

# Australian Curriculum: Science — Year 5

## Year level plan-2023

CURRICULUM	SEMESTER 1		SEMESTER 2	
	Term 1	Term 2	Term 3	Term 4
Unit name	Our place in the solar system	Survival in the Australian environment	Matter matters	Now you see it
Unit description	<p>In this unit, students will describe the key features of our solar system including planets and stars. They will discuss scientific developments that have affected people's lives and describe details of contributions to our knowledge of the solar system from a range of people. With guidance, students will pose questions, plan and conduct investigations to answer questions and solve problems. They will decide on variables to change and measure to conduct fair tests. Students will communicate their ideas in a variety of multimodal texts including recording in data sheets and as a report for popular media.</p>	<p>In this unit students analyse the structural features and behavioural adaptations that assist living things to survive in their environment. They understand that science involves using evidence and comparing data to develop explanations. Students investigate the relationships between the factors that influence how plants and animals survive in their environments, including those that survive in extreme environments, and use this knowledge to design creatures with adaptations that are suitable for survival in prescribed environments.</p>	<p>In this unit, Matter matters, students will broaden their classification of matter to include gases and begin to see how matter structures the world around them. They will understand that solids, liquids and gases have some shared and some distinct observable properties and can behave in different ways. Students will pose questions, make predictions and plan investigation methods into the observable properties and behaviours of solids, liquids and gases. They will represent data and observations in tables and graphs. They will identify patterns and relationships in data and suggest improvements to methods to improve fairness and accuracy. Students will understand that scientific understandings, discoveries and inventions are used to inform decision making and solve or prevent problems.</p>	<p>In this unit students will investigate the properties of light and the formation of shadows. They will investigate reflection angles, how refraction affects our perceptions of an object's location, how filters absorb light and affect how we perceive the colour of objects, and the relationship between light source distance and shadow height. They will plan investigations including posing questions, making predictions, and following and developing methods. They will analyse and represent data and communicate findings using a range of text types, including reports and labelled and ray diagrams. They will explore the role of light in everyday objects and devices and consider how improved technology has changed devices and affected peoples' lives.</p>

ASSESSMENT		SEMESTER 1		SEMESTER 2	
		Exploring the solar system- AT1	Creating a creature- AT3	Investigating evaporation & explaining solids. Liquids and gases-AT2	Exploring the transfer of light- AT4
<b>Range and balance of summative assessment conventions</b>	<b>Technique</b>	Investigation	Investigation	Experimental investigation	Experimental investigation
	<b>Text types</b>	Report	Information report	Scientific report	Scientific report
	<b>Mode</b>	Poster/multimodal presentation	Written	Poster/multimodal presentation	Written
	<b>Conditions</b>	<ul style="list-style-type: none"> <li>Record all information on the Exploring the solar system: Student resource sheet</li> <li>Complete individually</li> <li>Class time- 3 sessions</li> </ul>	<ul style="list-style-type: none"> <li>Investigation conducted in groups; questions answers independently; supervised;</li> <li>4 sessions</li> </ul>	<ul style="list-style-type: none"> <li>Supervised class time</li> <li>Over 4 sessions</li> <li>Completed individually</li> </ul>	<ul style="list-style-type: none"> <li>Supervised class time</li> <li>Over 3 sessions</li> <li>Completed individually</li> </ul>
<b>Aspects of the achievement standard</b>					
Classify substances according to their observable properties and behaviours			✓	✓	
Explain everyday phenomena associated with the transfer of light					✓
Describe the key features of our solar system		✓			
Analyse how the form of living things enables them to function in their environments			✓		
Discuss how scientific developments have affected people's lives, help us solve problems and how science knowledge develops from many people's contributions		✓		✓	✓
Follow instructions to pose questions for investigation		✓			✓
Predict the effect of changing variables when planning an investigation				✓	
Use equipment in ways that are safe and improve the accuracy of their observations				✓	
Construct tables and graphs to organise data and identify patterns in the data				✓	
Compare patterns in their data with predictions when suggesting explanations				✓	
Describe ways to improve the fairness of their investigations, and communicate their findings using multimodal texts			✓	✓	✓

Term 1 Term 2 Term 3 Term 4 ✓ indicates opportunities that summative assessments provide for students to demonstrate evidence against aspects of the achievement standard