

Grade: Prep

The Water Cycle

Students will be able to:

- recognise that water is continually circulating
- understand the concepts of the water cycle
- recognise that water has many forms
- develop their rhythm and sound skills

Lesson Details:

1. Where does rain come from?

Children may refer to the sky, but explore if it rains on a sunny day to direct them towards thinking about clouds, the colour and size of the clouds and the seasons when rain is more likely to occur.

2. Where does the water go after it rains?

Children who live in urban areas will respond by referring to gutters or downpipes, or the drains on the roadside. Some may even be aware of the large stormwater pipes along our beaches and rivers. Encourage them to think about their garden and lawns, or for children who live rurally, the forest, mountains and rivers. Some concepts are rain soaking into the ground, rain drying up when the sun comes out, plants drinking the rain, rain running into our oceans and rivers.

3. What is the water cycle?

Present the TasWater Urban Water Cycle poster to your students and explain what the cycle is and the main stages.

The amount of water on Earth remains unchanged, in fact it is the same amount as when dinosaurs existed. Place a glass of water in front of the students and ask: How old do you think this water is? The water in this glass has been around as long as earth has existed. How is this so?

Our water just keeps going around and around in what is called 'the water cycle'.

Curriculum Links

Science Understanding

- ACSSU003
- ACSSU004
- ACSSU005

Science as a Human Endeavour

- ACSHE013

Science Enquiry Skills

- ACSIS014
- ACSIS011
- ACSIS012

English

- ACELT1579

Did you know?

Over 97% of the water on earth is salt water. Approximately 2% is captured in ice and less than 1% is available as fresh water.

Lesson Details continued:

4. What are the stages of the water cycle?

Evaporation: When the sun heats up the water in the sea or the rivers, the water becomes vapour and rises into the air.

Transpiration: Water from the leaves of plants becomes vapour and rises into the sky.

Condensation: When the water vapour gets really cold in the sky it joins together as tiny water droplets to form clouds.

Precipitation: When the clouds become too heavy with condensed water, the clouds release the water and it falls back to earth as rain, sleet, hail or snow.

Infiltration: When the water lands on the ground it soaks into the soil and runs into groundwater sources.

Then the water cycle starts all over again.

Lesson Reflection:

1. What is the water cycle?
2. Are we drinking the same water as the dinosaurs? Why?
3. Why do we need water?
4. Who can explain the water cycle?
5. What are the different forms of water?

5. Teach students the water cycle song.

By Lori-Ann Phelan (sing to the tune of “She’ll be coming Around the Mountain”).

Water travels in a cycle, yes it does (*use pointer finger to make a big circle*).

Water travels in a cycle, yes it does (*repeat finger cycle*).

It goes up as evaporation (*move hands up to sky*).

Forms clouds as condensation (*make a cloud overhead with arms*).

Then comes down as precipitation, yet it does! (*sprinkle with fingers while bringing arms down in front of you*).

6. What are the different forms of water?

Can your students name the different forms of water? As water travels through the water cycle it constantly changes shape and form. Water vapour is a gas and occurs during evaporation and the transpiration process (plants sweating water). Condensation is where water turns from gas into liquid and tiny droplets of water form clouds, fog or mist. Precipitation; rain, hail, sleet or snow is the result of condensation becoming too heavy to remain in the sky. Sometimes the air around the ground is so cold, that water freezes into ice. When water freezes while it’s dripping it forms icicles.

In summary, water can be a gas, a liquid or a solid.

More Information

Contact our Education Officers who can visit your classroom and share some engaging water activities with your students. Alternatively visit our website, complete an online request form and our Education Officers will contact you.

Email: education@taswater.com.au

Website: www.taswater.com.au

Additional Activities

While explaining the water cycle, give each child a dry piece of cotton wool, is it light or heavy? Have the children dip the cotton wool in water and get them to describe the difference. Relate this example to how heavy clouds become. Get them to gently squeeze the cotton wool over the sink and relate that to precipitation.