

# 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	Levers and Gears	Inclined Planes	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 <i>ACSHE119</i>	✓	✓	✓				✓				✓	✓		✓	✓		
Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures <i>ACSHE223</i>				✓	✓	✓	✓		✓	✓	✓			✓	✓		
Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations <i>ACSHE120</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity <i>ACSHE121</i>							✓				✓			✓	✓		

### Science inquiry skills

Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge <i>AC SIS124</i>	✓			✓			✓		✓	✓	✓		✓	✓			✓
Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed <i>AC SIS125</i>				✓	✓		✓		✓		✓	✓	✓	✓			✓
Measure and control variables, select equipment appropriate to the task and collect data with accuracy <i>AC SIS126</i>					✓				✓	✓	✓		✓	✓			✓
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 <i>AC SIS129</i>	✓	✓	✓	✓	✓		✓	✓			✓		✓	✓			✓
Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence <i>AC SIS130</i>				✓	✓		✓	✓			✓		✓	✓			✓
Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements <i>AC SIS131</i>					✓	✓	✓		✓	✓	✓		✓	✓			✓
Use scientific knowledge and findings from investigations to evaluate claims based on evidence <i>AC SIS132</i>				✓			✓				✓	✓	✓	✓			✓
Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate <i>AC SIS133</i>	✓				✓		✓		✓		✓		✓	✓			✓

# Stile

AC Australian CURRICULUM

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	Levers and Gears	Inclined Planes	Magnetism	Introduction to Science	Science News	Engineering Challenges	Science Investigations
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## Biology

### Science understanding

Classification helps organise the diverse group of organisms ACSSU111	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactions between organisms, including the effects of human activities can be represented by food chains and food webs ACSSU112	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Chemistry

### Science understanding

Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques ACSSU113	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable ACSSU116	<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 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"/>

## Physics

### Science understanding

Change to an object's motion is caused by unbalanced forces, including Earth's gravitational attraction, acting on the object ACSSU117	<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"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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# Stile

AC Australian CURRICULUM

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 Transformation	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 <i>ACSHE134</i>	✓		✓	✓			✓	✓			✓		✓		
Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations <i>ACSHE135</i>	✓		✓	✓	✓		✓	✓			✓	✗	✓		
People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity <i>ACSHE136</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓		
Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures <i>ACSHE226</i>	✓									✓			✓		

### Science inquiry skills

Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge <i>ACSIS139</i>	✓	✓		✓			✓	✓	✓	✓	✓	✓	✗			✓
Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed <i>ACSIS140</i>	✓	✓				✓	✓	✓	✓	✓	✓	✓	✗			✓
Measure and control variables, select equipment appropriate to the task and collect data with accuracy <i>ACSIS141</i>							✓	✓		✓	✓	✓	✗			✓
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 <i>ACSIS144</i>	✓					✓	✓			✓	✓	✓	✗			✓
Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence <i>ACSIS145</i>	✓					✓	✓	✓	✓	✓	✓	✓	✗			✓
Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements <i>ACSIS146</i>							✓		✓	✓	✓	✓	✗			✓
Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate <i>ACSIS148</i>	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓			✓
Use scientific knowledge and findings from investigations to evaluate claims based on evidence <i>ACSIS234</i>	✓			✓		✓	✓	✓		✓	✓	✓	✓			✓

# Stile

AC Australian CURRICULUM

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 Transformation	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"/>												
Multi-cellular organisms contain systems of organs carrying out specialised functions that enable them to survive and reproduce ACSSU150		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>									
Differences between elements, compounds and mixtures can be described at a particle level ACSSU152						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							
Chemical change involves substances reacting to form new substances ACSSU225							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							

## Earth and Space

### 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"/>				
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## 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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# Stile

AC Australian CURRICULUM

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>			✓		✓		✓	✓	✓	✓			✓	✓		✓	✓		✓
Analyse patterns and trends in data, including describing relationships between variables and identifying inconsistencies <i>ACSIS169</i>	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓		✓	✓		✓
Use knowledge of scientific concepts to draw conclusions that are consistent with evidence <i>ACSIS170</i>	✓		✓		✓	✓	✓	✓	✓	✓			✓	✓	✓		✓		✓
Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data <i>ACSIS171</i>	✓		✓		✓		✓		✓				✓						✓
Critically analyse the validity of information in primary and secondary sources and evaluate the approaches used to solve problems <i>ACSIS172</i>	✓		✓	✓	✓				✓	✓			✓	✓					✓
Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations <i>ACSIS174</i>		✓	✓		✓		✓	✓	✓	✓				✓	✓	✓	✓		✓

# 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

## Biology

### Science understanding

Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment <i>ACSSU175</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems <i>ACSSU176</i>				<input checked="" type="checkbox"/>																

## Chemistry

### Science understanding

All matter is made of atoms that are composed of protons, neutrons and electrons; natural radioactivity arises from the decay of nuclei in atoms <i>ACSSU177</i>					<input checked="" type="checkbox"/>															
Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed <i>ACSSU178</i>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>												
Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer <i>ACSSU179</i>				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												

## Earth and Space

### Science understanding

The theory of plate tectonics explains global patterns of geological activity and continental movement <i>ACSSU180</i>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
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## Physics

### Science understanding

Energy transfer through different mediums can be explained using wave and particle models <i>ACSSU182</i>											<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
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# Stile

AC Australian CURRICULUM

Biology	Chemistry	Earth and Space	Physics	Science News	STEM Resources											
Simple Inheritance	Genetics	Evolution	Human Evolution	Chemical Bonds	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								✓	✓			✓	✓			✓
Select and use appropriate equipment, including digital technologies, to collect and record data systematically and accurately	ACSIS200								✓				✓	✓			✓
Analyse patterns and trends in data, including describing relationships between variables and identifying inconsistencies	ACSIS203						✓	✓	✓				✓	✓			✓
Use knowledge of scientific concepts to draw conclusions that are consistent with evidence	ACSIS204	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓
Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data	ACSIS205								✓				✓	✓			✓
Critically analyse the validity of information in primary and secondary sources and evaluate the approaches used to solve problems	ACSIS206							✓		✓			✓	✓			✓
Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations	ACSIS208		✓	✓				✓	✓				✓	✓	✓		✓

# Stile



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

## Biology

### Science understanding

Transmission of heritable characteristics from one generation to the next involves DNA and genes	ACSSU184	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence	ACSSU185			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												

## Chemistry

### Science understanding

The atomic structure and properties of elements are used to organise them in the Periodic Table	ACSSU186					<input checked="" type="checkbox"/>											
Different types of chemical reactions are used to produce a range of products and can occur at different rates	ACSSU187						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									

## 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	ACSSU188							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere	ACSSU189									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						

## Physics

### Science understanding

Energy conservation in a system can be explained by describing energy transfers and transformations	ACSSU190									<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
The motion of objects can be described and predicted using the laws of physics	ACSSU229											<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			