

Alignment with the Australian Curriculum: Science

This *Schoolyard safari* unit embeds all three strands of the Australian Curriculum: Science. The table below lists sub-strands and their content for Year 1. This unit is designed to be taught in conjunction with other Year 1 units to cover the full range of the Australian Curriculum: Science content for Year 1.

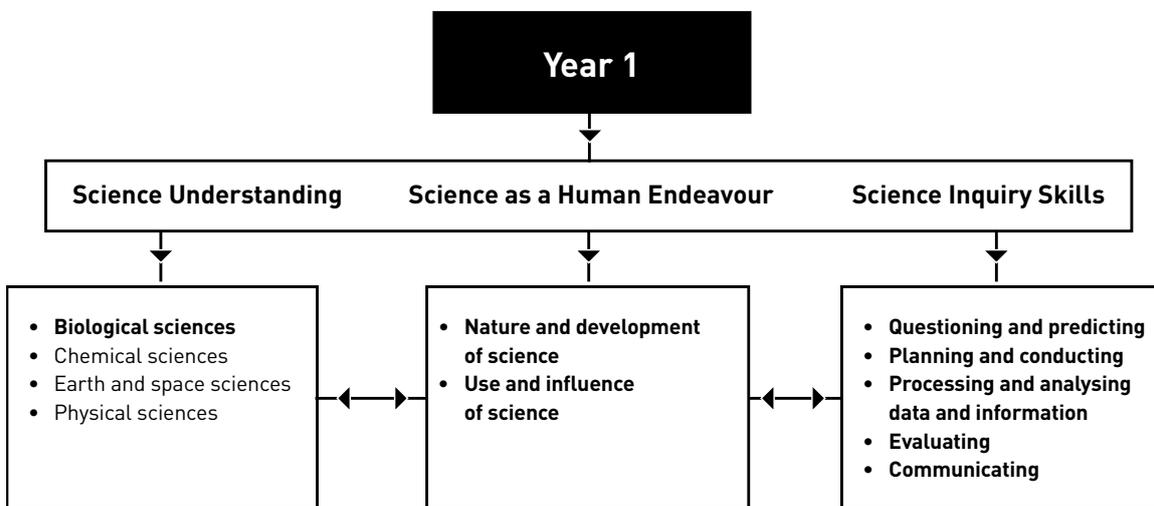
For ease of assessment the table below outlines the sub-strands and their aligned lessons.

Strand	Sub-strand	Code	Year 1 content descriptions	Lessons
Science Understanding (SU)	Biological sciences	ACSSU017	Living things have a variety of external features	1–7
		ACSSU211	Living things live in different places where their needs are met	1–7
Science as a Human Endeavour (SHE)	Nature and development of science	ACSHE021	Science involves asking questions about, and describing changes in, objects and events	1–7
	Use and influence of science	ACSHE022	People use science in their daily lives, including when caring for their environment and living things	1–7
Science Inquiry Skills (SIS)	Questioning and predicting	ACSIS024	Respond to and pose questions, and make predictions about familiar objects and events	1–7
	Planning and conducting	ACSIS025	Participate in different types of guided investigations to explore and answer questions, such as manipulating materials, testing ideas, and accessing information sources	5, 6
		ACSIS026	Use informal measurements in the collection and recording of observations, with the assistance of digital technologies as appropriate	2–7
	Processing and analysing data and information	ACSIS027	Use a range of methods to sort information, including drawings and provided tables	2, 3, 4
		ACSIS212	Through discussion, compare observations with predictions	1–4, 6
	Evaluating	ACSIS213	Compare observations with those of others	1–4, 6
	Communicating	ACSIS029	Represent and communicate observations and ideas in a variety of ways such as oral and written language, drawing and role play	1–7

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Interrelationship of the science strands

The interrelationship between the three strands—Science Understanding, Science as a Human Endeavour and Science Inquiry Skills—and their sub-strands is shown below. Sub-strands covered in this unit are in bold.



Relationship to overarching ideas

In the Australian Curriculum: Science, six overarching ideas support the coherence and developmental sequence of science knowledge within and across year levels. In *Schoolyard safari* these overarching ideas are represented by:

Overarching idea	Incorporation in <i>Schoolyard safari</i>
Patterns, order and organisation	Students compare the similarities and differences between the external features of small animals. Students disrupt ant trails to examine how ants move and regroup
Form and function	Students draw detailed observations of small animals to describe their physical characteristics and their related functions
Stability and change	Students draw conclusions about the quantity and diversity of small animals found in the schoolyard
Scale and measurement	Students compare the shapes and sizes of small animals found in the schoolyard
Matter and energy	Students discuss relationship between the habitat and the feeding needs of small animals
Systems	Students make links between the physical features of living things and their habitats

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Curriculum focus

The Australian Curriculum: Science is described by year level, but provides advice across four year groupings on the nature of learners. Each year grouping has a relevant curriculum focus.

Curriculum focus Foundation–Year 2	Incorporation in <i>Schoolyard safari</i>
Awareness of self and the local world	Through investigating the external features of small animals and how they move, feed and protect themselves, students learn about the needs of living things and the biodiversity of the schoolyard.

Achievement standards

The achievement standards of the Australian Curriculum: Science indicate the quality of learning that students typically demonstrate by a particular point in their schooling, for example, at the end of a year level. These standards will be reviewed regularly by ACARA and are available from the ACARA website.

By the end of this unit, teachers will be able to make evidence-based judgments on whether the students are achieving below, at or above the Australian Curriculum: Science Year 1 achievement standard. Rubrics to help teachers make these judgements are available on the website (www.science.org.au/primaryconnections)

General capabilities

The skills, behaviours and attributes that students need to succeed in life and work in the 21st century have been identified in the Australian Curriculum as general capabilities. There are seven general capabilities and they are embedded throughout the units. For further information see: www.australiancurriculum.edu.au

For examples of our unit-specific general capabilities information see the next page.

