

Australian Curriculum Version 9.0: Achievement standard aligned to content descriptions

This resource shows alignment between aspects of the achievement standard and relevant content descriptions for Year 4. A similar resource is available for other year levels.

The Australian Curriculum (AC) v9.0 code for each content description includes an element indicating the strand it is organised by, e.g. AC9S4U01 indicates Science understanding strand.

Key to content description codes: Science	
e.g. AC9SFU01	Strands:
Australian Curriculum (AC)	• SU — Science understanding
Version 9 (9)	• SHE — Science as a human endeavour
Science (S)	• SI — Science inquiry
Year (4)	
Strand (U, H, I)	
Content description number (##)	

Year 4 Australian Curriculum: Science achievement standard

By the end of Year 4 students identify the roles of organisms in a habitat and construct food chains. They identify key processes in the water cycle and describe how water cycles through the environment. They identify forces acting on objects and describe their effect. They relate the uses of materials to their properties. They explain the role of data in science inquiry. They identify solutions based on scientific explanations and describe the needs these meet.

Students pose questions to identify patterns and relationships and make predictions based on observations. They plan investigations using planning scaffolds, identify key elements of fair tests and describe how they conduct investigations safely. They use simple procedures to make accurate formal measurements. They construct representations to organise data and information and identify patterns and relationships. They compare their findings with those of others, assess the fairness of their investigation, identify further questions for investigation and draw conclusions. They communicate ideas and findings for an identified audience and purpose, including using scientific vocabulary when appropriate.

Achievement standard aspect	Relevant content description/s	ACv9.0 code
By the end of Year 4	Students learn to:	
Students identify the roles of organisms in a habitat and construct food chains.	<ul style="list-style-type: none"> explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships 	AC9S4U01
They identify key processes in the water cycle and describe how water cycles through the environment.	<ul style="list-style-type: none"> identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation 	AC9S4U02
They identify forces acting on objects and describe their effect.	<ul style="list-style-type: none"> identify how forces can be exerted by one object on another and investigate the effect of frictional, gravitational and magnetic forces on the motion of objects 	AC9S4U03
They relate the uses of materials to their properties.	<ul style="list-style-type: none"> examine the properties of natural and made materials including fibres, metals, glass and plastics and consider how these properties influence their use 	AC9S4U04
They explain the role of data in science inquiry.	<ul style="list-style-type: none"> examine how people use data to develop scientific explanations 	AC9S4H01
They identify solutions based on scientific explanations and describe the needs these meet.	<ul style="list-style-type: none"> consider how people use scientific explanations to meet a need or solve a problem 	AC9S4H02
They pose questions to identify patterns and relationships and make predictions based on observations.	<ul style="list-style-type: none"> pose questions to explore observed patterns and relationships and make predictions based on observations 	AC9S4I01
They plan investigations using planning scaffolds, identify key elements of fair tests and describe how they conduct investigations safely.	<ul style="list-style-type: none"> use provided scaffolds to plan and conduct investigations to answer questions or test predictions, including identifying the elements of fair tests, and considering the safe use of materials and equipment 	AC9S4I02
They use simple procedures to make accurate formal measurements.	<ul style="list-style-type: none"> follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate 	AC9S4I03
They construct representations to organise data and information and identify patterns and relationships.	<ul style="list-style-type: none"> construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns 	AC9S4I04
They compare their findings with those of others, assess the fairness of their investigation, identify further questions for investigation and draw conclusions.	<ul style="list-style-type: none"> compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions 	AC9S4I05
They communicate ideas and findings for an identified audience and purpose, including using scientific vocabulary when appropriate.	<ul style="list-style-type: none"> write and create texts to communicate findings and ideas for identified purposes and audiences, using scientific vocabulary and digital tools as appropriate. 	AC9S4I06

More information

If you would like more information, please visit the QCAA website www.qcaa.qld.edu.au. Alternatively, email the K–10 Curriculum and Assessment branch at australiancurriculum@qcaa.qld.edu.au.

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