

Stile



	Biology				Chemistry	Earth and Space				Physics	General Science	Templates					
	Classification	Kingdoms	Food Chains and Food Webs	Invasive Species	Mixtures	Separation Techniques	Our Place In Space	Tides	Resources	The Water Cycle	Forces	Simple Machines	Magnetism	Introduction to Science	Science News	Engineering Challenges	Science Investigations

Year 7

Science as a human endeavour

Scientific knowledge has changed people's understanding of the world and is refined as new evidence becomes available	ACSHE119	✓	✓	✓				✓				✓	✓	✓	✓		
Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures	ACSHE223				✓	✓	✓		✓	✓	✓			✓	✓		
Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations	ACSHE120	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity	ACSHE121						✓				✓			✓	✓		

Science inquiry skills

Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge	AC SIS124	✓			✓		✓		✓	✓	✓	✓		✓			✓
Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed	AC SIS125				✓	✓	✓		✓		✓	✓	✓	✓			✓

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Biology				Chemistry	Earth and Space				Physics			General Science		Templates	
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Classification	Kingdoms	Food Chains and Food Webs	Invasive Species	Mixtures	Separation Techniques	Our Place In Space	Tides	Resources	The Water Cycle	Forces	Simple Machines	Magnetism	Introduction to Science	Science News	Engineering Challenges	Science Investigations
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Interactions between organisms, including the effects of human activities can be represented by food chains and food webs
ACSSU112

		✓	✓													
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Chemistry

Science understanding

Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques
ACSSU113

				✓	✓											
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Earth and Space

Science understanding

Predictable phenomena on Earth, including seasons and eclipses, are caused by the relative positions of the sun, Earth and the moon
ACSSU115

						✓	✓									
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Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable
ACSSU116

								✓	✓							
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Physics

Science understanding

Stile



Biology				Chemistry	Earth and Space				Physics			General Science		Templates		
<u>Classification</u>	<u>Kingdoms</u>	<u>Food Chains and Food Webs</u>	<u>Invasive Species</u>	<u>Mixtures</u>	<u>Separation Techniques</u>	<u>Our Place In Space</u>	<u>Tides</u>	<u>Resources</u>	<u>The Water Cycle</u>	<u>Forces</u>	<u>Simple Machines</u>	<u>Magnetism</u>	<u>Introduction to Science</u>	<u>Science News</u>	<u>Engineering Challenges</u>	<u>Science Investigations</u>
										✓	✓	✓				

Change to an object's motion is caused by unbalanced forces, including Earth's gravitational attraction, acting on the object

ACSSU117

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Biology						Chemistry			Earth and Space	Physics	Science News	Templates		
Cells	Plant Cells	Stem Cells	Reproduction	Healthy Eating	Body Systems	States of Matter	Elements and Compounds	Physical & Chemical Change	Minerals	Active Earth	Energy	Science News	Engineering Challenges	Science Investigations

Year 8

Science as a human endeavour

Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available	ACSHE134	✓		✓	✓			✓	✓			✓	✓		
Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations	ACSHE135	✓		✓	✓	✓		✓	✓			✓	✓		
People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity	ACSHE136	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures	ACSHE226	✓									✓	✓	✓		

Science inquiry skills

Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge	ACSI139	✓	✓		✓			✓	✓	✓	✓	✓			✓
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	Biology						Chemistry			Earth and Space	Physics	Science News	Templates		
	Cells	Plant Cells	Stem Cells	Reproduction	Healthy Eating	Body Systems	States of Matter	Elements and Compounds	Physical & Chemical Change	Minerals	Active Earth	Energy	Science News	Engineering Challenges	Science Investigations
Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed ACSI140	✓	✓				✓	✓	✓	✓	✓	✓	✓			✓
Measure and control variables, select equipment appropriate to the task and collect data with accuracy ACSI141								✓	✓		✓	✓			✓
Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate ACSI144	✓					✓		✓			✓	✓			✓
Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence ACSI145	✓					✓	✓	✓		✓	✓	✓			✓
Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements ACSI146								✓		✓	✓	✓			✓
Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate ACSI148	✓			✓		✓	✓	✓		✓	✓	✓			✓
Use scientific knowledge and findings from investigations to evaluate claims based on evidence ACSI234	✓			✓		✓	✓	✓			✓	✓			✓

