

**WATER CONSERVATION**

# Water is Important

		QUALITY CRITERIA				
SCIENCE		Insufficient evidence to demonstrate working towards the achievement standard	Working towards the achievement standard	Achieving and demonstrating the achievement standard	Working beyond the achievement standard	Extending with depth beyond the achievement standard
<b>SCIENCE UNDERSTANDING: Science as a human endeavour</b>						
Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives (VCSSU073)	<ul style="list-style-type: none"> <li>considering how decisions are made to grow particular plants and crops depending on environmental conditions</li> </ul> Optional Activity: WS 4	Insufficient evidence	<b>With guidance, discuss and consider</b> why different crops or plants are grown to suit the environment.	<b>Discuss and consider</b> why different crops or plants are grown to suit the environment.	<b>Confidently discuss and consider</b> why different crops or plants are grown to suit the environment.	<b>Confidently discuss and explain</b> why different crops or plants are grown to suit the environment.
<b>SCIENCE INQUIRY SKILLS: Planning and conducting</b>						
With guidance, plan appropriate investigation types to answer questions or solve problems and use equipment, technologies and materials safely, identifying potential risks (VCSIS083)	<ul style="list-style-type: none"> <li>experiencing a range of ways of investigating questions, including experimental testing, creating models, internet research, field observations, simulations and trial and error methods</li> </ul> Optional Activity: WS 4	Insufficient evidence	<b>With guidance, research</b> online or <b>observe</b> in the field why different crops or plants are grown to suit the environment.	<b>Research</b> online or <b>observe</b> in the field why different crops or plants are grown to suit the environment.	<b>Research</b> online or <b>observe</b> in the field why different crops or plants are grown to suit the environment, and <b>discuss</b> findings.	<b>Research</b> online or <b>observe</b> in the field why different crops or plants are grown to suit the environment, and <b>discuss</b> findings using scientific language.
<b>SCIENCE INQUIRY SKILLS: Recording and processing</b>						
Construct and use a range of representations, including tables and graphs, to record, represent and describe observations, patterns or relationships in data (VCSIS085)	<ul style="list-style-type: none"> <li>using familiar units such as grams, seconds and metres and developing the use of standard multipliers such as kilometres and millimetres</li> </ul> PS 4 WS 3, 9, 10	Insufficient evidence	<b>With assistance, use</b> familiar units of measurement and <b>apply</b> to real-world situations.	<b>Use</b> familiar units of measurement and <b>apply</b> to real-world situations. <b>Calculate</b> volume and <b>solve</b> real-world problems using multiplication.	<b>Use</b> familiar units of measurement and <b>apply</b> to real-world situations. <b>Accurately calculate</b> volume and <b>solve</b> real-world problems using multiplication.	<b>Use</b> familiar units of measurement and <b>apply</b> to real-world situations. <b>Accurately calculate</b> volume and <b>solve</b> real-world problems using multiplication. <b>Suggest</b> other problems that could be solved this way.

