How Working Scientifically and Working Technologically are presented in the draft Science and Technology K–6 Syllabus

Working Scientifically and Working Technologically:

- are presented in stages
- includes Australian curriculum content descriptions for Science and NSW content for Science and Technology
- describes what students are required to learn about and to do from K–6.

### Science and Technology • Early Stage 1

**Working Scientifically**

<table>
<thead>
<tr>
<th>Outcome:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A student:</td>
</tr>
<tr>
<td>explores their immediate surroundings and what they already know by questioning, observing and communicating</td>
</tr>
</tbody>
</table>

**Science as a Human Endeavour**

Science involves exploring and observing the world using the senses

**Science Inquiry Skills**

- Respond to questions about familiar objects and events
- Explore and make observations by using the senses
- Engage in discussions about observations and use methods such as drawing to represent ideas
- Share observations and ideas

Students question and predict by:

- posing and responding to questions about familiar objects and things they are curious about in the natural and made environments
- making predictions resulting from their questions

Students plan investigations by:

- sharing what they already know and how they could find out more about their questions relating to the natural and made environment

Students conduct investigations by:

- exploring and making careful observations by using the senses to gather information about their immediate surroundings
- manipulating objects and materials through purposeful play

Students process and analyse data and information by:

- organising objects or images of objects to display data and/or information
- engaging in informal and guided discussions about their observations, what was or was not expected or interesting

Students communicate by:

- referring to a range of representations for sharing and making sense of their observations and ideas by talking, role-play, drawing, contributing to joint construction of short texts and/or using digital technologies (ICT)
- working in groups to reflect on what they liked or disliked about what they did and what they would do differently [CCT]; [PSC]

**Background information**

Progression:
The emphasis in Early Stage 1 is fostering curiosity and wonder while developing skills in questioning, exploring and observing. In activities set by the teacher, students explore through purposeful play, manipulating, observing and describing what is accessible to their direct experience. They are encouraged to value and share their own questions and ideas about what happens, reasons and name some cause and effect associations.

**Content organisation heading** describes what students should know and be able to do. Content describes what students learn to do.

**Cross-curriculum content is embedded and identified using codes. Examples include Critical and Creative Thinking [CCT] and Personal and Social Competence.**

---

**Australian curriculum Science content descriptions, determined by ACARA, are shaded grey.**

There are currently no Australian curriculum content descriptions for K–6 Technology.

**NSW content clarifies the Australian curriculum content. It provides breadth and depth of learning and appropriate scope for the subject.**

**NSW content is the focus of consultation.**

**Teachers select how content is combined into units of work.**
How knowledge and understanding is presented in the draft Science and Technology K–6 Syllabus

Knowledge and understanding:
- is presented in stages
- comprises Australian curriculum content descriptions for Science and NSW content for Science and Technology
- describes what students are required to learn about and to do from K–6.

**Science and Technology • Stage 1**

**Living World**

**Outcome:**
A student:
- identifies that living things have observable physical features and grow and change

**Science as Human Endeavour**
- Science involves asking questions about and describing changes in objects and events

**Science Understanding**
- Living things have a variety of external features
- Living things grow, change and have offspring similar to themselves
- Living things live in different places where their needs are met
- Living things have a variety of external features

**Students:**
- use a range of methods, including field work, to identify plants and animals in their local area
- devise simple classification systems based on the features of plants and animals identified in the local area
- Living things grow, change and have offspring similar to themselves

**Students:**
- observe and record growth and change in the life of a common animal or a plant, using informal units and/or digital technologies or provided tables as appropriate [N]; [ICT]
- compare the appearance of living things with their offspring such as dogs, cats, humans, fish, frogs, trees and insects
- Living things live in different places where their needs are met

**Students:**
- explore with guidance the needs of a plant in its environment
- participate in fieldwork to observe the physical features of a local land or aquatic environment and identify how that environment meets the needs of the animals and plants that live there such as a pond, beach, bush or backyard [SE]

Cross-curriculum content is embedded and identified using codes. Examples include Numeracy [N] and Information and Communication Technologies [ICT].

Content is organised into strands.

Outcomes and content are linked.

Overarching statement identifies what students learn about. Underpinning content describes what students learn to do.