

Water  
audit



Water  
audit







# Chapter 1

## Locating Your Water Meter Check for Leaks



# Water audit

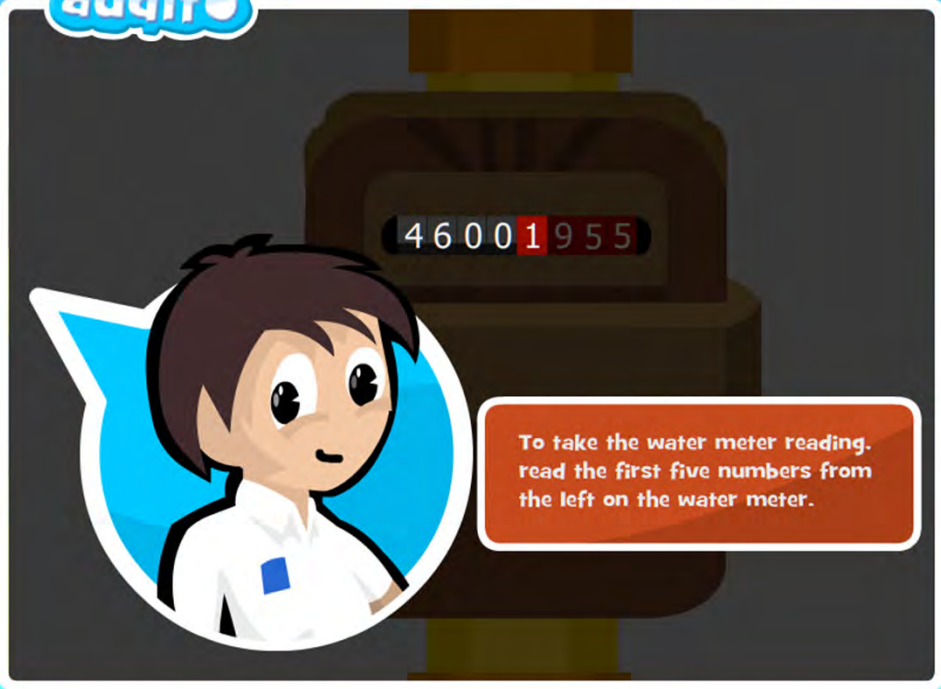


They are usually found in the meter compartment outside your home.

