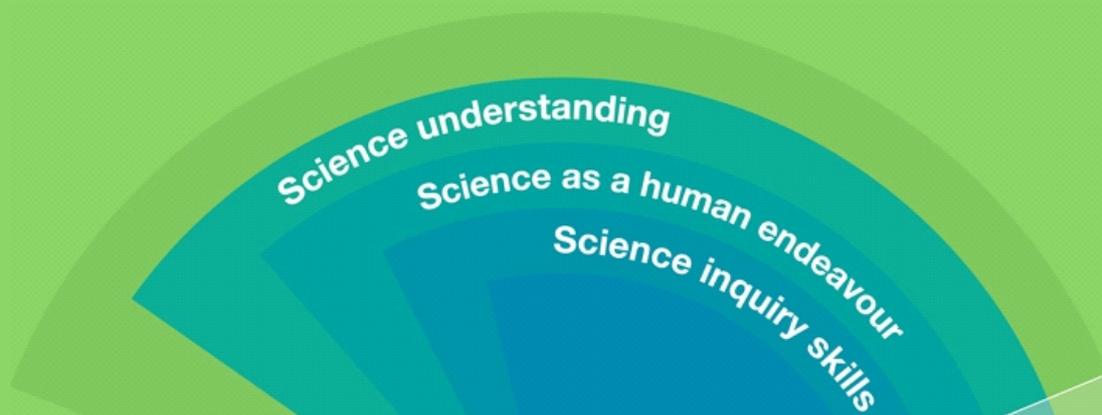


# The Australian Curriculum Science



## Table of Contents

Curriculum F–10	3
Year 1	3

## Year 1

The *Science Inquiry Skills* and *Science as a Human Endeavour* strands are described across a two-year band. In their planning, schools and teachers refer to the expectations outlined in the Achievement Standard and also to the content of the *Science Understanding* strand for the relevant year level to ensure that these two strands are addressed over the two-year period. The three strands of the curriculum are interrelated and their content is taught in an integrated way. The order and detail in which the content descriptions are organised into teaching/learning programs are decisions to be made by the teacher.

From Foundation to Year 2, students learn that observations can be organised to reveal patterns, and that these patterns can be used to make predictions about phenomena. In Year 1, students infer simple cause-and-effect relationships from their observations and experiences, and begin to link events and phenomena with observable effects. They observe changes that can be large or small and happen quickly or slowly. They explore the properties of familiar objects and phenomena, identifying similarities and differences. Students begin to value counting as a means of comparing observations, and are introduced to ways of organising their observations.

### Science Understanding

Biological sciences	Elaborations
Living things have a variety of external features (ACSSU017) 	<ul style="list-style-type: none"> <li>recognising common features of animals such as head, legs and wings</li> <li>describing the use of animal body parts for particular purposes such as moving and feeding</li> <li>identifying common features of plants such as leaves and roots</li> <li>describing the use of plant parts for particular purposes such as making food and obtaining water</li> </ul>
Living things live in different places where their needs are met (ACSSU211) 	<ul style="list-style-type: none"> <li>exploring different habitats in the local environment such as the beach, bush and backyard</li> <li>recognising that different living things live in different places such as land and water</li> <li>exploring what happens when habitats change and some living things can no longer have their needs met</li> </ul>
Chemical sciences	Elaborations
Everyday materials can be physically changed in a variety of ways (ACSSU018) 	<ul style="list-style-type: none"> <li>predicting and comparing how the shapes of objects made from different materials can be physically changed through actions such as bending, stretching and twisting</li> <li>exploring how materials such as water, chocolate or play dough change when warmed or cooled</li> </ul>
Earth and space sciences	Elaborations

Observable changes occur in the sky and landscape (ACSSU019)



- exploring the local environment to identify and describe natural, managed and constructed features
- recording short and longer term patterns of events that occur on Earth and in the sky, such as the appearance of the moon and stars at night, the weather and the seasons

### Physical sciences

### Elaborations

Light and sound are produced by a range of sources and can be sensed (ACSSU020)



- recognising senses are used to learn about the world around us: our eyes to detect light, our ears to detect sound, and touch to feel vibrations
- identifying the sun as a source of light
- recognising that objects can be seen when light from sources is available to illuminate them
- exploring different ways to produce sound using familiar objects and actions such as striking, blowing, scraping and shaking
- comparing sounds made by musical instruments using characteristics such as loudness, pitch and actions used to make the sound

## Science as a Human Endeavour

### Nature and development of science

### Elaborations

Science involves asking questions about, and describing changes in, objects and events (ACSHE021)



- jointly constructing questions about the events and features of the local environment with teacher guidance
- recognising that descriptions of what we observe are used by people to help identify change

### Use and influence of science

### Elaborations

People use science in their daily lives, including when caring for their environment and living things (ACSHE022)



- considering how science is used in activities such as cooking, fishing, transport, sport, medicine and caring for plants and animals
- considering that technologies used by Aboriginal and Torres Strait Islander people require an understanding of how materials can be used to make tools and weapons, musical instruments, clothing, cosmetics and artworks
- exploring how musical instruments can be used to produce different sounds
- comparing how different light sources are used in daily life
- identifying ways that science knowledge is used in the care of the local environment such as animal habitats, and suggesting changes to parks and gardens to better meet the needs of native animals

## Science Inquiry Skills

### Questioning and predicting

### Elaborations

<p>Respond to and pose questions, and make predictions about familiar objects and events (AC SIS024)</p> 	<ul style="list-style-type: none"> <li>• thinking about "What will happen if.....?" type questions about everyday objects and events</li> <li>• using the senses to explore the local environment to pose interesting questions and making predictions about what will happen</li> </ul>
Planning and conducting	Elaborations
<p>Participate in different types of guided investigations to explore and answer questions, such as manipulating materials, testing ideas, and accessing information sources (AC SIS025)</p> 	<ul style="list-style-type: none"> <li>• manipulating objects and making observations of what happens</li> <li>• researching ideas collaboratively using big books, web pages and ICT within the classroom</li> <li>• exploring different ways of solving science questions through guided discussion</li> <li>• sorting information and classifying objects based on easily observable characteristics with teacher guidance</li> </ul>
<p>Use informal measurements in the collection and recording of observations, with the assistance of digital technologies as appropriate (AC SIS026)</p> 	<ul style="list-style-type: none"> <li>• using units that are familiar to students from home and school, such as cups (cooking), hand spans (length) and walking paces (distance) to make and record observations with teacher guidance</li> </ul>
Processing and analysing data and information	Elaborations
<p>Use a range of methods to sort information, including drawings and provided tables (AC SIS027)</p> 	<ul style="list-style-type: none"> <li>• using matching activities, including identifying similar things, odd-one-out and opposites</li> <li>• exploring ways of recording and sharing information through class discussion</li> <li>• jointly constructing simple column graphs and picture graphs to represent class investigations</li> </ul>
<p>Through discussion, compare observations with predictions (AC SIS212)</p> 	<ul style="list-style-type: none"> <li>• discussing original predictions and, with guidance, comparing these to their observations</li> </ul>
Evaluating	Elaborations
<p>Compare observations with those of others (AC SIS213)</p> 	<ul style="list-style-type: none"> <li>• discussing observations as a whole class to identify similarities and differences in their observations</li> </ul>
Communicating	Elaborations
<p>Represent and communicate observations and ideas in a variety of ways such as oral and written language, drawing and role play (AC SIS029)</p> 	<ul style="list-style-type: none"> <li>• discussing or representing what was discovered in an investigation</li> <li>• engaging in whole class or guided small group discussions to share observations and ideas</li> </ul>