



## SAMPLE TEACHING AND LEARNING OUTLINE

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**SCIENCE**  
**BIOLOGICAL SCIENCES**  
**YEAR 3**

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## **Disclaimer**

Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their teaching and learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the learning area syllabus

## Science understanding

Living things can be grouped on the basis of observable features and can be distinguished from non-living things

Week	Syllabus content	Lesson content	Suggested resources
1–2	<p><b>PROCESSING AND ANALYSING DATA AND INFORMATION</b></p> <p>Use a range of methods, including tables and simple column graphs to represent data and to identify patterns and trend</p>	<p><b>Living, non-living and once living</b></p> <ul style="list-style-type: none"> <li>Review of living and non-living and introduce once living</li> <li>Tally and graph things in the classroom that fit into these categories</li> <li>Negotiate the observable features of living and non-living things</li> <li>Discuss patterns and trends identified</li> </ul>	<p>Living and non-living things (teacher background, various units of work and lesson resources)</p> <p><a href="http://scienceweb.asta.edu.au/years-f-2/unit1/overview/yrf2-unit1-overview.html">http://scienceweb.asta.edu.au/years-f-2/unit1/overview/yrf2-unit1-overview.html</a></p> <p>Living or Non-Living Things video</p> <p><a href="https://www.youtube.com/watch?v=PZ2FI50oecs&amp;feature=related">https://www.youtube.com/watch?v=PZ2FI50oecs&amp;feature=related</a></p>
3–5	<p><b>QUESTIONING AND PREDICTING</b></p> <p>With guidance, identify questions in familiar contexts that can be investigated scientifically and make predictions based on prior knowledge</p> <p><b>PLANNING AND CONDUCTING</b></p> <p>With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment</p> <p>Consider the elements of fair tests and use formal measurements and digital technologies as appropriate, to make and record observations accurately</p>	<p><b>Exploring seeds</b></p> <ul style="list-style-type: none"> <li>Is a seed living, non-living or once living?</li> <li>Develop criteria of living and non-living</li> <li>Labelling parts of a seed</li> <li>Stages of seed germination</li> <li>Different seeds, appearance, texture, colour, casings</li> <li>Observe fruit and vegetable seeds</li> <li>Sprouting simple seeds such as mung beans and alfalfa, observe growth and development</li> </ul> <p><b>INVESTIGATION IDEA</b></p> <ul style="list-style-type: none"> <li>Plant seed – what will we change? Water and no water</li> <li>Develop investigation and make appropriate predictions</li> <li>Collect and record information, using a range of methods and digital technologies is available</li> </ul>	<p>All about seeds</p> <p><a href="http://seeds.sciencenetlinks.com/seeds/">http://seeds.sciencenetlinks.com/seeds/</a></p> <p>Germination and Reproduction of Plants (information and video explanation)</p> <p><a href="http://seeds.sciencenetlinks.com/seeds/">http://seeds.sciencenetlinks.com/seeds/</a></p> <p>Germination time-lapse video of different seeds</p> <p><a href="https://vimeo.com/30074251">https://vimeo.com/30074251</a></p> <p>Bitesize Plants ( information page)</p> <p><a href="http://www.bbc.co.uk/bitesize/ks2/science/living_things/plant_s/read/1/">http://www.bbc.co.uk/bitesize/ks2/science/living_things/plant_s/read/1/</a></p> <p>Investigation planners</p> <p><a href="http://www.primaryresources.co.uk/science/science1.htm">http://www.primaryresources.co.uk/science/science1.htm</a></p>

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3–5	<b>PROCESSING AND ANALYSING DATA AND INFORMATION</b> Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends  Compare results with predictions, suggesting possible reasons for findings	<ul style="list-style-type: none"><li>• Discuss fair test and question how this was a fair test and why</li><li>• Label basic plant structure as it grows</li><li>• Compare results and predictions and make suggestions for findings</li></ul>	Science Buddies (fair test information for teachers) <a href="http://www.sciencebuddies.org/science-fair-projects/project_experiment_fair_test.shtml">http://www.sciencebuddies.org/science-fair-projects/project_experiment_fair_test.shtml</a>
	<b>QUESTIONING AND PREDICTING</b> With guidance, identify questions in familiar contexts that can be investigated scientifically and make predictions based on prior knowledge  <b>PLANNING AND CONDUCTING</b> With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment  6–8 Consider the elements of fair tests and use formal measurements and digital technologies as appropriate, to make and record observations accurately	<b>Do plants move?</b> <ul style="list-style-type: none"><li>• Predictions about plants, do they move or not? Are they living or not?</li><li>• Discussions about 'movement' being a characteristic of living things</li></ul> <b>INVESTIGATION IDEA</b> <ul style="list-style-type: none"><li>• Move one seedling into a dark cupboard with a stream of light to encourage plant growth towards opening</li><li>• Plan and conduct investigation</li></ul>	Germination time-lapse video of different seeds <a href="https://vimeo.com/30074251">https://vimeo.com/30074251</a>  Primary Resources (varied resources) <a href="http://www.primaryresources.co.uk/science/science2c.htm">http://www.primaryresources.co.uk/science/science2c.htm</a>

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Week	Syllabus content	Lesson content	Suggested resources
9–10	<b>PROCESSING AND ANALYSING DATA AND INFORMATION</b>  Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends  Compare results with predictions, suggesting possible reasons for findings		
	<b>PROCESSING AND ANALYSING DATA AND INFORMATION</b>  Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends  Compare results with predictions, suggesting possible reasons for findings  <b>SCIENCE AS A HUMAN ENDEAVOUR NATURE AND DEVELOPMENT OF SCIENCE</b>  Science involves making predictions and describing patterns and relationships  <b>USE AND INFLUENCE OF SCIENCE</b>  Science knowledge helps people to understand the effect of their actions	<b>How do different animals move?</b> <ul style="list-style-type: none"><li>• Identify different observable features of animals; coverings, wings, fins, tails</li><li>• How do these features help with movement, places they may live and special things they can do?</li><li>• Consider the actions of people and the loss of animal habitat</li></ul>	Living things in their environment (varied resources and ideas)  <a href="http://www.primaryresources.co.uk/science/science2e.htm">http://www.primaryresources.co.uk/science/science2e.htm</a>  Adaptation to climate   Australia (Planet Doc documentary)  <a href="https://www.youtube.com/watch?v=xRC1rnnFnPE">https://www.youtube.com/watch?v=xRC1rnnFnPE</a>  Wildlife Journal Junior (information page)  <a href="http://www.nhptv.org/wild/habitat.asp">http://www.nhptv.org/wild/habitat.asp</a>