



Living things have a variety of external features (ACSSU017) AC		Pages
Living things live in different places where their needs are met (ACSSU211) AC		
Lesson 1 Where are living things found and what external features do they have to help them survive?	Students recall prior knowledge to establish what they know about what living things need, the features of living things and where they live.	4-6
Lesson 2 Where do animals live and what external features do they have that help them survive?	Students explore the habitats of some Australian animals through an interactive website, and learn about the body parts of the animals that live there and how they help them survive.	7-12
Lesson 3 What animals live in the ocean and what body parts do they have that help them survive?	Students investigate animals that live at the beach and underwater. The external features of fish, sharks and sea turtles are explored and labelled, with the aid of research via QR codes that link to videos.	13-18
Lesson 4 What animals live in the bush and what body parts do they have that help them survive?	Students observe and investigate common footprints made by Australian bush animals, including kangaroo, emu, lizard and wombat. Students then focus on the kangaroo and create a minibook, labelling the kangaroo's external features and investigating how it uses its body parts to live in the bush.	19-30
Lesson 5 What insects live in the backyard and what body parts do they have to help them survive?	Students explore insects found in the backyard by playing an interactive game. Students then explore by themselves by photographing an insect from their own backyard and finding information about it. Students create a tri-fold board to present their information and show a labelled photograph.	31-34
Lesson 6 What are the parts of a plant and what does each part do?	Students examine the common parts of a plant and use an interactive game to label a plant and understand the function of its features. Students then observe and investigate an actual plant and prepare an alien report explaining the parts of a plant and their functions.	35-38
Lesson 7 Why do plants from different habitats look different?	Students think about what plants belong in the desert and the rainforest. They focus on leaves and the function of leaves to observe and investigate a cactus and a leaf from a rainforest plant and explain why the leaves are different.	39-43
Summative assessment	Students draw an animal in its habitat and label the body parts, as well as draw a regular garden plant and its features and compare it to a desert or rainforest plant.	44-46
STEM project Alien animals	Students apply their knowledge of animal features and functions to create an alien animal using a website game. Students then design and make a 3D diorama suitable for the animal.	47-54



Curriculum scope and sequence

	Lesson									
	1	2	3	4	5	6	7	Assessment	STEM project	
SCIENCE UNDERSTANDING										
Living things have a variety of external features (ACSSU017) AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Living things live in different places where their needs are met (ACSSU211) AC	✓	✓	✓	✓	✓		✓	✓	✓	
SCIENCE AS A HUMAN ENDEAVOUR										
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE021) AC	✓	✓	✓	✓	✓	✓	✓		✓	
People use science in their daily lives, including when caring for their environment and living things (ACSHE022) AC						✓			✓	
SCIENCE INQUIRY SKILLS										
Questioning and predicting										
Pose and respond to questions, and make predictions about familiar objects and events (ACSI024) AC	✓	✓	✓	✓	✓	✓	✓			
Planning and conducting										
Participate in guided investigations to explore and answer questions (ACSI025) AC		✓	✓	✓	✓	✓	✓		✓	
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSI026) AC		✓	✓	✓	✓	✓	✓		✓	
Processing and analysing data and information										
Use a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions (ACSI027) AC	✓	✓	✓	✓	✓	✓	✓		✓	
Evaluating										
Compare observations with those of others (ACSI213) AC		✓	✓	✓	✓		✓			
Communicating										
Represent and communicate observations and ideas in a variety of ways (ACSI029) AC		✓	✓	✓	✓	✓	✓	✓	✓	



