

Stage 4 Geography - Water in the world

Teacher lesson plan – School water audit

Sydney
WATER

Key inquiry questions

- How many water devices does the school have and how efficient they are?
- Can we help produce a list of actions that can improve water conservation at school and at home?

Time: 5 lessons
(45-60 min each)

Syllabus outcomes

GE4-5 Discusses management of places and environments for their sustainability.
GE4-7 Acquires and processes geographical information by selecting and using geographical tools for inquiry.

Syllabus content

Water in the World – The value of water

- Investigate the economic, cultural, spiritual and aesthetic values of water for people:
 - description of the ways water is used by people.

Water in the World - Water scarcity and water management

- Investigate the nature of water scarcity and ways of overcoming it.

Geographical concepts, skills and tools

Sustainability - the capacity of the environment to continue to support our lives and the lives of other living creatures into the future eg pressures on the Earth's water resources and landscapes; the need to manage environments for a long-term future; sustainable management approaches.

Processing geographical information - apply geographical concepts to draw conclusions based on the analysis of the data and information collected.

Communicating geographical information - present findings, arguments and ideas in a range of communication forms selected to suit a particular audience and purpose; using geographical terminology and digital technologies as appropriate

Fieldwork - observing, measuring, collecting and recording data, developing and conducting surveys and interviews.

Sydney Water aim for activity

One of our objectives is to protect the environment. We do this by producing safe clean drinking water and taking wastewater away for treatment. Sydney Water supports school water audit which aim to improve water conservation and efficiency at school and at home.

Teaching and learning

Lesson one - introduction

Q. How does water make us feel? Why do we like having water around us?

A. Water is important for hydration, health, hygiene, wellness and liveability. See our [Liveable cities](#) webpage for more information.

Q. How do we use water in our everyday lives?

A. We often take water availability for granted but we use it all day every day. Its interesting to see how little we use for drinking, even though all water coming to our homes is treated at a water filtration plant to a high standard for drinking. See our [Water use and conservation](#) webpage for more information.

Resources

Sydney Water resources

[Liveable cities](#)

[Water use and conservation](#)

[Love water](#)

[Water audit](#)

<p>Q. If we like water because it makes us feel good and we need it for our wellbeing, why do we let so much go down the drain?</p> <p>A. This question is aimed at helping students establish a value for water and set the scene for investigating the use and care of water in the school environment (and extension – at home).</p> <p>Delivery ideas</p> <ul style="list-style-type: none"> • With answers to the above questions in mind, ask students to think about why we should identify the ways that we use water at our school and if we are using water efficiency. • Introduce the idea of a water audit and explain what it is and how the class will do the water audit. See our Water audit webpage for full instructions. 	
<p>Lesson two – setting up to do a water audit</p> <p>Follow the instruction on our Water audit webpage.</p> <p>You may like to start your audit with a mapping exercise. Explore the school area using ‘Google My maps’, add measurements, annotations and sections/layers and share with group members.</p>	<p>Sydney Water resources</p> <p>Water audit</p>
<p>Lesson three - doing a water audit</p> <p>Follow the instructions and download the resources available on our Water audit webpage.</p> <p>You may also like to include a stormwater audit as part of your whole school investigation. See our Stormwater webpage for more information.</p>	<p>Sydney Water resources</p> <p>Stormwater</p>
<p>Lesson four - interpreting the results</p> <p>Follow the instruction on our Water audit webpage.</p> <p>You may like to address numeracy and computer literacy skills by having students take their results and create graphs and other visual representations to include in their reporting.</p>	<p>Sydney Water resources</p> <p>Water audit</p>
<p>Lesson five – report and recommendation</p> <ol style="list-style-type: none"> 1. Have the students produce a list of actions that can improve water conservation at school and at home. 2. Create a school water audit report to present to school principal. It could be used to to raise water awareness, or maybe to support grants, funding and incentives. 3. Evaluation <ul style="list-style-type: none"> • What did the students learn from this activity? • What can they do with this information and the new skills they have? <p>Extension/homework</p> <p>Do a water audit at home. See our Water use and conservation page for more information.</p>	<p>Sydney Water resources</p> <p>Water use & conservation</p>

<p>Conclusion</p> <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>Find out more</p> <ul style="list-style-type: none">• sydneywater.com.au/education• facebook.com/SydneyWater • instagram.com/sydneywater • twitter.com/SydneyWaterNews 
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