# Water audit



# Water audit

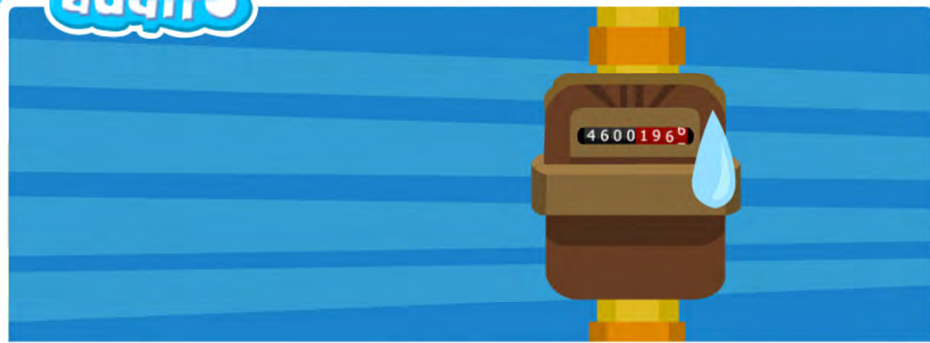


# Water audit



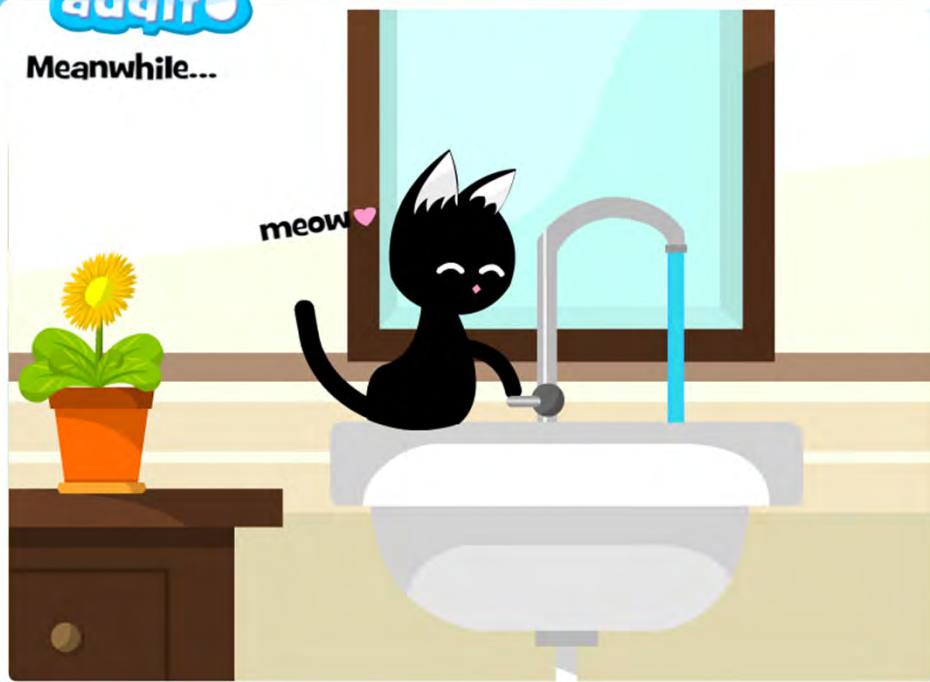


# Water audit



# Water audit

Meanwhile...



## Chapter II

### Installing Thimbles



# Water audit



First step is to remove the aerator

# Water audit



Next. take out the washer



# Water audit



# Water audit



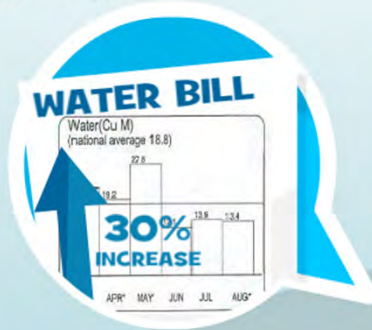
## Chapter II

### Tips to Save Water



# Water audit

## TIP 01



Check your water bill to monitor your family's water consumption. If your consumption is more than average, re-look your family's water usage habits.

# Water audit

## TIP 02

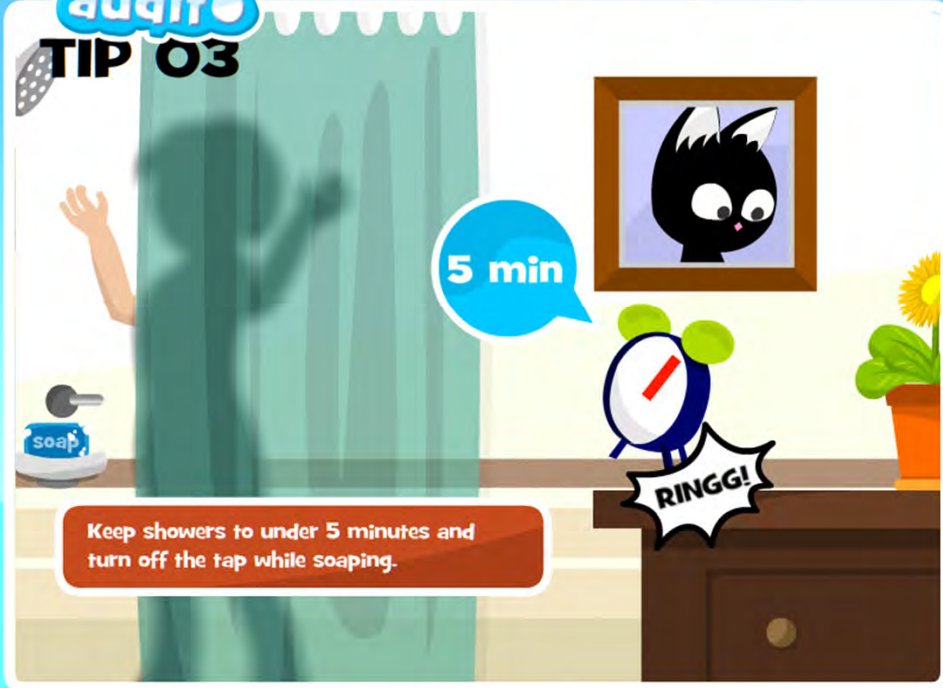


Use a mug when you brush your teeth



# Water audit

## TIP 03



Keep showers to under 5 minutes and turn off the tap while soaping.