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Biology						Chemistry			Earth and Space	Physics	Science News	Templates		
Cells	Plant Cells	Stem Cells	Reproduction	Healthy Eating	Body Systems	States of Matter	Elements and Compounds	Physical & Chemical Change	Minerals	Active Earth	Energy	Science News	Engineering Challenges	Science Investigations

Biology

Science understanding

Cells are the basic units of living things; they have specialised structures and functions	ACSSU149	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multi-cellular organisms contain systems of organs carrying out specialised functions that enable them to survive and reproduce	ACSSU150	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						

Chemistry

Science understanding

Properties of the different states of matter can be explained in terms of the motion and arrangement of particles	ACSSU151	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Differences between elements, compounds and mixtures can be described at a particle level	ACSSU152	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Chemical change involves substances reacting to form new substances	ACSSU225	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

Earth and Space

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	Biology						Chemistry		Earth and Space	Physics	Science News	Templates			
	Cells	Plant Cells	Stem Cells	Reproduction	Healthy Eating	Body Systems	States of Matter	Elements and Compounds	Physical & Chemical Change	Minerals	Active Earth	Energy	Science News	Engineering Challenges	Science Investigations
Science understanding															
Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales ACSSU153										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Physics															
Science understanding															
Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems ACSSU155												<input checked="" type="checkbox"/>			

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Biology					Chemistry				Earth and Space		Physics					Science News	STEM Resources		
The Nervous System	The Endocrine System	The Immune System	Microbiomes	Ecosystems	Atoms	Chemical Reactions	Acids and Bases	Reactions and Energy	Active Earth	Earthquakes	Light	Sound	Heat	Radiation	Electrical Circuits	Magnetism	Science News	Engineering Challenges	Science Investigations

Year 9

Science as a human endeavour

Scientific understanding, including models and theories, is contestable and is refined over time through a process of review by the scientific community <i>ACSHE157</i>		✓	✓		✓	✓		✓		✓	✓		✓					✓		
Advances in scientific understanding often rely on developments in technology and technological advances are often linked to scientific discoveries <i>ACSHE158</i>			✓		✓	✓			✓					✓		✓		✓		
People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities <i>ACSHE160</i>	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓		
Values and needs of contemporary society can influence the focus of scientific research <i>ACSHE228</i>	✓		✓	✓	✓		✓	✓	✓	✓	✓		✓		✓			✓		

Science inquiry skills

Formulate questions or hypotheses that can be investigated scientifically <i>ACSIS164</i>			✓		✓		✓		✓	✓			✓	✓		✓	✓			✓
Plan, select and use appropriate investigation types, including field work and laboratory experimentation, to collect reliable data; assess risk and address ethical issues associated with these methods <i>ACSIS165</i>			✓		✓		✓	✓	✓	✓			✓		✓	✓				✓
Select and use appropriate equipment, including digital technologies, to collect and record data systematically and accurately <i>ACSIS166</i>			✓		✓		✓	✓	✓				✓	✓		✓	✓			✓

Stile

AC Australian CURRICULUM

Biology					Chemistry				Earth and Space		Physics						Science News	STEM Resources	
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The Nervous System	The Endocrine System	The Immune System	Microbiomes	Ecosystems	Atoms	Chemical Reactions	Acids and Bases	Reactions and Energy	Active Earth	Earthquakes	Light	Sound	Heat	Radiation	Electrical Circuits	Magnetism	Science News	Engineering Challenges	Science Investigations
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Analyse patterns and trends in data, including describing relationships between variables and identifying inconsistencies <i>AC SIS169</i>	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓		✓	✓			✓
Use knowledge of scientific concepts to draw conclusions that are consistent with evidence <i>AC SIS170</i>	✓		✓		✓	✓	✓	✓	✓	✓			✓	✓	✓		✓			✓
Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data <i>AC SIS171</i>	✓		✓		✓	✓			✓	✓			✓							✓
Critically analyse the validity of information in primary and secondary sources and evaluate the approaches used to solve problems <i>AC SIS172</i>	✓		✓	✓	✓			✓	✓	✓			✓	✓						✓
Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations <i>AC SIS174</i>		✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓				✓