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MATHEMATICS		Insufficient evidence to demonstrate working towards the achievement standard	Working towards the achievement standard	Achieving and demonstrating the achievement standard	Working beyond the achievement standard	Extending with depth beyond the achievement standard
<b>LEVEL 5: NUMBER</b>						
Recognise that 100% represents the complete whole and use percentages to describe, represent and compare relative size; connect familiar percentages to their decimal and fraction equivalents (VC2M5N04)	<ul style="list-style-type: none"> <li>percentages (such as 30% and 70%) combine to make 100% WS 3</li> </ul>	Insufficient evidence	<b>With assistance, use</b> percentages to <b>create</b> a pie chart and <b>understand</b> percentages combine to make 100%.	<b>Use</b> percentages to <b>create</b> a pie chart and <b>understand</b> percentages combine to make 100%.	<b>Confidently use</b> percentages to <b>create</b> a pie chart and <b>understand</b> percentages combine to make 100%.	<b>Confidently use</b> percentages to <b>create</b> a pie chart and <b>explain</b> how percentages combine to make 100%.
Solve problems involving multiplication of larger numbers by one- or two-digit numbers, choosing efficient mental and written calculation strategies and using digital tools where appropriate; check the reasonableness of answers (VC2M5N06)	<ul style="list-style-type: none"> <li>solving multiplication problems such as <math>253 \times 4</math> using a doubling strategy, for example, <math>2 \times 253 = 506</math> and <math>2 \times 506 = 1012</math> WS 5</li> </ul>	Insufficient evidence	<b>With guidance, respond</b> to a familiar situation and <b>employ</b> a mathematical strategy to <b>solve</b> a problem efficiently.	<b>Respond</b> to a familiar situation and <b>employ</b> a mathematical strategy to <b>solve</b> a problem efficiently.	<b>Respond</b> to a familiar situation and <b>describe</b> a mathematical strategy to <b>confidently solve</b> a problem efficiently.	<b>Respond</b> to a familiar situation and <b>explain</b> a mathematical strategy to <b>confidently solve</b> a problem efficiently.
	<ul style="list-style-type: none"> <li>solving multiplication problems like <math>15 \times 16</math> by thinking of factors of both numbers, <math>15 = 3 \times 5</math>, <math>16 = 2 \times 8</math>, and rearranging the factors to make the calculation easier, <math>5 \times 2 = 10</math>, <math>3 \times 8 = 24</math> and <math>10 \times 24 = 240</math> WS 10</li> </ul>	Insufficient evidence	<b>With assistance, use</b> one- and two-digit numbers to solve worded multiplication problems.	<b>Use</b> one- and two-digit numbers to solve worded multiplication problems.	<b>Confidently use</b> one- and two-digit numbers to solve worded multiplication problems.	<b>Confidently use</b> one- and two-digit numbers to solve worded multiplication problems and <b>describe</b> any patterns in the numbers.
Use mathematical modelling to solve practical problems involving additive and multiplicative situations, including simple financial planning contexts; formulate the problems, choosing operations and efficient mental and written calculation strategies, and using digital tools where appropriate; interpret and communicate solutions in terms of the situation (VC2M5N09)	<ul style="list-style-type: none"> <li>modelling financial situations such as creating financial plans; for example, creating a budget for a class fundraising event, using a spreadsheet to tabulate data and perform calculations WS 5–11</li> </ul>	Insufficient evidence	<b>With guidance, use</b> mathematical modelling to <b>solve</b> a problem efficiently.	<b>With guidance, use</b> mathematical modelling to make informed decisions about how to <b>solve</b> a problem efficiently.	<b>Use</b> mathematical modelling to make informed decisions about how to <b>solve</b> a problem efficiently.	<b>Use</b> mathematical modelling to <b>explain</b> how to make informed decisions about how to <b>solve</b> a problem efficiently.
<b>LEVEL 6: ALGEBRA</b>						
Find unknown values in numerical equations involving brackets and combinations of arithmetic operations, using the properties of numbers and operations (VC2M6A02)	<ul style="list-style-type: none"> <li>using brackets and the order of operations to write number sentences and appreciating the need for an agreed set of rules to complete multiple operations within the same number sentence; for example, for <math>40 \div 2 \times (4 + 6) = \square</math>, you solve what is in the brackets first then complete the number sentence from left to right as there is no hierarchy between division and multiplication WS 5–11</li> </ul>	Insufficient evidence	<b>With assistance, solve</b> arithmetic problems involving all four operations with natural numbers and <b>connect</b> decimal representation to units of measurement.	<b>Solve</b> arithmetic problems involving all four operations with natural numbers and <b>connect</b> decimal representation to units of measurement.	<b>Confidently solve</b> arithmetic problems involving all four operations with natural numbers and <b>connect</b> decimal representation to units of measurement.	<b>Confidently solve</b> arithmetic problems involving all four operations with natural numbers and <b>confidently connect</b> decimal representation to units of measurement.

