



Home challenge

Learning objective

To investigate how much water is used at home and identify easy ways to save water

Overview

Children record how often they use water for different activities during a week at home. They quiz their household about their water-using habits and everyone signs up to water-saving promises

Resources

- **Are your family Water Heroes?** worksheet 1.1
- **How much water do you use at home?** worksheet 1.2
- Graph paper

Curriculum links



Mathematics – statistics

In advance

- Set this task for completion before your **Water Saving Mission** so you can review the results in class during the campaign week.
- Choose which Home challenge tasks suit your class best.

Setting the Home challenge:

Are your family Water Heroes?

- Ask children to also complete the **Are your family Water Heroes?** quiz at home to identify simple ways to save water and save money at home.
- Children choose water-saving promises to sign up to with their family.

How much water do you use at home?

- Ask children to conduct a one-week survey of water use in their homes.
- Children record how many times they do water-using activities each day, using the **How much water do you use at home?** worksheet.

Reviewing the Home challenge in class:

Main

Are your family Water Heroes?

- Share the scores from **Are your family Water Heroes?** by recording a tally chart of all the class scores on the white board.
- Demonstrate how to draw a bar chart to illustrate the class results on graph paper.
- Extension: Calculate the average class score. On average are your class Water Heroes?

How much water do you use at home?

- Show children how to record frequencies from their tally marks.
- Demonstrate how to calculate water totals for each activity and for each day.
- Compare whose family had the most showers in the week. Explore reasons why.
- Discuss which activities used most water. Does this surprise anyone?
- Demonstrate how to represent the data using a pictogram or bar chart, as appropriate.
- Extension: Demonstrate how to calculate average household water use per day and compare this to UK average water usage.

Plenary

- Ask children to share one thing they have learned from completing the Home challenge.

Classroom-based alternative

- Ask children to test each other using the **Are your family Water Heroes?** worksheet.
- Complete the **How much water do you use at home?** in advance for your own household. Provide children with your own survey data to use to complete the calculations.

1.1 Water Hero home worksheet

Dear Parent/Carer,

Southern Water is installing free water-saving devices at your child's school as part of a Water-Saving Mission. This will save the school, water, energy and money. It would be really helpful if you could support your child to complete this water quiz at home. We hope it will help you start saving water, energy and money at home too.

Thank you for your help.

Sally Lambert, Community Education Manager, Southern Water



Are your family Water Heroes?

Ask your family about how they use water and ring their answers

In the bathroom			
1	Do you have a shower to wash instead of a bath?	Yes	No
2	Do you shower for no more than four minutes?	Yes	No
3	Do you turn the tap off while brushing your teeth?	Yes	No
4	Do you have a dual flush toilet (with a choice of big flush and small flush buttons)?	Yes	No
In the kitchen			
5	Do you wash dishes or vegetables in a bowl rather than under a running tap?	Yes	No
6	Do you fill your kettle using only the mugs of water you need?	Yes	No
7	Do you wait until your washing machine or dishwasher are full before turning them on?	Yes	No
Outside and in the garden			
8	Do you have a water butt to collect rainwater for plants in the garden?	Yes	No
9	Do you use a watering can to water your garden?	Yes	No
10	Do you wash your car with a bucket and sponge instead of a hose?	Yes	No
How many times did your family answer yes? If you scored:			
5 or less	Want to be a Water Hero? Then it's time to start saving water and money with our water-saving promises.		
6 - 7	You are Water Heroes in training. You are starting to save water, but there is more you could do. Sign up to some water-saving promises.		
8 - 10	Well done, you are Water Heroes. Keep up the good work. Help your family and friends to save too by signing up to water-saving promises.		

Be a Water Hero – ask all members of your family to sign up to the promises here:

<p>Take a four-minute shower instead of a bath</p>  <p>tick here</p>	<p>Use a watering can in the garden</p>  <p>tick here</p>	<p>Turn the tap off when I brush my teeth</p>  <p>tick here</p>	<p>Make sure the washing machine is full for every wash</p>  <p>tick here</p>
--	---	--	---

Sign your name here:





How much water do you use at home?

Keep a diary of how much water your family uses at home

The water on Earth moves in a never-ending cycle. Every living thing needs water to survive so we all need to use water wisely.

Your name: _____ **How many people live in your home?** _____

How many times does your home do these activities every day? Use tally marks to record each time you do an activity. Remember to include all the members of your home in your tally.

	Activity										
	Flushing toilet	Shower	Bath	Dish-washer	Washing up (by hand)	Washing machine	Drinking	Brushing teeth	Washing car	Watering plants	Total
Amount of water used	6 litres	8 litres per minute	80 litres	14 litres	12 litres	50 litres	0.5 litres per drink	6 litres	5 litres per bucket	4 litres per watering can	
Monday											
Tuesday											
Wednesday											
Thursday											
Friday											
Saturday											
Sunday											
Total											

Write the frequency in the total box.

On squared paper, design either:

1. A pictogram to show the number of times that you used water for different activities
2. A bar chart to show how much water you used for different activities

How do you compare?

The average person in the UK uses 150 litres of water per day. That's the same as 300 of these drinking bottles.

Average water used per person = total water used by your home/number of people living in your home

= _____ litres



Are people in your home using more or less water than the UK average?

