

Science Stage 4 – Earth and Space

Teacher lesson plan – Water Cycle Lesson Plan

Sydney
WATER

Key inquiry questions

- How do the physical processes influence the flow and availability of water as a resource?

Time: 45-60 min

Syllabus Outcomes

SC4-1VA - appreciates the importance of science in their lives and the role of scientific inquiry in increasing understanding of the world around them

SC4-2VA - shows a willingness to engage in finding solutions to science-related personal, social, and global issues, including shaping sustainable futures

SC4-13ES - explains how advances in scientific understanding of processes that occur within and on the Earth, **influence the choices** people make about **resource use and management**.

Syllabus Content

ES4 Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial management.

- identify that water is an important resource that cycles through the environment (ACSSU222)
- explain the water cycle in terms of the physical processes involved

Working Scientifically skills

SC4- XWS - Examination of factors influencing water flows and the availability of water resources in different places.

SC4-6WS - follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually

SC4-7WS - processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns, and relationships, and draw conclusions

Sydney Water aim for activity

- Our core objectives are to protect the environment and protect public health.
- In these lessons, we'll investigate and understand the importance of the natural water cycle, the processes involved and how it affects our lives. Students will gain an understanding of the importance of water to support life on earth.

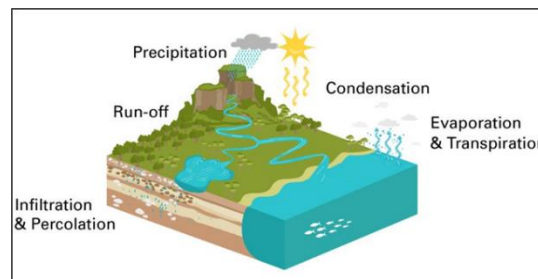
Teaching and learning

Introduction

Ask students **where they think water comes from** ... when they answer, ask where that water comes from.

For example,

- if they say the tap, ask how it gets to the tap?
- if they say the dam, then where does that water come from?





Explain that this process is called the **Natural Water Cycle**. Go to our Natural water cycle webpage for more information.

Did you know that water is continuously recycled over and over again from the Earth to the atmosphere and back again?

Resources

Sydney Water Resources

[Natural water cycle](#)

<p>Body</p> <p>Write up a glossary of terms. Instruct to write down any key words they hear.</p> <p>Watch the Natural water cycle video - <i>If needed watch a 2nd time and pause in key places.</i></p> <p>Students prepare a drama, song, or poster to demonstrate their knowledge. This can work well as a group work activity. Why not try a poem or rap?</p> <p>This activity requires creative thinking to explain the various physical processes involved in the water cycle - <i>If needed watch video another time and pause in key places.</i></p>	<p>Sydney Water Resources</p> <p>Natural water cycle</p> <p>Glossary</p>
<p>Extension</p> <ol style="list-style-type: none"> 1. An extension project idea would be to use Sydney Water's Website to map out the flow of water to your school or suburb, so the students know exactly how Sydney Water provides safe, clean drinking water right to your tap! 2. Do an investigation on the availability of water in other countries and how they deal with water shortages. One example is Singapore. How does this tiny island cope with the pressures of water security? To learn more, visit PUB Singapore at https://www.pub.gov.sg/ 	<p>Sydney Water Resources</p> <p>Water Network</p>
<p>Assessment activity</p> <p>Students present their work to the rest of the group as a demonstration or display.</p> <p>Evaluation questions</p> <ul style="list-style-type: none"> • Can human's impact on the water cycle? • Explain how the water cycle is continuous? • What is the importance of the sun in the water cycle? <p>Reflection activity - Students finish these statements</p> <ol style="list-style-type: none"> 1. I used to think(at the start of these lessons) 2. But now I think(at the end of these lessons) 	<p>Sydney Water resources</p> <p>Urban water management</p> <p>Find out more</p> <ul style="list-style-type: none"> • sydneywater.com.au/education • facebook.com/SydneyWater  • instagram.com/sydneywater  • twitter.com/SydneyWaterNews 