

Lesson 3 - Water use in your home

(Measuring the water you use)



Before you start this session, please:

- Print Session Information sheets
- Print Activity sheets 3:1 and 3:2
- Make sure you have access to the internet so that you can watch the video clips and for instructions on reading your water meter.
- Grab a pencil and some paper.

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Let's get started

In the last session we learned about the how our water is cleaned and then about its journey to our homes. Now we are going to think about how we use that water.

Anglian Water measures the amount of water used by a household each day. In most homes we use a water meter, which is usually outside. Ask an adult to find out if you have a water meter and help you find it (if you have one).

You can find out how to read your meter by going outside and looking for a round black cover near your house.

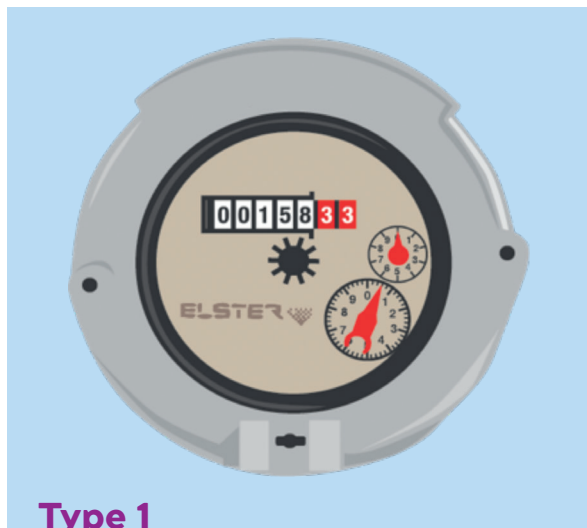


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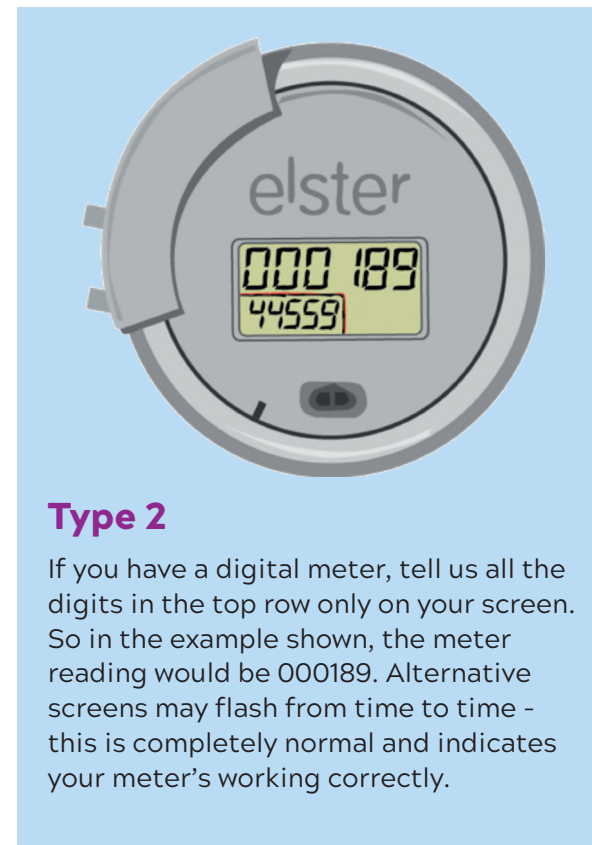
How to read your meter

Reading your meter is easy. It will either be type 1 or 2 as shown on the right. Remember to include any zeros on the meter when taking a reading.



Type 1

If you have an older style meter, your display will have black digits on a white background. These indicate the cubic metres used and will be what you submit in your reading. Record on Activity sheet 3:1 the first five digits only, so in the example shown, the meter reading would be 00158.



Type 2

If you have a digital meter, tell us all the digits in the top row only on your screen. So in the example shown, the meter reading would be 000189. Alternative screens may flash from time to time - this is completely normal and indicates your meter's working correctly.



Use Activity sheet 3:1 to help you record your meter reading.

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Do you Love Every Drop

Water is a precious resource; we need to be careful about the amount of water we use. If you Love Every Drop it means that you are helping to look after our planet by using less.

Reasons to save water

We all need to drink it, wash our clothes and have lovely showers. But there is only a limited amount of water on the planet, which we all need to share. Making water clean uses lots of energy.

Using less water = less energy = better for the environment.

A water meter measures the amount of water you use, so if you use less water, you can save money on your water bills.

We each use about 133 litres of water every day. How can you use less?

Activity

Try reading your water meter at home.