Biology

Science understanding

Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment <i>AC SSU175</i>	✓	✓	✓	✓																
Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems <i>AC SSU176</i>					✓															

Chemistry

Science understanding

Stile



	Biology					Chemistry				Earth and Space		Physics						Science News	STEM Resources	
	The Nervous System	The Endocrine System	The Immune System	Microbiomes	Ecosystems	Atoms	Chemical Reactions	Acids and Bases	Reactions and Energy	Active Earth	Earthquakes	Light	Sound	Heat	Radiation	Electrical Circuits	Magnetism	Science News	Engineering Challenges	Science Investigations
All matter is made of atoms that are composed of protons, neutrons and electrons; natural radioactivity arises from the decay of nuclei in atoms ACSSU177						✓														
Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed ACSSU178					✓		✓		✓											
Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer ACSSU179					✓			✓	✓											
Earth and Space																				
Science understanding																				
The theory of plate tectonics explains global patterns of geological activity and continental movement ACSSU180										✓	✓									
Physics																				
Science understanding																				
Energy transfer through different mediums can be explained using wave and particle models ACSSU182											✓	✓	✓	✓	✓	✓	✓			

Stile



Biology				Chemistry			Earth and Space				Physics			Science News	STEM Resources	
Simple Inheritance	Genetics	Evolution	Human Evolution	The Periodic Table	Metals	Reaction Types	The Universe	Comets	Earth Systems	Mass Extinctions	Energy Conservation	Kinematics	Newton's Laws of Motion	Science News	Engineering Challenges	Science Investigations

Year 10

Science as a human endeavour

Scientific understanding, including models and theories, is contestable and is refined over time through a process of review by the scientific community	ACSHE191	✓			✓	✓			✓	✓	✓	✓				✓		
Advances in scientific understanding often rely on developments in technology and technological advances are often linked to scientific discoveries	ACSHE192		✓		✓		✓		✓				✓	✓		✓		
People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities	ACSHE194		✓				✓	✓	✓		✓		✓	✓	✓	✓		
Values and needs of contemporary society can influence the focus of scientific research	ACSHE230						✓		✓							✓		

Science inquiry skills

Formulate questions or hypotheses that can be investigated scientifically	ACSIS198						✓				✓	✓		✓	✓			✓
Plan, select and use appropriate investigation types, including field work and laboratory experimentation, to collect reliable data; assess risk and address ethical issues associated with these methods	ACSIS199								✓		✓		✓	✓				✓

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AC Australian CURRICULUM

	Biology				Chemistry			Earth and Space				Physics			Science News	STEM Resources	
	Simple Inheritance	Genetics	Evolution	Human Evolution	The Periodic Table	Metals	Reaction Types	The Universe	Comets	Earth Systems	Mass Extinctions	Energy Conservation	Kinematics	Newton's Laws of Motion	Science News	Engineering Challenges	Science Investigations
The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence <i>ACSSU185</i>			✓	✓													
Chemistry																	
Science understanding																	
The atomic structure and properties of elements are used to organise them in the Periodic Table <i>ACSSU186</i>					✓												
Different types of chemical reactions are used to produce a range of products and can occur at different rates <i>ACSSU187</i>						✓	✓										
Earth and Space																	
Science understanding																	
The universe contains features including galaxies, stars and solar systems, and the Big Bang theory can be used to explain the origin of the universe <i>ACSSU188</i>								✓	✓								
Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere <i>ACSSU189</i>										✓	✓						
Physics																	
Science understanding																	

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	Biology				Chemistry			Earth and Space				Physics			Science News	STEM Resources	
	<u>Simple Inheritance</u>	<u>Genetics</u>	<u>Evolution</u>	<u>Human Evolution</u>	<u>The Periodic Table</u>	<u>Metals</u>	<u>Reaction Types</u>	<u>The Universe</u>	<u>Comets</u>	<u>Earth Systems</u>	<u>Mass Extinctions</u>	<u>Energy Conservation</u>	<u>Kinematics</u>	<u>Newton's Laws of Motion</u>	<u>Science News</u>	<u>Engineering Challenges</u>	<u>Science Investigations</u>
Energy conservation in a system can be explained by describing energy transfers and transformations ACSSU190										↙		↙		↙			
The motion of objects can be described and predicted using the laws of physics ACSSU229												↙	↙	↙			