

Year 2

Lesson 6

Being a Watersaver at school

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Learning objectives

Students will be able to:

- recognise the many ways water is used in the school
- identify how water use can be reduced.

Learning outcomes

Subject	Strand & content descriptors
Science	Science understanding <ul style="list-style-type: none">• Earth's resources, including water, are used in a variety of ways. (ACSSU032) Science as a human endeavour <ul style="list-style-type: none">• People use science in their daily lives, including when caring for their environment and living things. (ACSHE035)
Geography	Geographical knowledge & understanding <ul style="list-style-type: none">• Environment: The environment is the source of every material thing we use Geographical skills & inquiry <ul style="list-style-type: none">• Observing and questioning: Pose and respond to several questions for an inquiry; based on a variety of questions stems and stimulus.• Planning, collecting and evaluating: Participate in a guided inquiry using a range of information sources.• Planning, collecting and evaluating: Collect information about the local area.• Planning, analysing, interpreting and concluding: Sort information and identify patterns.• Planning, analysing, interpreting and concluding: Draw conclusions based on their investigations and share these conclusions.
English	Literature <ul style="list-style-type: none">• Recreate texts imaginatively using drawing, writing, performance and digital forms of communication. (ACELT1586)

Important questions

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

Background information – dealing with drips

Schools are mini cities meeting the needs of hundreds of students and staff daily, including the water required for drinking and washing.



Heavy water use areas in schools include ovals, gardens and toilets. Becoming a Watersaver school will assist staff and students to learn about water conservation and reduce water bills.

Linking locally

Many of our local schools and businesses have implemented an array of water saving initiatives and are now prospering from environmental and economical benefits. An example is John Paul College.

Water conservation can be achieved by changing watering practices or through technological developments such as water timers and infrared urinals. Mulching (using organic matter such as straw or sugar cane to reduce evaporation) garden beds, improving oval irrigation and monitoring taps and bubblers can help save water.

John Paul College

John Paul College brought water efficiency to its 35-hectare Daisy Hill campus in 2006, soon following with energy and waste efficiency initiatives. The school has already reduced water consumption by 73%, energy consumption by almost 20% and waste by 35%, by establishing:

- 10 tank farms storing up to 500,000-litres
- a pool plant that recycles backwash water and minimizes chemical use
- efficient ways of managing sports fields, grass, gardens and vegetation
- waterless urinals, low-flow showers and water-off taps
- bores, ponds and waterways that manage storm-water and provide ecosystems
- 44 solar panels generating more than 12 megawatts/ year
- retrofitting and building projects to maximise building efficiency
- water and power management software platforms that help continually measure, monitor and minimise consumption—supported by a first-of-its-kind 3D model of the campus
- 60 recycling stations that feed into four for segregation, collection and off-campus reuse
- awareness and behavior modification programs across the campus and curriculum including integrated waterwise education, a 24/7 website promoting initiatives and resources, a student environmental council, and community awareness activities fostering responsible stewardship of scarce resources.

Lesson plan – dealing with drips

- Engage students by asking them a number of questions about water use in the school; including: What do they use water for? Which behaviour do they think uses the most water? What do other people in the school (teachers; grounds person; cafeteria staff) use water for?
- Using a map of the school identify the places where water is used, along with familiar behaviours such as toilet flushing, hand washing and drinking consider other uses such as irrigation and cleaning. Highlight these places on the map using suitable icons, shapes or colours.
- Alternatively, take a tour of the school and mark the water outlets with coloured ribbon – e.g. blue for drinking, green for flushing, yellow for irrigation. Additional information such as leaking tap or observed wasteful behaviours should also be noted.



- Use the data to produce a display that includes information on the number and location of water facilities and clearly group facilities according to type or use (e.g. used for drinking or used for cleaning). Information can be presented pictorially, in bar graphs or other formats.
- Using the information collected, students should identify a number of water conservation initiatives that they would like to implement. They should then develop a methodology identifying the steps needed to plan, implement and evaluate the initiative. Activity sheet 8 'Simple ways to reduce water use at school' can assist you with this.

Resource requirements

- School map
- Activity sheet 8 'Simple ways to reduce water use at school'
- Coloured ribbon or material
- Student self-evaluation sheet 1

Additional activities

- Announce the findings of your investigation during assembly; devise short presentations to deliver to fellow students that will inform them of the need to save water and the simple things they can do to help.
- Make a mulch garden. With the assistance of the grounds person and using Activity sheet 8 select a small garden area for a mulch garden.
- Select the best type of mulch for the garden and investigate suitable plants – think about how much sun the garden gets and what plants grow well nearby.
- Check how the mulch keeps the garden cool and moist by carefully lifting the mulch and feeling the soil – you could also use a thermometer or moisture meter.