Schoolyard safari—Australian Curriculum general capabilities

General capabilities	Australian Curriculum description	Schoolyard safari examples
Literacy	Literacy knowledge specific to the study of science develops along with scientific understanding and skills. Primary Connections learning activities explicitly introduce literacy focuses and provide students with the opportunity to use them as they think about, reason and represent their understanding of science.	In <i>Schoolyard safari</i> the literacy focuses are: <ul style="list-style-type: none"> • science journals • role-plays • word walls • maps • tables • ideas maps • labelled diagrams • factual texts • graphs
 Numeracy	Elements of numeracy are particularly evident in Science Inquiry Skills. These include practical measurement and the collection, representation and interpretation of data.	Students: <ul style="list-style-type: none"> • collect, interpret and represent data through tables • create and interpret picture graphs.
Information and communication technology (ICT) competence	ICT competence is particularly evident in Science Inquiry Skills. Students use digital technologies to investigate, create, communicate, and share ideas and results.	Students are given optional opportunities to: <ul style="list-style-type: none"> • use a digital camera to take photographs of small animals • view video of societies of ants—real and fictional • create ‘Blabberize’ animations about small animals.
 Critical and creative thinking	Students develop critical and creative thinking as they speculate and solve problems through investigations, make evidence-based decisions, and analyse and evaluate information sources to draw conclusions. They develop creative questions and suggest novel solutions.	Students: <ul style="list-style-type: none"> • ask and answer questions, describe and explain their ideas, make suggestions and join in discussions • make comparisons between habitats and between the physical features of living things • explain their reasoning.
Ethical behaviour	Students develop ethical behaviour as they explore principles and guidelines in gathering evidence and consider the implications of their investigations on others and the environment.	Students: <ul style="list-style-type: none"> • use a ‘Code for Caring’ when collecting and observing animal specimens.
 Personal and social competence	Students develop personal and social competence as they learn to work effectively in teams, develop collaborative methods of inquiry, work safely, and use their scientific knowledge to make informed choices.	Students: <ul style="list-style-type: none"> • work collaboratively in teams • follow instructions to collect data.
 Intercultural understanding	Intercultural understanding is particularly evident in Science as a Human Endeavour. Students learn about the influence of people from a variety of cultures on the development of scientific understanding.	<ul style="list-style-type: none"> • ‘Cultural perspectives’ opportunities are highlighted where relevant. • Important contributions made to science by people from a range of cultures are highlighted where relevant.

Cross-curriculum priorities

There are three cross-curriculum priorities identified by the Australian Curriculum:

- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia's engagement with Asia
- Sustainability.

For further information see: www.australiancurriculum.edu.au



Aboriginal and Torres Strait Islander histories and cultures

The PrimaryConnections Indigenous perspectives framework supports teachers' implementation of Aboriginal and Torres Strait Islander histories and cultures in science.

The framework can be accessed at: www.science.org.au/primaryconnections

Schoolyard safari focuses on the Western science way of making evidence-based claims about how living things, such as small animals, have a variety of external features and live in different places where their needs are met.

Aboriginal and Torres Strait Islander Peoples might have other explanations for the external features of small animals and the places where they live.

PrimaryConnections recommends working with Aboriginal and Torres Strait Islander community members to access local and relevant cultural perspectives. Protocols for engaging with Aboriginal and Torres Strait Islander community members are provided in state and territory education guidelines. Links to these are provided on the PrimaryConnections website.

Sustainability

The *Schoolyard safari* unit provides opportunities for students to develop an understanding of how the different places where small animals live can be affected by environmental conditions, including changes due to human activities. This unit helps them to develop an understanding of the fragility of the environment and living things. This can assist them to develop knowledge, skills and values for making decisions about individual and community actions that contribute to sustainable patterns of use of the Earth's natural resources.

Alignment with the Australian Curriculum: English and Mathematics

Strand	Sub-strand	Code	Year 1 content descriptions	Lessons
English–Language	Text structure and organisation	ACELA1447	Understand that the purposes texts serve shape their structure in predictable ways	5, 7
English–Literacy	Interacting with others	ACELY1656	Engage in conversations and discussions, using active listening behaviours, showing interest, and contributing ideas, information and questions	2, 4, 6, 7
		ACELY1788	Use interaction skills including turn-taking, recognising the contributions of others, speaking clearly and using appropriate volume and pace	1, 2, 3, 4, 5, 6
		ACELY1657	Make short presentations using some introduced text structures and language, for example opening statements	7 (optional)
	Interpreting, analysing, evaluating	ACELY1658	Describe some differences between imaginative informative and persuasive texts	5 (optional)
		ACELY1660	Use comprehension strategies to build literal and inferred meaning about key events, ideas and information in texts that they listen to, view and read by drawing on growing knowledge of context, text structures and language features	5
	Creating texts	ACELY1661	Create short imaginative and informative texts that show emerging use of appropriate text structure, sentence-level grammar, word choice, spelling, punctuation and appropriate multimodal elements, for example illustrations and diagrams	1–7
	Mathematics–Measurement and Geometry	Location and transformation	ACMMG023	Give and follow directions to familiar locations
	Using units of measurement	ACMMG019	Measure and compare the lengths and capacities of pairs of objects using uniform informal units	4
Mathematics–Statistics and Probability	Data representation and interpretation	ACMSP263	Represent data using objects and drawings where one object or drawing represents one data value. Describe the displays	6

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Other links are highlighted at the end of lessons where possible. These links will be revised and updated on the website (www.science.org.au/primaryconnections).