

H2O check-up

Lesson plan

Year levels: 7 & 8

Time: 60 minutes

The Well

Tap into water education

Lesson overview

In this lesson, students will conduct an 'H2O check-up' to understand how much water is used in their daily lives. They will learn about water conservation and develop strategies to reduce water consumption. The activity will highlight the importance of sustainable water use, particularly in regions facing water scarcity.

Objectives:

- Understand the concept of a water audit and its importance.
- Calculate daily water use for different activities.
- Identify areas where water consumption can be reduced.
- Develop a water conservation plan to promote sustainable water use.

Materials:

- Calculators
- H2O check-up worksheet
- ICT for research

Opening

Bring students together and ask them to predict how much water they think they would use each day. Have students record their answers.

Now, ask students about all the different ways they might use water throughout their day. Record their answers on a board, so they are visible to everyone.

Some possible answers:

- Shower
- Bath
- Brushing teeth
- Washing hands
- Filling a water bottle
- Flushing the toilet
- Washing clothes
- Watering the garden
- Looking after pets
- Cooking

Break down some of their answers – for example: a toilet could have a half flush and a full. A shower might have a water saving head.

Give students five minutes to now research how much water is used for each activity. For example, a full flush of the toilet is approximately 11 litres. They can explore how much water a tap might use in a minute, or how many millilitres of water are used to brush their teeth.

Activity

Students use the H2O check-up worksheet (below) to audit their water usage for a day. They should take the form home and record a full 24-hour period.

Reflection

After the audit is complete, share to students that the average person uses about 200L of water per day. Have a discussion comparing their results.

Critical questions

1. Why is it important for people in South Australia to be aware of their water consumption?
2. Which of your daily activities have the greatest impact on your overall water consumption and why do these activities require so much water?
3. How do you think climate change might impact water availability in South Australia in the future?
4. What are some challenges people might face when trying to reduce their water consumption?
5. What parts of South Australia do you think struggle with the issue of water security most, and why?
6. How do you think technological advancements could help conserve water in our communities? Can you think of any examples of water-saving technology already in use?
7. What steps can you take to encourage others in your community to be more mindful of their water use?

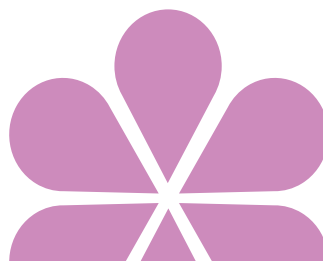
Extra support

Supply students a list of the amount of water each activity uses.

Extension

Encourage students to think broadly about their water usage. Have them explore the water consumption that goes into other parts of their daily life.

- How is water used to make the burger that you eat for dinner? Research how many litres of water are needed to produce their favourite food and drinks.
- How did you get to school today? Does that vehicle use water?
- Do power or manufacturing plants use water in their creation of the energy that we use every day?



Curriculum connections

Science	
Year 7	Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116) Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)
Year 8	Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135)
HASS (Geography)	
Year 7	Classification of environmental resources and the forms that water takes as a resource (ACHASSK182) The way that flows of water connect places as they move through the environment and the way these affect places (ACHASSK183) The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa (ACHASSK185)
English	
Year 7 & 8	Analyse how food and fibre are produced when designing managed environments and how these can become more sustainable (ACTDEK032)

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