

PrimaryConnections and the *NSW Syllabus Science and Technology K-6*

PrimaryConnections curriculum units align with Australian Curriculum: Science and address all Science outcomes in *NSW Syllabus Science and Technology K-6*. PrimaryConnections curriculum units address most of the Technology outcomes in the NSW Syllabus. The tables below provide an overview. Teachers are encouraged to make planning decisions regarding the sequence of skills and contexts, based on the needs, abilities and prior learning of their students.

Acknowledgement

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Knowledge and Understanding

Living World

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-3LW-ST explores the characteristics, needs and uses of living things	ST1-4LW-S describes observable features of living things and their environments	ST2-4LW-S compares features and characteristics of living and non-living things	ST3-4LW-S examines how the environment affects the growth, survival and adaptation of living things
PC Unit	Staying alive, or Growing well	Schoolyard safari, or Dinosaurs and more	Feathers, fur or leaves?	Rising salt, or Desert survivors
K&U Outcome		ST1-5LW-T identifies how plants and animals are used for food and fibre products	ST2-5LW-T describes how agricultural processes are used to grow plants and raise animals for food, clothing and shelter	ST3-5LW-T explains how food and fibre are produced sustainably in managed environments for health and nutrition
PC Unit				Rising salt

Material World

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-4MW-ST identifies that objects are made of materials that have observable properties	ST1-6MW-S identifies that materials can be changed or combined	ST2-6MW-S describes how adding or removing heat causes a change of state	ST3-6MW-S explains the effect of heat on the properties and behaviour of materials
PC Unit	What's it made of? or That's my hat!	All mixed up Spot the difference	Melting moments	Change detectives
K&U Outcome		ST1-7MW-T describes how the properties of materials determine their use	ST2-7MW-T investigates the suitability of natural and processed materials for a range of purposes	ST3-7MW-T explains how the properties of materials determines their use for a range of purposes
PC Unit		Bend it! Stretch it!	Material world, or Package it better	What's the matter

Physical World

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-5PW-ST observes the way objects move and relates changes in motion to push and pull forces	ST1-8PW-S describes common forms of energy and explores some characteristics of sound energy	ST2-8PW-ST describes the characteristics and effects of common forms of energy, such as light and heat	ST3-8PW-ST explains how energy is transformed from one form to another
PC Unit	On the move	Look! Listen!	Heating up Light shows* (Differentiated)	Essential energy, or Circuits and switches
K&U Outcome		ST1-9PW-ST investigates how forces and energy are used in products	ST2-9PW-ST describes how contact and non-contact forces affect an object's motion	ST3-9PW-ST investigates the effects of increasing or decreasing the strength of a specific contact or non-contact force
PC Unit		Push-pull, or Machine makers	Smooth moves	Magnetic moves* (Differentiated)

**Light shows* addresses science outcome ST2-8PW-ST and *Magnetic moves* addresses science outcome ST3-9PW-ST. However, the links to the mathematics and English align with Year 5 and Year 4 respectively. Modification and differentiation is required to align to NSW Stage 2 or Stage 3 mathematics and English Curriculums.

Earth and Space

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-6ES-S identifies how daily and seasonal changes in the environment affect humans and other living things	ST1-10ES-S recognises observable changes occurring in the sky and on the land and identifies Earth's resources	ST2-10ES-S investigates regular changes caused by interactions between the Earth and the Sun, and changes to the Earth's surface	ST3-10ES-S explains regular events in the solar system and geological events on the Earth's surface
PC Unit	Weather in my world	Changes all around, or Up, down and all around, and Water works	Night and day	Creators and destroyers, or Earthquake explorers, and Earth's place in space

Digital Technologies

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-7DI-T identifies digital systems and explores how instructions are used to control digital devices	ST1-11DI-T identifies the components of digital systems and explores how data is represented	ST2-11DI-T describes how digital systems represent and transmit data	ST3-11DI-T explains how digital systems represent data, connect together to form networks and transmit data
PC Unit				

Skills - Working Scientifically and Design and Production

The skills of Working Scientifically are developed through scientific inquiry. Students are given opportunities to develop these skills by conducting scientific investigations in a variety of contexts across years of schooling. Every PrimaryConnections curriculum unit provides contextualised examples of how these skills can be fostered.

In PrimaryConnections curriculum units, the skills of Working Scientifically are identified as *Science Inquiry Skills*.

Students have the opportunity to further develop abilities in critical and creative thinking and problem solving when engaged in tasks, investigations, and projects aligned with the skills of Design and Production. A selection of PrimaryConnections units provide examples of how the skills of Design and Production can be incorporated within science inquiry. The tables below provide an overview.

