WATER CONSERVATION

Water is Important

1 Identify something water is used for:

- by you

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- inside your home

.....

- in the backyard

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- at school

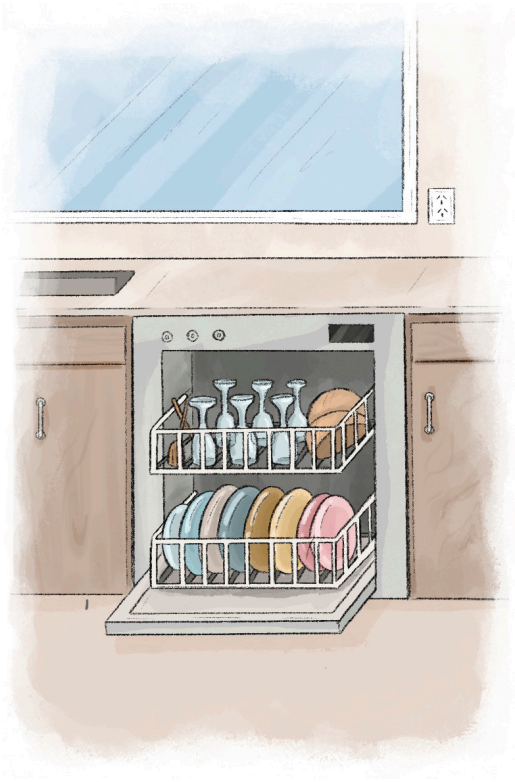
.....

- in the community

.....

- on a farm

.....



2 Choose three of your answers from Question 1 and estimate their water usage in litres. After your estimate, use the link below to check your answer.

lmw.vic.gov.au/water-supply-and-services/saving-water/saving-water-at-home/

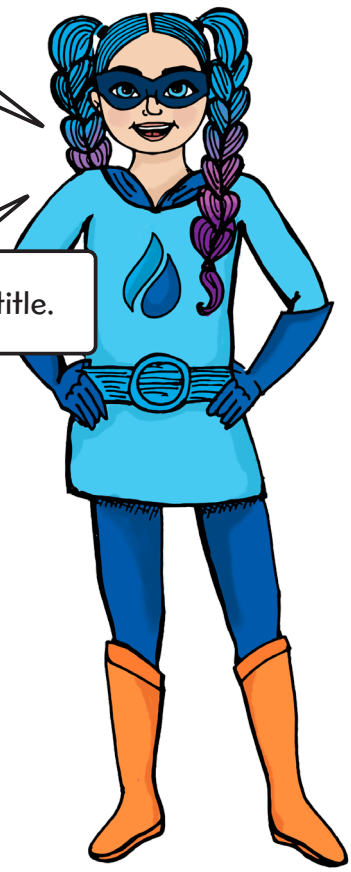
Water Usage	Estimate	Actual
Example The dishwasher	30 litres	20 litres
	litres	litres
	litres	litres
	litres	litres

