

Water Use at Home

Teacher Notes

Secondary (7-10)

ACTIVITY DESCRIPTION

The Water Use at Home activity investigates the amount of water that we use on a daily basis through a variety of household water uses. Students brainstorm all of the ways that water is used in the home and match them with the amount of water they consume. They then explore possible conservation measures to reduce their household water consumption.

INSTRUCTIONS

1. Tune in

Brainstorm some of the ways water is used at home (e.g. dishwasher, garden watering, etc.). Identify the water use that you think consumes the most amount of water?

2. Mix and Match

Match each of the water use cards (e.g. shower, flushing toilet, etc.) with the cards indicating the average amount of water it uses. (Note: the water use is measured in litres per person per day for a person living in Melbourne).

3. Discussion

1. Refer to the three water uses below and suggest one way to reduce water consumption for each. (Consider the rethink, reduce, reuse, recycle approach when developing your strategies).
 - a) Showering
 - b) Watering the garden
 - c) Flushing the toilet

Calculate how much water you think you could save by implementing one of the above mentioned water saving strategies. e.g. How many litres of water could the average person save by cutting their daily shower time in half?

SUGGESTIONS FOR ASSESSMENT

Formative

1. Participation in the Water Use at Home activity
2. Participation in the Discussion questions above

BACKGROUND NOTES

Fresh water is one of our most precious resources and makes up only a small fraction of all water on the planet. While nearly 70% of the earth is covered in water, only 2.5% is fresh and only 1% of our fresh water is easily accessible for human use. Fresh water is an important resource in addressing human needs, but is also essential for a healthy environment.

Although we use it on a daily basis, very few of us give much thought to how much fresh water we actually consume. **The average Melburnian uses approximately 142 litres of water per day.** How can we become more efficient with our use of fresh water to ensure there is enough for others and the environment?

ACTIVITY SOLUTIONS

Water Use Card	Water Consumption Figures **
Showering	36 litres of water*
Watering the garden	21 litres of water*
Washing clothes	21 litres of water*
Flushing the toilet	20 litres of water*
Tap water	19 litres of water*
Leaking pipes and taps	7 litres of water*
Evaporative Cooling (Summer months)	6 litres of water*
Bathing	3 litres of water*
Dishwasher	1 litre of water*

* litres per person per day for a person living in Melbourne

** Figures based on the results of the Smart Water Fund's ['Melbourne Residential Water Use Study'](#)

ACCESS THIS ACTIVITY

Visit the **CERES School of Nature and Climate** website to download the activity - <https://sustainability.ceres.org.au/education-resources/curriculum-activities/>

Curriculum and RSS Links

KEY CONCEPTS

Water Footprint, Water Use, Water Conservation

KEY LEARNING INTENTIONS

1. Students will be able to identify the variety of ways that water is used in the home
2. Students will order and compare water uses according to the volume of water the average person uses in a household in Melbourne
3. Students will be able to identify water conservation measures

VICTORIAN CURRICULUM

Science

7 - 8

Water is an important resource that cycles through the environment ([VCSSU101](#))

Geography

7 - 8

Nature of water scarcity and the role of humans in creating and overcoming it, including studies drawn from Australia and West Asia and/or North Africa ([VCGGK108](#))

Classification of environmental resources and the forms that water takes as a resource ([VCGGK105](#))

9 - 10

The interconnection between food production and land and water degradation; shortage of fresh water; competing land uses; and climate change, for Australia and other areas of the world ([VCGGK135](#))

SUGGESTED RESOURCESMART SCHOOLS MODULE LINKS



Undertaking the activity as described above links to the *ResourceSmart Schools Water Module - actions B1.1, B1.2, B1.3*

Below is a list of extension activities that link to additional actions of the Water module:

1. Conduct a water audit at your school to identify ways that water is used and any possible water saving strategies and recommendations (*Resourcesmart Schools Water Module - actions A1.1, B1.3, B1.4, B1.8, C2.1*)
2. Implement a water saving strategy at your home for one week. Document the process and report your challenges and successes to the class (*ResourceSmart Schools Water Module - actions B1.3, C1.3*)

SUGGESTED RESOURCESMART SCHOOLS MODULE LINKS (Cont'd)

3. Create interpretive signage about water conservation and display them around the school to raise awareness and to encourage water savings (*ResourceSmart Schools Water Module - actions A2.5, B1.4*)
4. Design and create a water efficient school garden that includes local, drought tolerant plants to suit the local environment and climatic conditions. Talk to a local plant expert or friends group for advice on appropriate plants (*ResourceSmart Schools Water Module - actions A4.1, A4.2, B1.3, B1.6, B1.8, C3.9*)
5. Invite a local indigenous group/s to share their traditional perspectives on the uses and value of water (*ResourceSmart Schools Water Module - actions B1.5, B1.6*)
6. Create an education brochure or pamphlet educating people about water conservation in the home. Distribute these in the school e-newsletter (*ResourceSmart Schools Water Module - actions C1.1, C3.5*)

Speak to your CERES ResourceSmart Schools Facilitator about further links to the Water Module.