Working Scientifically

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-1WS-S observes, questions and collects data to communicate ideas	ST1-1WS-S observes, questions and collects data to communicate and compare ideas	ST2-1WS-S questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations	ST3-1WS-S plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions
PC Units	Staying alive Growing well What's it made of? That's my hat! On the move Weather in my world	Schoolyard safari Dinosaurs and more Watch it grow Spot the difference Bend it! Stretch it! All mixed up Look! Listen! Push-pull Machine makers Up, down and all around Changes all around Water works	Feathers, fur or leaves? Friends or foes? Among the gum trees Melting moments Material world Package it better Heating up Smooth moves Magnetic moves Light shows* Night and day Beneath our feet	Desert survivors Marvellous micro-organisms Rising salt What's the matter? Change detectives Magnetic moves* Light shows It's electrifying Essential energy Circuits and switches Earth's place in space Earthquake explorers Creators and destroyers

Design and Production

NSW Stage	Early Stage 1 outcomes	Stage 1 outcomes	Stage 2 outcomes	Stage 3 outcomes
K&U Outcome	STe-2DP-T develops solutions to an identified need	ST1-2DP-T uses materials, tools and equipment to develop solutions for a need or opportunity	ST2-2DP-T selects and uses materials, tools and equipment to develop solutions for a need or opportunity	ST3-2DP-T plans and uses materials, tools and equipment to develop solutions for a need or opportunity
PC Units	That's my hat!	Dinosaurs and more, Machine makers, or Changes all around	Package it better, or Magnetic moves	Circuits and switches, or Magnetic moves*, or Creators and destroyers
K&U Outcome		ST1-3DP-T describes, follows and represents algorithms to solve problems	ST2-3DP-T defines problems, describes and follows algorithms to develop solutions	ST3-3DP-T defines problems, and designs, modifies and follows algorithms to develop solutions
PC Units				

NSW Syllabus Outcomes addressed by each PrimaryConnections Unit

The following table outlines the NSW Science and Technology syllabus outcomes addressed by each PrimaryConnections Unit.

Highlighted outcome numbers show the units which uniquely cover a skill during that Stage. Schools and teachers may use this document when planning a Scope and Sequence.

Some units in each stage cover the same outcomes in a different context. In these instances, teachers are encouraged to make planning decisions based on their schools' context and students' prior knowledge and context.

PrimaryConnections: Alignment with the NSW Science and Technology K-6 Syllabus (2017)				
Stage	Living World	Material World	Physical World	Earth and Space
ES1 (K)	Staying alive STe-1WS-S STe-3LW-ST	What's it made of? STe-1WS-S STe-4MW-ST	On the move STe-1WS-S STe-5PW-ST	Weather in my world STe-1WS-S STe-6ES-S
	Growing well STe-1WS-S STe-3LW-ST	That's my hat! STe-1WS-S STe-2DP-T STe-4MW-ST		
S1 (1-2)	Schoolyard safari ST1-1WS-S ST1-4LW-S	Spot the difference ST1-1WS-S ST1-6MW-S	Look! Listen! ST1-1WS-S ST1-8PW-S	Up, down and all around ST1-1WS-S ST1-10ES-S
	Dinosaurs and more ST1-1WS-S ST1-2DP-T ST1-4LW-S	Bend it! Stretch it! ST1-1WS-S ST1-7MW-T	Push-pull ST1-1WS-S ST1-9PW-ST	Water Works ST1-1WS-S ST1-10ES-S
	Watch it grow! ST1-1WS-S	All mixed up ST1-1WS-S ST1-6MW-S	Machine makers ST1-1WS-S ST1-2DP-T ST1-9PW-ST	Changes all around ST1-1WS-S ST1-2DP-T ST1-10ES-S
	Feathers, fur or leaves? ST2-1WS-S ST2-4LW-S	Melting moments ST2-1WS-S ST2-6MW-S	Heating up ST2-1WS-S ST2-8PW-ST	Night and day ST2-1WS-S ST2-10ES-S
S2 (3-4)	Friends or foes? ST2-1WS-S	Package it better ST2-1WS-S ST2-2DP-T ST2-7MW-T	Smooth moves ST2-1WS-S ST2-9PW-ST	Beneath our feet ST2-1WS-S
	Among the gum trees ST2-1WS-S	Material world ST2-1WS-S ST2-7MW-T	Magnetic moves ST2-1WS-S ST2-2DP-T ST3-1WS-S* ST3-2DP-T* ST3-9PW-ST*	
	Desert survivors ST3-1WS-S ST3-4LW-S	What's the matter? ST3-1WS-S ST3-7MW-T	Light shows ST3-1WS-S ST2-1WS-S* ST2-8PW-ST*	
S3 (5-6)	Marvellous microorganisms ST3-1WS-S ST3-4LW-S	Change detectives ST3-1WS-S ST3-6MW-S	Essential energy ST3-1WS-S ST3-8PW-ST	Earthquake explorers ST3-1WS-S ST3-10ES-S
	Rising salt ST3-1WS-S ST3-4LW-S ST3-5LW-T		It's electrifying ST3-1WS-S	
			Circuits and switches WS3-1WS-S ST3-2DP-T ST3-8PW-ST	Creators and destroyers ST3-1WS-S ST3-2DP-T ST3-10ES-S

* These units will require differentiation to the skills outcomes, literacy products and Mathematics links to make them suitable for this stage. Please Note: The following Technologies, Design and Production and Digital Technologies outcomes are not currently covered by the Primary Connections Resources. STe1-7DI-T; ST1-3DP-T; ST1-5LW-T; ST1-11DI-T; ST2-3DP-T; ST2-5LW-T; ST2-11DI-T; ST3-3DP-T; 3-11DI-T.