

# **Stage 3 - Overview**

In this lesson find out how water works within the Snowy Scheme to generate clean, renewable energy. Use knowledge to pose questions, gather data, solve problems and investigate ideas. Extend this topic with other activities across English, digital technology and research skills.

Learning area	Content descriptions
Science ACCHE 098	Science as a human endeavour Nature and development of science Science involves testing predictions by gathering data and using evidence
	to develop explanations of events and phenomena and reflects historical and cultural contributions.
ACSHE100	Use and influence of science
	Scientific knowledge is used to solve problems and inform personal and community decisions.
ACSIS232	Science inquiry skills
	Questioning and predicting
	With guidance, pose clarifying questions and make predictions about scientific investigations
Maths ACMMG138	Measurement and geometry
	Using units of measurement
	Connect volume and capacity and their units of measurement
HASS HASS	Inquiry and skills
	Analysing, evaluating & reflecting and communicating

The subject of sustainability is a foundation for all learning areas and key concepts - sustainability - cross-curriculum priority (ACARA)

### Resources

Fact sheet - Water overview

Activity sheet - Water overview comprehension + answer sheet (download prior to printing)

Fact sheet - Snowy Hydro

Website - Snowy Hydro and search 'water'

Activity sheet - Journey of a water drop

Please download prior to printing

Activity sheet - Tunnel maze

Activity sheet - Water Audit

## Lesson ideas and activities

#### Introduction

Brainstorm the following questions with your class. Has anyone heard of the Snowy Mountains Scheme and Snowy Hydro? Take a poll by counting hands up. Depending on poll results, ask why was the Scheme built? What does it do?

#### Lesson

Provide your students with the, 'Snowy Hydro', fact sheet (either online or printed) and take your students through the information.

- Start with the explanation of the Snowy Hydro logo In addition, ask you students what does 'Hydro' mean? Hydro means, 'water' originating from the Greek language. Ask them to crack the code of colour and meaning
- Guide your students through the 'water' fact sheet information, placing it in the context of the Snowy Scheme. Visit the webpage to assist with further understanding
- Activity sheet Water overview comprehension This worksheet correlates directly with the water fact sheet. It is recommended they be used together
- Before writing, discuss the work sheet either in pairs, or as a class. This activity can be approached collaboratively, or individually
- Activity sheet Tunnel water maze provide one sheet for each student. This activity is based around the tunnel system and water travelling from the reservoir to the power station
- Activity sheet Water audit Collate water usage at school on the sheet provided. Work through the questions either in groups, or individually
- Research water saving ideas. How can I apply these ideas to school? Arrange class data into graphs. Discuss innovative ideas and place them on the board for group research to broaden the ideas
- Reflect on the power of water within the Snowy Scheme and the generation of hydro power

#### **Extension ideas**

#### HASS

- Activity sheet Water overview comprehension Use this sheet as a quiz to assess how much students have taken in and check answers against the water fact sheet.
- Activity sheet Tunnel water maze Ask the students to design their own tunnel maze to let the water flow from the reservoir through the tunnel system to the power station.
- Challenge Link up more than one power station to generate clean, renewable clean energy

#### **English - creative writing**

• Activity sheet - Journey of a water drop - Build on this activity over several sessions to complete a published piece of work - digital technology skills. For students that require more structure, brainstorm starting points for the water drop and place ideas on the board. Collect all student's work, compile into a class book.