

# **Learning objectives**

### Students will be able to:

- recognise the many ways water is used in the home
- identify how to reduce water use

## **Learning outcomes**

Subject	Strand & content descriptors
Science	Science understanding
	• Earth's resources, including water, are used in a variety of ways. (ACSSU032) Science as a human endeavour
	<ul> <li>People use science in their daily lives, including when caring for their environment and living things. (ACSHE035)</li> </ul>
	Science inquiry skills
	<ul> <li>Respond to and pose questions, and make predictions about familiar objects and events. (ACSIS037)</li> </ul>
	Represent and communicate observations and ideas in a variety of ways such
	as oral and written language, drawing and role play. (ACSIS042)
Geography	Geographical knowledge & understanding
	Environment: The environment is the source of every material thing we use.
	Geographical skills & inquiry
	<ul> <li>Observing and questioning: Pose and respond to several questions for an inquiry; based on a variety of questions stems and stimulus.</li> </ul>
	<ul> <li>Planning, collecting and evaluating: Participate in a guided inquiry using a range of information sources.</li> </ul>
	Planning, collecting and evaluating: Collect information about the local area.
Mathematics	Number & algebra
	Solve simple addition and subtraction problems using a range of efficient
	mental and written strategies. (ACMNA030)
	Statistics & probability
	Collect, check and classify data. (ACMSP049)

## Important questions

- Where in the house do we use water?
- Why is it important to save water?
- What are some simple ways to save water?

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### **Background information**

Drought and water restrictions throughout Australia have focused on the need to conserve water.

The Australian Bureau of Statistics (Year Book Australia 2008), reports more households have installed water conservation devices, including dual-flush toilets and reduced-flow shower heads.

46 percent of households reported using one or more water conservation practice. The most popular included using full loads when washing dishes and clothes, and taking shorter showers.

Attitudes and behaviour will need to change permanently if we are to live sustainably. While water appears to be limitless, the amount on the planet remains constant. Collecting and supplying water incurs environmental and social costs. For example, establishing new dams disrupts natural environments and may impact on communities.

While government action at all levels can help reduce water use, actions by individuals in the home, at work and at school are also important to conserve this valuable resource.

#### Lesson plan - how many buckets?

Brainstorm the ways water is used in the house or garden – washing the dog, cleaning dishes, drinking. Collect and group these words according to categories such as: cleaning; cooking; or playing.

In a group discussion ask students to identify or suggest ways that less water could be used at home. Remind them that simple actions can save lots of water. Examples of water saving strategies may include:

- Turning off the tap when brushing your teeth.
- Taking shorter showers no more than four minutes.
- Half fill your glass of water so you don't throw away what you don't drink.
- Don't water the garden after rain.

Using **Activity sheet 7 'How much water do you use'** ask students to record how much water was used in their house and for what purpose over a set period.

It may be easier to convert litres into buckets; the following provides a conversion for the items on the Activity sheet 7.

- Shower = 1 bucket per minute.
- Bath = 12 buckets.
- ½ Flush = ½ bucket.
- Full flush = 1 bucket.
- Dishes by hand = 1 bucket.
- Washing machine = 10 buckets.
- Cleaning teeth = 1 cup (or 1½ buckets if the tap is left running)
- Water garden = 1 bucket per minute.



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#### **Additional activities**

Using the data and suitable icons – such as buckets – sort and display the information to provide comparative information on water use at home. For example how many litres/buckets are used each day to wash the dishes or water the garden; how many litres/buckets are used in the shower.

Ask students what action/s they could take to save 2 buckets each day. As a class, students could each pledge to save 2 buckets per day.

Ask students to collect water saving ideas from friends and family. Collate and present them in a book, create posters illustrating water saving ideas. Encourage students to take the posters home or place in the school.

#### **Resource requirements**

- Activity sheet 7 'How much water do you use'
- Student self-evaluation sheet 1

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