# Water audit

## TIP 04



Wash vegetables and dishes in a filled sink or container instead of under a running tap.

# Water audit

## TIP 05



Wash clothes on a full load when using washing machine.

# Water audit

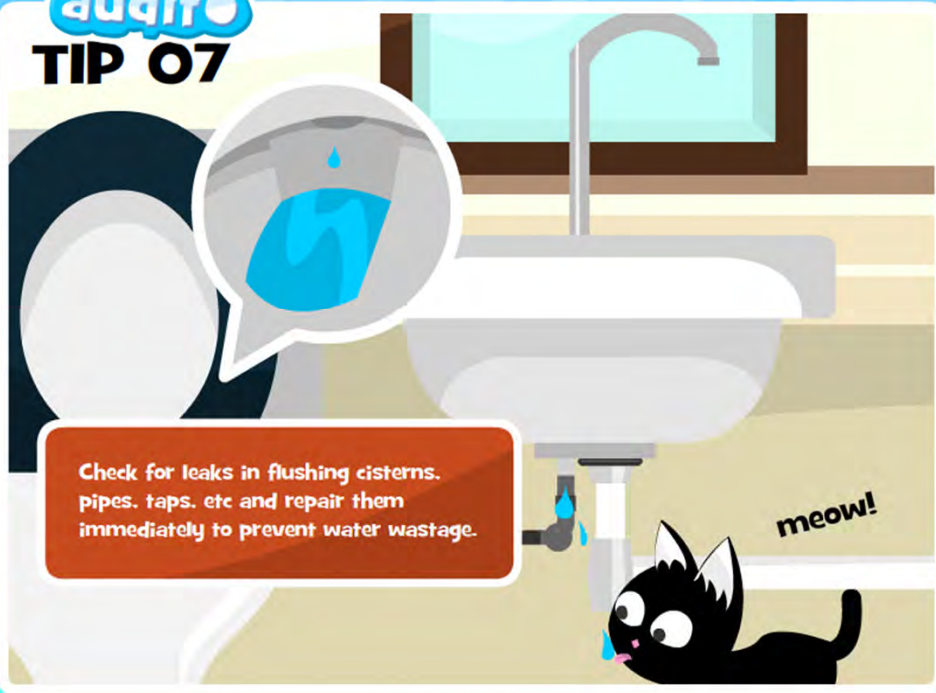
## TIP 06



Collect rinse water from the washing machine for flushing the toilet or mopping the floor.

# Water audit

## TIP 07



Check for leaks in flushing cisterns, pipes, taps, etc and repair them immediately to prevent water wastage.

# Water audit

## TIP 08



For dual flush flushing cistern, use reduced flush for liquid waste.



## Chapter III

# How to Calculate Water Usage



# Water audit

## FORMULA



first reading

Take down 1st water meter reading



# Water audit

## FORMULA



first reading



Second reading

After the second week, take down the reading again



# Water audit

## FORMULA



Don't forget to include yourself!

Next, note the number of people staying in your home



# Water audit

## FORMULA



Don't forget to include yourself!

Now let's calculate water used in a day using the formula and also calculate the water usage per person per day





# Water audit

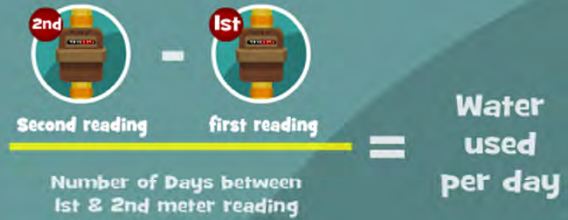
## FORMULA


$$\frac{\text{Second reading} - \text{first reading}}{\text{Number of Days between 1st \& 2nd meter reading}} = \text{Water used per day}$$

First, take the 2nd reading minus 1st reading divided by the number of days...

# Water audit

## FORMULA


$$\frac{\text{Second reading} - \text{first reading}}{\text{Number of Days between 1st \& 2nd meter reading}} = \text{Water used per day}$$

...to calculate the water used per day

# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)



Water Usage Per Person per Day (litres/person/day)

$$\frac{\text{Water used per day} \times 1000 \text{ Litres}}{\text{Number of people staying in your home}}$$

Number of people staying in your home

Next, to calculate the amount of water a person used in a day, we take the water used per day multiply by 1000 litres divided by the number of people staying in your home



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)



Now you know how much water you have used in a day. Let's start reducing your usage further by installing thimbles and practising good water saving habits in your home.





# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)

Monday    Tuesday    Wednesday  
Thursday    Friday    Saturday  
sunday    **Monday**



Third reading

One week later after you have installed thimbles and practised good water saving habits. take the 3rd reading



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)



Third reading

Now, we shall calculate the 2nd water usage per day.





# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)



Third reading = second reading

=

2nd Water used per day

Number of Days between 2nd & 3rd meter reading

Take the 3rd reading minus 2nd reading divided by the number of days...



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)



Third reading = second reading

=

2nd Water used per day

Number of Days between 2nd & 3rd meter reading

...to calculate the 2nd water used per day.



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)

2nd Water  
used X 1000 Litres  
per day

Number of people  
staying in your home

=



Water Usage Per  
Person per Day  
(litres/person/day)

To get the 2nd water usage per person per day, we take the 2nd water used per day multiply by 1000 litres divided by the number of people staying in your home



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)

How much % of water was saved =

Now, we can calculate how much % of water was saved.



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)

How much % of water was saved =

$$\left( \frac{\text{1st Water Usage Per Person per Day (liters/person/day)}}{\text{1st Water Usage Per Person per Day (liters/person/day)}} - \frac{\text{2nd Water Usage Per Person per Day (liters/person/day)}}{\text{2nd Water Usage Per Person per Day (liters/person/day)}} \right) \times 100\%$$

Water Usage Per Person per Day (liters/person/day)

Take the difference between the 1st usage and 2nd usage over the first usage multiply by 100 percent



# Water audit

## FORMULA (1m<sup>3</sup> = 1000 litres)

How much % of water was saved =

$$\left( \frac{\text{1st Water Usage Per Person per Day (liters/person/day)}}{\text{1st Water Usage Per Person per Day (liters/person/day)}} - \frac{\text{2nd Water Usage Per Person per Day (liters/person/day)}}{\text{2nd Water Usage Per Person per Day (liters/person/day)}} \right) \times 100\%$$

Water Usage Per Person per Day (liters/person/day)

Isn't that simple? Login now & try it out on your own!





# Checklist

No. of family members:

Water meter reading 1:

Water meter  
reading 1 Date:

-----  
After at least 7 days from the first water meter reading...

Water meter reading 2:

Water meter  
reading 2 Date:

No. of days between 2nd  
reading and 1st reading:

days

Water consumed per day:

m<sup>3</sup>

Per person per day usage:

litres/person/day

-----  
On the day when you take the second water meter reading,

Check for leaks in the house by  
shutting off all the fittings and watch  
if the meter is moving:

Yes

No

Install thimbles in tap fittings and  
showerheads in the house:

Yes

No

No. of thimbles installed:

Practise these good water saving habits...

Check water bill to monitor your family's water consumption:	Yes	No	
Keep showers to less than 5 minutes and turn off the tap while soaping:	Yes	No	
Wash vegetables and dishes in a filled sink or container instead of under a running tap:	Yes	No	
Wash clothes on a full load when using washing machine:	Yes	No	
Collect rinse water from the washing machine for flushing the toilet or mopping the floor:	Yes	No	
Check for leaks in flushing cisterns, pipes, taps, etc and repair them immediately to prevent water wastage:	Yes	No	
For dual flush flushing cistern, use reduced flush for liquid waste.	Yes	No	N.A.

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After at least 7 days from the 2nd water meter reading...

Water meter reading 3:

Water meter reading 3 Date:

No. of days between 3rd reading & 2nd reading:  days

Water consumed per day:  m<sup>3</sup>

Per person per day usage:  litres/person/day

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% of water saved:  % saved!

# Registration

**Student ID:**

**Name:**

**School:**

**If others,  
please specify:**

**Class:**

**Age:**

**Block/House no.:**

**Unit:**

**Street:**

**Postal:**

**No. of Occupants:**

**House  
Type:**

- 1 room    2 room    3 room    4 room  
 5 room    Executive Flat    Semi-Detached  
 Terrace    Bungalow    Private Apartment  
 Others

**If others,  
please specify:**

**Mobile:**

**Email:**

I have sought my parent's consent  
to participate in this exercise.