

Water freeze frame

Lesson plan

Year levels: 4-6

Time: 60 minutes

Lesson overview

To explore the themes of water conservation and, through role play, allow students to express their understanding creatively.

Objectives:

- Identify the different types of water on Earth, including the proportions of salt, fresh water, and frozen water, as well as their implications for human use.
- Understand the importance of water conservation and identify practical ways to save water in daily life.
- Collaborate in small groups to brainstorm, plan, and rehearse – practising teamwork and communication skills.
- Reflect on the effectiveness of the water-saving messages and discuss how these practices can be implemented in daily life.

Materials:

- 1 litre of water in container
- 1 x small measuring cup (approx. 50 mls)
- 1 x tablespoon

Opening

- 1. Start with a full litre of water:** Show the students a one-litre container full of water. This represents all the water on Earth.
- 2. Fresh water demonstration:** Carefully pour 30ml of the water into a small measuring cup. Explain that this small amount represents the fresh water on Earth, while the rest in the container is salty ocean water.
- 3. Frozen water:** From the 30ml of fresh water, pour out half a tablespoon (10mls). Let the students know that the amount left in the cup is fresh water that is hard to access, because it's locked away in ice caps, glaciers or deep underground.



Tap into water education

4. Water we can use: Explain that the half tablespoon symbolises the small amount of fresh water that is accessible as surface water on land. This is the water that we use most, for drinking, sanitation, farming and agriculture.

Discuss with students their thoughts on the world's water ratio.

- We learned that most of the Earth's water is salty and not suitable for drinking. Where is fresh water found in the environment? Can you think of any local fresh water sources?
- Groundwater is used in many parts of South Australia due to the dry climate. What might be some of the challenges of relying on groundwater?
- As temperatures rise due to climate change, how could this effect the availability of fresh water in Australia?
- What short- and long-term challenges might be faced by a community with limited fresh water sources? (Teachers and students may speak from experience)
- Can you think of activities that might waste water, and how can we change those habits?
- What are some simple ways we can conserve water in our homes and schools?

Examples of water saving actions may include:

- Educating communities (promoting water saving strategies)
- Collecting rainwater
- Reduce water usage
 - Taking shorter showers
 - Using a broom instead of a hose to clean driveways
 - Turning off the tap when brushing teeth
 - Collecting greywater for the garden
 - Fixing leaky taps



Activity

Tableau/frozen picture:

Break students into groups of three or four. Each group will choose two water saving ideas and create two tableaux (frozen pictures). Students will also need to think of a phrase their character/s could be saying in the tableau.

Example:

Tableau 1: a family washing dishes.

- Characters:
 - Student 1 (pointing at sink): “Fill the sink up, then wash! We don’t want to keep the tap running.”
 - Student 2 (stacking dishwasher): “Let’s only turn the dishwasher on when it’s full.”
 - Student 3 (talking to person handwashing and pointing at the garden): “Let’s save that water for the garden.”

Tableau 2: fix leaky taps

- Characters:
 - Student 1 (crouching next to a leaky tap, pretending to fix it): “Leaky taps waste so much water!”
 - Student 2 (pointing at the leaking tap with concern): “Fixing this tap will help save water for everyone.”
 - Student 3 (crossing arms, looking determined): “Every drop counts on the Eyre Peninsula.”

Give students time to brainstorm and rehearse.

Instructions:

- Have one group come up to the front.
- Count down from 5 to 0. When you reach 0, students should be in their frozen picture.

Guessing game:

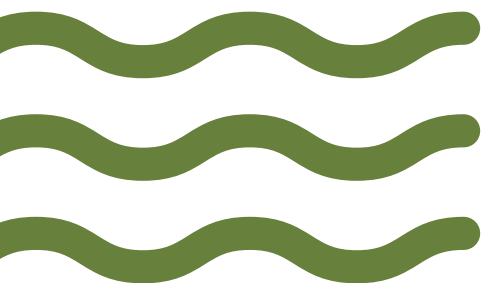
- The rest of the class can guess what the tableau represents.

Character activation:

- Call out one student’s name from the group.
- That student will “come to life” and say their line.
- Repeat for each member of the group.
- Follow the same process for the other groups.

Reflection

After all groups have performed, gather the class to discuss what they could do right now at school or at home to protect our water supply. You may like to record any additional water-saving ideas students came up with for their tableaux.



Curriculum connections

Science	
Year 4	Living things depend on each other and the environment to survive (ACSSU073) Science knowledge helps people to understand the effect of their actions (ACSHE062)
Year 6	The growth and survival of living things are affected by physical conditions of their environment (ACSSU094)
HASS (Geography)	
Year 4	The use and management of natural resources and waste, and the different views on how to do this sustainably (ACHASSK090)
Year 5	The environmental and human influences on the location and characteristics of a place and the management of spaces within them (ACHASSK113)
English	
Year 4	Use interaction skills such as acknowledging another's point of view and linking students' response to the topic, using familiar and new vocabulary and a range of vocal effects such as tone, pace, pitch and volume to speak clearly and coherently (ACELY1688)
Year 5	Use interaction skills, for example paraphrasing, questioning and interpreting non-verbal cues and choose vocabulary and vocal effects appropriate for different audiences and purposes (ACELY1796)
Year 6	Use interaction skills, varying conventions of spoken interactions such as voice volume, tone, pitch and pace, according to group size, formality of interaction and needs and expertise of the audience (ACELY1816)