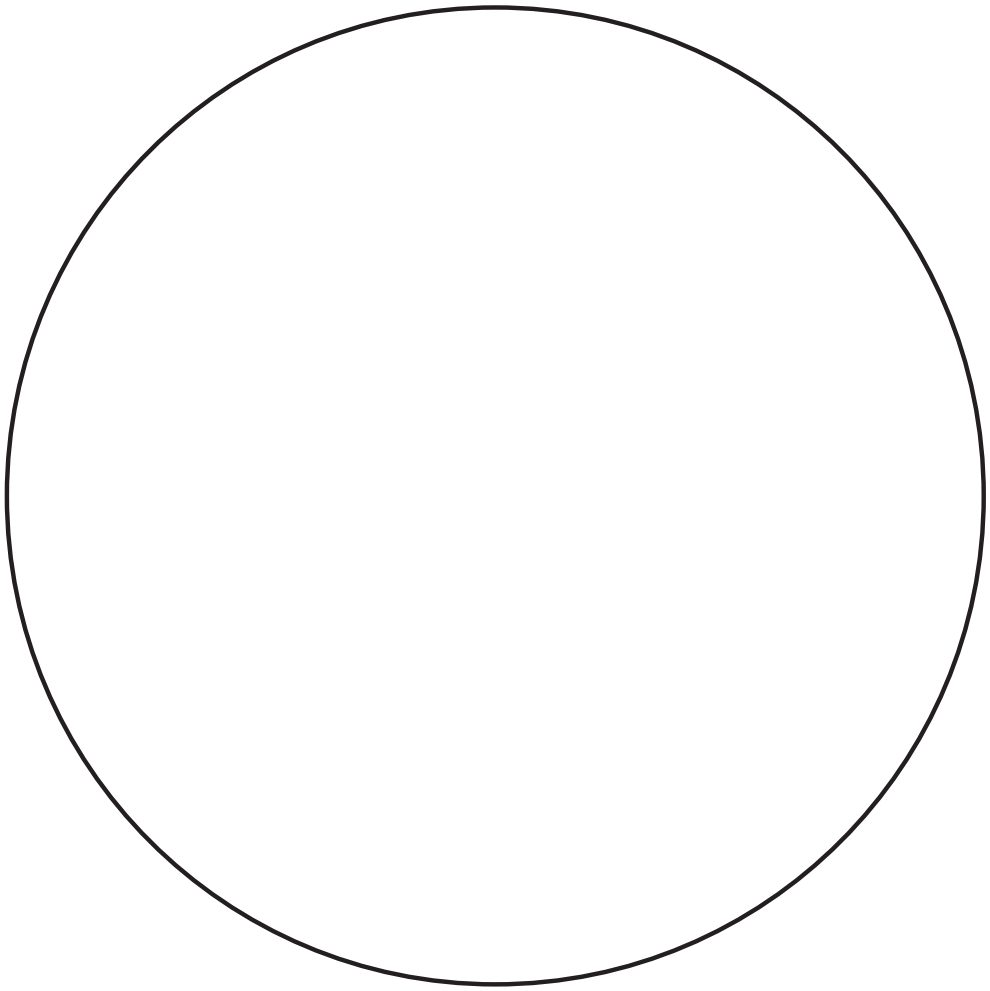
LOWER MURRAY WATER

3 Create a pie chart that shows where water is used in the home. Divide your pie chart into sectors to show the following information:

- garden 35%
- bathroom 26%
- toilet 19%
- laundry 15%
- kitchen 5%

Make sure that the size of each sector represents the size of the water use.





Legend

- ☐ Garden
- ☐ Bathroom
- ☐ Toilet
- ☐ Laundry
- ☐ Kitchen

4 Design and create a poster to inform younger students about ways to save water at school. Include as many tips as you can think of. Here are some ideas to start:

- Tell a teacher if you see a leaking tap.
- Use the half-flush button on the toilet.

For Questions 5–10, we will compare two different families: the Aquasavers and the Dripdrops.

The two families are similar in many ways. Each family is made up of four people and a pet dog. They both receive their water from the town supply.

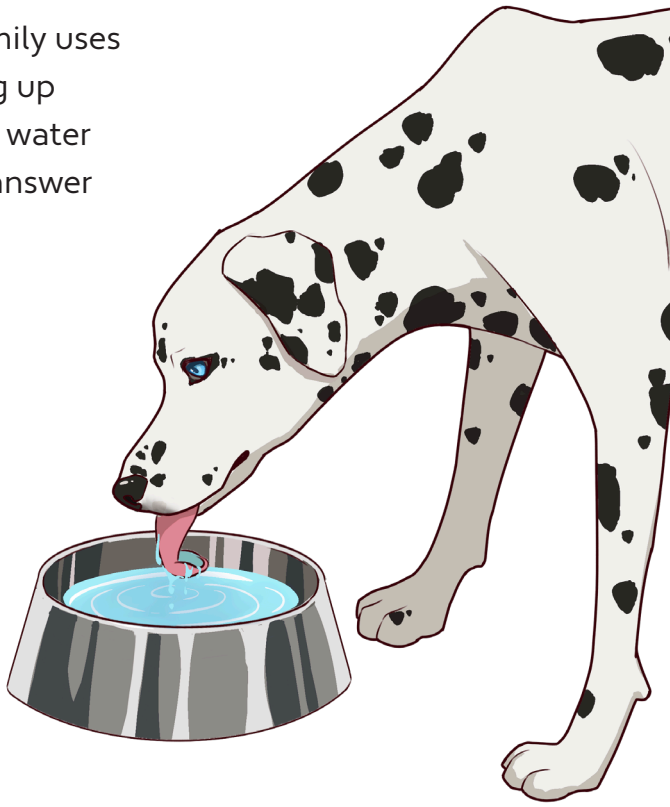
Aquasavers

The Aquasaver family tries to save water.

