

Australian Curriculum: 2024 Science — Year 6



CURRICULUM	SEMESTER 1		SEMESTER 2	
	Term 1	Term 2	Term 3	Term 4
Unit name	Unit 1: Making changes	Unit 2: Energy and electricity integrated with technology	Unit 3: Our changing world	Unit 4: Life on Earth
Unit description	Students investigate changes that can be made to materials and how these changes are classified as reversible or irreversible. They plan investigation methods using fair testing to answer questions. Students identify and assess risks, make observations, accurately record data and develop explanations. They suggest improvements, which can be made to their methods to improve investigations. Students explore the effects of reversible and irreversible changes in everyday materials and how this scientific understanding is used to solve problems that directly affect people's lives.	Students investigate electrical circuits as a means of transferring and transforming electricity. They design and construct electrical circuits to make observations, develop explanations and perform specific tasks, using materials and equipment safely. Students explore how energy from a variety of sources can be used to generate electricity and identify energy transformations associated with different methods of electricity production. They identify where scientific understanding and discoveries related to the production and use of electricity have affected people's lives and evaluate personal and community decisions related to use of different energy sources and their sustainability.	Students explore how sudden geological changes and extreme weather events can affect Earth's surface. They consider the effects of earthquakes and volcanoes on Earth's surface and how communities are affected by these events. They gather, record and interpret data relating to weather and weather events. Students explore the ways in which scientists are assisted by the observations of people from other cultures, including those throughout Asia. Students construct representations of cyclones and evaluate community and personal decisions related to preparation for natural disasters. They investigate how predictions regarding the course of tropical cyclones can be improved by gathering data.	Students explore the environmental conditions that affect the growth and survival of living things. They use simulations to plan and conduct fair tests and analyse the results of these tests. Students pose questions, plan and conduct investigations into the environmental factors that affect the growth of living things. They gather, record and interpret observations relating to their investigations. Students consider human impact on the environment and how science knowledge can be used to inform personal and community decisions. They recommend actions to develop environments for native plants and animals.
General capabilities				
Cross-curriculum priorities				

ASSESSMENT	SEMESTER 1		SEMESTER 2		
	Term 1	Term 2	Term 3	Term 4	
Range and balance of summative assessment conventions	Assessment	Unit 1: Testing change: Reversible or irreversible?	Integrated Design Technology Unit 2 and Science Unit 2	Unit 3: Explaining changes to the surface of Earth	Unit 4: Investigating mouldy bread
	Technique	Experimental investigation	Investigation	Test	Experimental investigation
	Type of text	Record of investigations	Collection of work	Short response	Record of investigation
	Mode	Written	Multimodal	Written	Written
Aspects of the achievement standard					
compare and classify different types of observable changes to materials					
analyse requirements for the transfer of electricity and describe how energy can be transformed from one form to another when generating electricity					
explain how natural events cause rapid change to Earth's surface					
describe and predict the effect of environmental changes on individual living things					
explain how scientific knowledge helps us to solve problems and inform decisions and identify historical and cultural contributions					
follow procedures to develop investigable questions and design investigations into simple cause-and-effect relationships					
identify variables to be changed and measured and describe potential safety risks when planning methods					
collect, organise and interpret their data, identifying where improvements to their methods or research could improve the data					
describe and analyse relationships in data using appropriate representations and construct multimodal texts to communicate ideas, methods and findings					

Shaded cells indicate opportunities that summative assessments provide for students to demonstrate evidence against all aspects of the achievement standard