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ECONOMICS AND BUSINESS	Insufficient evidence to demonstrate working towards the achievement standard	Working towards the achievement standard	Achieving and demonstrating the achievement standard	Working beyond the achievement standard	Extending with depth beyond the achievement standard
<b>Resource allocation and making choices</b>					
<ul style="list-style-type: none"> <li>Describe the difference between needs and wants and explain why choices need to be made PS 4–5</li> </ul>	Insufficient evidence	<b>With guidance, identify</b> water as a limited resource and <b>describe</b> the difference between sustainable water use and wasteful water use.	<b>Identify</b> water as a limited resource and <b>describe</b> the difference between sustainable water use and wasteful water use.	<b>Identify</b> water as a limited resource and <b>explain</b> the difference between sustainable water use and wasteful water use.	<b>Identify</b> water as a limited resource and <b>explain</b> , using scientific language, the difference between sustainable water use and wasteful water use.
<ul style="list-style-type: none"> <li>Explore the concept of opportunity cost and explain how it involves choices about the alternative use of limited resources and the need to consider trade-offs WS 5–10</li> </ul>	Insufficient evidence	<b>With guidance, explore</b> the cost of a family's water use, and <b>describe</b> its impact on the broader community.	<b>Explore</b> the cost of a family's water use, and <b>describe</b> its impact on the broader community.	<b>Explore</b> the cost of a family's water use, and <b>describe</b> its impact on the broader community. <b>Identify</b> the effects and potential consequences of these actions.	<b>Evaluate</b> the cost and benefits of a family's water use, and <b>describe</b> its impact on the broader community. <b>Identify</b> the effects and potential consequences of these actions.
<ul style="list-style-type: none"> <li>Identify types of resources (natural, human, capital) and explore the ways societies use them in order to satisfy the needs and wants of present and future generations PS 4–5</li> </ul>	Insufficient evidence	<b>With guidance, identify</b> water as a natural resource and <b>describe</b> the way we use it to satisfy the needs and wants of now and in the future.	<b>Identify</b> water as a natural resource and <b>describe</b> the way we use it to satisfy the needs and wants of now and in the future.	<b>Identify</b> water as a natural resource and <b>describe</b> why and how we use it to satisfy the needs and wants of now and in the future.	<b>Identify</b> water as a natural resource and <b>explain</b> why and how we use it to satisfy the needs and wants of now and in the future.
<b>Consumer and financial literacy</b>					
<ul style="list-style-type: none"> <li>Identify influences on consumer choices and explore strategies that can be used to help make informed personal consumer and financial choices WS 5–10</li> </ul>	Insufficient evidence	<b>With guidance, identify</b> ways government can influence our choices about using water. <b>Describe</b> ways we can make informed choices to reduce waste.	<b>Identify</b> ways government can influence our choices about using water. <b>Describe</b> ways we can make informed choices to reduce waste.	<b>Confidently identify</b> ways government can influence our choices about using water. <b>Describe</b> ways we can make informed choices to reduce waste.	<b>Confidently identify</b> ways government can influence our choices about using water. <b>Explain</b> ways we can make informed choices to reduce waste.
<ul style="list-style-type: none"> <li>Consider the effect that consumer and financial decisions of individuals may have on themselves, their family, the broader community and the natural, economic and business environment WS 5–10</li> </ul>	Insufficient evidence	<b>With guidance, consider and begin to recognise</b> the role of household appliances in conserving water and reducing waste.	<b>Consider and recognise</b> the role of household appliances in conserving water and reducing waste.	<b>Consider and recognise</b> the role of household appliances in conserving water and reducing waste, and can provide <b>examples</b> .	<b>Consider and confidently recognise</b> the role of household appliances in conserving water and reducing waste, and can provide further <b>examples</b> .

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VISUAL ARTS	Insufficient evidence to demonstrate working towards the achievement standard	Working towards the achievement standard	Achieving and demonstrating the achievement standard	Working beyond the achievement standard	Extending with depth beyond the achievement standard
<b>Present and perform</b>					
<ul style="list-style-type: none"> <li>Create and display art work considering how ideas can be expressed to an audience</li> </ul> PS 4	Insufficient evidence	<b>With guidance, create and display</b> a poster appropriate for younger students, which communicates the concept of saving water.	<b>Create and display</b> a poster appropriate for younger students that <b>describes</b> and <b>explains</b> the concept of saving water.	<b>Create and display</b> a poster appropriate for younger students that <b>describes</b> and <b>explains</b> the concept of saving water. Students will show evidence of <b>planning</b> their artwork.	<b>Create and display</b> a poster appropriate for younger students that <b>describes</b> and <b>explains</b> the concept of saving water. Students will show evidence of <b>planning</b> and <b>researching</b> their artwork.

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ETHICAL CAPABILITY	Insufficient evidence to demonstrate working towards the achievement standard	Working towards the achievement standard	Achieving and demonstrating the achievement standard	Working beyond the achievement standard	Extending with depth beyond the achievement standard
<b>Decision making and actions</b>					
<ul style="list-style-type: none"> <li>Discuss the role and significance of conscience and reasoning in ethical decision-making</li> </ul> PS 5	Insufficient evidence	<b>With assistance, discuss and identify</b> how the way we use water has consequences for a whole community.	<b>Discuss and identify</b> how the way we use water has consequences for a whole community. <b>Explain</b> the role of ethical decision-making.	<b>Discuss and identify</b> how the way we use water has consequences for a whole community. <b>Analyse</b> the value of having rules, and <b>explain</b> the role of ethical decision-making.	<b>Discuss and identify</b> how the way we use water has consequences for a whole community. <b>Analyse</b> the value of having rules, and <b>explain</b> the significance of ethical decision-making.

## FEEDBACK

### VIC Curriculum

#### Science

VCSSU073, VCSIS083, VCSIS085

#### Mathematics

VC2M5N04, VC2M5N06, VC2M5N09, VC2M6A02

#### Economics and Business

Resource allocation and making choices  
Consumer and financial literacy

#### Visual Arts

Present and perform

#### Ethical Capability

Decision making and actions