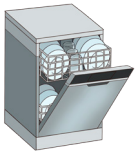
Dripdrops

The Dripdrop family knows they use too much water and would like to use less.

The following tables show how much water each family uses on a typical Saturday. Complete each table by adding up all the volumes in the final column to see how much water each family uses in one day. Then, go to page 7 and answer Questions 5–10.

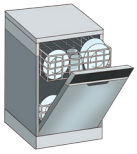


Aquasaver family

Drinking		Each person drinks 8 glasses (2 litres) of water (or tea/coffee).	4 × 2 L	=	8
Toilet (dual-flush)		Each person has 5 half flushes (15 litres) and one full flush (6 litres).	4 × (15 + 6) L	=	84
Shower		Three people have 3-minute showers with a water-saving showerhead.	3 × 27 L	=	81
Bath		One person has a bath.	1 × 100 L	=	100
Washing dishes		1 full load in dishwasher	1 × 20 L	=	20
Washing clothes		1 full load in front-loading washing machine	1 × 50 L	=	50
Brushing teeth		Each person brushes their teeth twice a day for 2 minutes each time, and turns off the tap when not rinsing.	4 × 2 × 1 L	=	8
Washing hands		Each person washes their hands 6 times a day and uses 4 litres each time for a total of 24 litres.	4 × 24 L	=	96
Pet's drinking water		Bella the dog drinks 3 full 1-litre bowls every day.	3 × 1 L	=	3
Watering the garden		The garden is watered with a handheld trigger hose for 10 minutes. The family also uses the water from the bath to water the garden.	200 L	=	200

Total volume of water used by the Aquasavers =

Dripdrop family

Drinking		Each person drinks 8 glasses (2 litres) of water (or tea/coffee).	4 × 2 L	=	8
Toilet 1 (non-dual-flush)		Two people have 6 full flushes (11 litres).	2 × (6 × 11) L	=	132
Toilet 2 (dual-flush)		Two people have 6 full flushes (6 litres).	2 × (6 × 6) L	=	72
Shower		Two people have 3-minute showers with a water-saving showerhead.	2 × 54 L	=	108
Bath		Two people have a full bath.	2 × 120 L	=	240
Washing dishes		2 half-loads in dishwasher	2 × 20 L	=	40
Washing clothes		1 full load in top-loader	1 × 122 L	=	122
Brushing teeth		Each person brushes their teeth twice a day for 2 minutes each time. Tap left running.	4 × 2 × 10 L	=	80
Washing hands		Each person washes their hands 6 times a day and uses 4 litres each time for a total of 24 litres.	4 × 24 L	=	96
Pet's drinking water		Milo the dog drinks 2 full 1-litre bowls every day.	2 × 1 L	=	2
Watering the garden		The garden is watered with a handheld trigger hose for 20 minutes.	400 L	=	400

Total volume of water used by the Dripdrops =

5 How much water does each family use per day?

Aquasaver family: ..... litres/day **Dripdrop family:** ..... litres/day

6 How much more water does the Dripdrop family use than the Aquasaver family in a day?

.....

7 If every family in the Mildura region wasted this much water, what would the total volume be? Assume that there are 15,000 families.

.....

8 What are four tips you could give the Dripdrops to help them save water?

9 Use your answer from Question 6 to calculate how much more water the Dripdrops would use than the Aquasavers in a week.

7 × ..... = ... litres

Your answer from Question 6

10 Use your answer from Question 9 to calculate how much more water the Dripdrops would use than the Aquasavers in a year.

52 × ..... = ... litres

Your answer from Question 9

11 The current cost of water is 50 cents per 1000 litres (0.05 cents per litre) and customers pay for their water every 91 days (a 'quarter').

a How much would the Aquasavers pay for their water use for 91 days?

First, calculate how many litres they would use in 91 days:

91 × ..... = ... litres

Now, calculate how much this volume of water would cost:

..... × 0.05 = ... cents

Convert cents to dollars by dividing by 100:

..... cents ÷ 100 = $ .....

b How much would the Dripdrops pay for their water use for 91 days?

First, calculate how many litres they would use in 91 days:

91 × ..... = ... litres

Now, calculate how much this volume of water would cost:

..... × 0.05 = ... cents

Convert cents to dollars by dividing by 100:

..... cents ÷ 100 = $ .....

PLAY A GAME

Grapevines & Drains

Play the game Grapevines & Drains.

You will need at least two players and a die or dice.