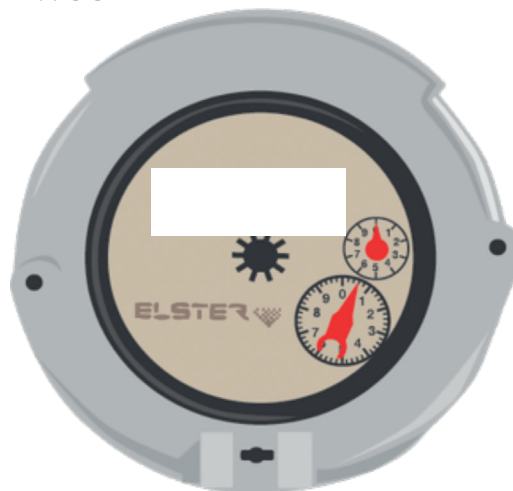
Take a reading at the same time on week 1 and week 2.

Record it in the boxes provided.

Find the difference between the reads.

They will tell you how much you have used in one week.

Week 1



Week 2



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So, let's find out how much water we all use?

When we first think about this we probably think - 'not much' - but when we think about everything we do at home it starts to add up. On a piece of paper make a list of all the things that use water in your home. How many did you think of?

Each of these activities can use more water than you think, and it all adds up to make a surprising amount - in the Anglian Water region each person uses approximately 133 litres each a day!



Look at the list below and compare with your list of activities. Then look at just how much each one can use.

Activity	How much water is used?
Running the tap	8 litres per minute
Washing up in the sink	8 litres
Washing hands	3 litres
Taking a normal shower	8 litres per minute
Taking a power shower	13 litres per minute
Flushing the toilet (short)	4 litres
Flushing the toilet (long or single flush type)	9 litres
Dishwasher (per wash)	14 litres
Washing machine (per load)	50 litres
Car washing (using a hose)	150 litres for 10 minutes
Cooking a meal	5 litres

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Let's investigate:

Over the next week keep a diary of when you use water.

Use Activity sheet 3:2 to help you record your findings. Don't forget to include when a grown up washes your clothes or cooks a meal and then washes up the dishes.

Don't forget

Once you have recorded your water use on Activity sheet 3:2 for this week draw a bar chart to show each day's usage.

What other ways could you record the data you have collected? Try using a computer, recording in pictures and presenting to your family or drawing a cartoon.

Challenges:

Let's explore your water footprint:

Farmers need lots of water for growing crops, especially when the weather is hot and dry.

Factories also use large amounts of water for making things.

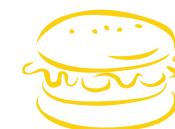
Take a look at the pictures below to find out approximately how much water is used to make some of our foods and everyday items.



A loaf of bread
1,300 litres



1 pint of milk
450 litres



A burger
2,400 litres



1kg of cheese
5,000 litres



A cotton shirt
2,700 litres



A packet of crisps
185 litres

What are your favourite foods?

Where do they come from?

How are they grown?

How much water is needed to produce them?

Make a storyboard showing the journey of your favourite food from where it is grown and produced right to your table - don't forget to show how much water is needed. Think about any packaging and transport as well.

Create a quiz for your grown ups to play - do they know as much as you do about the water all around us?

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Keeping a Water Use Diary

You can work out how much water you use at home by keeping a record, or water diary.

Activity	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total number of times in a week	Estimated water used	Total weekly water used
Running the tap									8 litres per minute	
Washing up in the sink									3 litres	
Washing hands									8 litres per minute	
Taking a normal shower									13 litres per minute	
Taking a power shower									4 litres	
Flushing the toilet (short)									9 litres	
Flushing the toilet (long or large bath type)									14 litres	
Dishwasher (per wash)									50 litres	
Washing machine (per load)									80 litres	
Bath (full)									150 litres for 10 minutes	
Using a hose (washing a car, watering the garden, etc)									5 litres	
Cooking a meal										

Let's start:

1. Make a record every time you use some water in one of the ways described in the 'activity' column.

You could use the tally system to help you count up accurately.

2. Make sure you put your results in the correct column. Check what day it is.

3. Speak to an adult each day to find out if your family uses water in any of the household activities in the table. Make a record in the table if they do.

Could you help with these jobs around the home?

4. Carry out your water survey every day for a week until your chart is full!

5. You can work out how much water you used for each activity by multiplying the total number of times you did that activity by the estimated water use for that activity (you will find the information on the chart).

6. Challenge yourself to work out the tables using your maths skills.

You could check if you were right by using a calculator.

Example:
If you washed your hands 25 times in a week, the total water use would be 25×3 , which is 75 litres.

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Water Use Diary

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Write or draw the answers these questions.

<p>Which activity was done the most regularly?</p>	
<p>Which activity used the most water over the course of the week?</p>	
<p>What was the total amount of water you used over the course of the week? To work this out, add up the total weekly water use for each activity in your table!</p>	
<p>Look at your total water use and see how close the total is to your actual water use which you recorded in Activity 3:1 (water meter).</p>	

