaced with new washers.

Look for Clues	
Location of Drip	Drips per Minute
Bathroom	
<input type="checkbox"/> Faucet	
<input type="checkbox"/> Shower	
<input type="checkbox"/> Bathtub	
Kitchen	
<input type="checkbox"/> Faucet	
<input type="checkbox"/> Pipes under sink	
Outside	
<input type="checkbox"/> Hose	
<input type="checkbox"/> Sprinklers	

Detective Drippy Holms recommends a walk through your whole house looking for clues and listening for sounds of a water leak. Use the chart as a guide and follow the clues to find those leaks.

1. Check the appropriate box if you find a drip or a leak.


2. If you find a drip check your watch to see how many times it drips in one minute. If you find a pipe that isn't dripping but is wet, write that down too.



Track down the word clues to finding leaks...



R	A	L	P	U	G	V	J	D	X	S	Q	T	G	B	SPRINKLER
G	L	C	F	K	E	Y	F	L	O	W	R	G	M	Y	DRIPPY
B	D	J	M	F	X	C	A	O	F	A	U	C	E	T	FAUCET
I	R	P	E	H	T	R	C	S	X	S	R	L	O	Z	DROPS
T	O	B	T	O	I	L	E	T	R	H	M	E	A	V	METER
Y	P	C	E	S	T	R	N	I	U	O	E	A	L	Q	TOILET
X	S	D	R	E	H	T	W	M	P	W	Z	K	C	B	FGUA
Q	Z	M	W	V	F	G	U	A	Z	E	P	S	A	M	WATER
J	G	A	L	L	O	N	S	T	D	R	I	P	P	Y	SAVINGS
O	T	X	P	E	X	B	E	L	U	M	V	N	Z	G	WRENCH
U	Z	V	R	W	A	T	E	R	B	C	O	P	T	M	LEAKS
O	F	L	N	Q	S	Z	B	S	A	V	I	N	G	S	SHOWER
H	B	W	R	E	N	C	H	V	D	Z	X	R	R	Z	HOSE
D	Q	C	W	R	W	P	O	W	E	Y	N	O	C	X	FLOW
U	M	D	T	O	Q	S	P	R	I	N	K	L	E	R	GALLONS

Now that you have tracked down all the leaks and are an expert leak detective, you have a chance to showcase your sleuthing skills by entering our **Leak Detective Contest!** 

Write a short story about your leak detecting adventures for a chance to win...

As an expert leak detective, you can now write a short story describing how many leaks you found, where they were located, approximately how much water was lost due to the leak and the steps you took to fix the leak. Then submit your story online to win. Winning Detective's will be selected from submitted entries and each winner will receive a **\$100 VISA gift card** and be presented with a Leak Detective Certificate!

Entry Guidelines:

An original short story, of a thousand words or less, that may include hand drawings or pictures (you can scan and attach them) for kids at the 3rd, 4th or 5th grade level.

Please include:

- Complete the entry form telling us a little bit about yourself, your age, grade level, address and telephone and/or email.
- Please have a parent fill out the parental permission to publish your work.
- Three winners, will be selected—one for each grade level. Winning stories will be published on the FGUA website and FGUA Facebook page.
- We reserve the right to publish your entry at our discretion.
- Winners will each receive a **\$100 VISA gift card**.
- All participants will receive a certificate and a participation prize.
- Entries maybe emailed to FGUA at - drippy.holms@fgua.com by **April 14th!**



Submit your short story for a chance to win our Leak Detective Contest!

