

Year 3

Lesson 4

Being a water saver at home

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Learning objectives

Students will be able to:

- recognise the many ways water is used in the home
- identify strategies and tools to investigate water use in the house
- identify how to reduce water use.

Learning outcomes

| Subject | Strand & content descriptors |
|-------------|--|
| Science | <p>Science inquiry skills</p> <ul style="list-style-type: none"> • With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge. (AC SIS053) • Represent and communicate observations and ideas in a variety of ways such as diagrams, physical representations and simple reports. (AC SIS060) |
| Geography | <p>Geographical knowledge & understanding</p> <ul style="list-style-type: none"> • Environment: Our use of natural resources and disposal of waste affects the environment. • Environment: People are able to influence the capacity of the environment to sustain life into the future. <p>Geographical skills & inquiry</p> <ul style="list-style-type: none"> • Observing and questioning: Pose questions about place, space or environment and make some predictions about their answer. • Observing and questioning: Determine which questions prompt geographical inquiry • Planning, collecting and evaluating: Suggest some inquiry sources and use a range of oral, graphic, written and digital information sources, including spatial technologies where appropriate. • Planning, collecting and evaluating: Use appropriate materials, geographical tools or equipment to collect data or observations, using formal measurements, digital technologies and spatial technologies as appropriate. |
| Mathematics | <p>Number & algebra</p> <ul style="list-style-type: none"> • Recognise, model, represent and order numbers to at least 10 000. (ACMNA052) • Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems. (ACMNA053) <p>Measurement & geography</p> <ul style="list-style-type: none"> • Measure, order and compare objects using familiar metric units of length, mass and capacity. (ACMMG061) <p>Statistics & probability</p> <ul style="list-style-type: none"> • Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording. (ACMSP068) |



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?

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.

Resource requirements

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

Lesson plan – how many buckets?

This lesson provides a framework for students to identify and develop tools to investigate how water is used in their house.

As a class develop a word bank that describes the various uses for water in the house. Group these according to category e.g. cleaning, washing, relaxing.

Ask students to suggest ways to investigate how much and where water is used in the house. For example:

- Examine a water bill to record consumption (kilolitres).
- Recording use by collecting data from the water meter.
- Identifying the consumption of different appliances and fixtures – through timing using a container with a known volume and a stopwatch for example or assessing appliance handbooks.



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Using suitable ICT programs students develop plans or maps of their house and plot data in appropriate points.

As a class compare the overall volume of water and the specific uses across households. Record and display this information.

Ask students to consider what tools and techniques they would use to undertake a similar investigation at the school.