Everyday materials can be physically changed in a variety of ways (ACSSU018) AC		Pages
Lesson 1 What are materials and how do they change?	This lesson is to establish students' prior knowledge about materials and how they change by looking at a space hopper toy and an elastic hair band.	58-62
Lesson 2 How can the shape of an object be changed? Does it change back to its original shape?	Students explore shapes made with playdough by playing a brief challenge game. Students then compare the shapes that can be made by playdough and a rubber band.	63-67
Lesson 3 What happens when some materials are heated?	Students observe and compare what happens to playdough and chocolate when they are placed in an oven, and how cooked playdough can't be manipulated in the same way that uncooked playdough can. Students create playdough jewellery from the hardened playdough balls.	68-71
Lesson 4 What happens when some materials are cooled?	Students investigate how water, juice, milk and oil change when cooled. Students take before and after photographs and record their observations in a table.	72-75
Lesson 5 What other physical changes can be made to an object? Does an object go back to its original shape after a change is made or does it stay changed?	Students explore what kinds of changes can be made to a cracker by breaking it in half, cutting it, crushing it, mixing it with water and then drying it out using a novelty shape mould. Students reinforce the concept that some objects can be changed and stay changed and other objects return to their original shape.	76-78
Lesson 6 How do materials change when cooking?	Students undertake a real-life application of changing materials by making a cheesecake. This involves physical processes such as crushing, slicing, mixing, cooling, warming, whipping and beating different materials.	79-82
Summative assessment	Students communicate what they have learnt about how materials such as a rubber band, water, playdough, juice and a cracker can be physically changed.	83-84
STEM project A chair for a bear	Based on the book <i>A chair for Baby Bear</i> , students design and make a chair by physically manipulating newspaper by rolling, twisting, folding, weaving, scrunching etc. The chair must be strong enough to hold a toy bear. Students then record a video explaining what is unique about how they used the newspaper.	85-92



Curriculum scope and sequence

	Lesson							
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SCIENCE UNDERSTANDING								
Everyday materials can be physically changed in a variety of ways (ACSSU018) AC	✓	✓	✓	✓	✓	✓	✓	✓
SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE021) AC	✓	✓	✓	✓	✓	✓	✓	✓
People use science in their daily lives, including when caring for their environment and living things (ACSHE022) AC			✓			✓		✓
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSI024) AC	✓	✓	✓	✓	✓	✓		
Planning and conducting								
Participate in guided investigations to explore and answer questions (ACSI025) AC	✓	✓	✓	✓	✓	✓		✓
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSI026) AC			✓			✓		
Processing and analysing data and information								
Use a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions (ACSI027) AC	✓	✓	✓	✓	✓	✓		✓
Evaluating								
Compare observations with those of others (ACSI213) AC	✓	✓	✓	✓	✓	✓		
Communicating								
Represent and communicate observations and ideas in a variety of ways (ACSI029) AC	✓	✓	✓	✓	✓	✓	✓	✓




Observable changes occur in the sky and landscape (ACSSU019)		Pages
Lesson 1 What changes do we see in the sky and on the landscape during the day and at night-time?	Predicting and discussing prior knowledge about the concepts of day and night. Students predict what changes they might expect to see in the sky and on the land between day and night and over longer periods of time.	96-98
Lesson 2 What changes do we see in the night sky and the day sky? Do the stars and moon only appear in the night sky?	Students investigate why the stars are able to shine brighter in the night sky by conducting a simple experiment using a torch. Students then explore the misconception that the moon is only visible in the night sky by observing digital photographs and a moon timetable.	99-102
Lesson 3 What other changes do we see in the sky? How does the weather affect the appearance of the sky?	Students discuss common weather descriptions and icons and how they indicate what can be seen in the sky. Students observe the day sky and predict what the weather will be like based on how the clouds look, how the wind feels and how much sunshine can be seen, by creating a brief daily weather report video.	103-105
Lesson 4 What changes do we see in the landscape? How do the seasons affect the appearance of the land?	Students define what a landscape is and explore how it changes throughout the seasons. Students recall what they have seen during each season and then draw a familiar scene during a chosen season.	106-110
Lesson 5 What are natural, managed and constructed features in a landscape?	Students explore the difference between natural, managed and constructed features and then investigate and observe examples of these features in the school grounds. Students use a digital camera and create a table to sort their printed photographs. They also predict the changes that could occur to these features.	111-113
Lesson 6 How do natural, managed and constructed features change?	Students use the photographs of natural features from the previous lesson and an interactive game to explore the impact of human activity on the natural landscape.	114-116
Summative assessment	Assess students' understanding of observable changes that occur in the sky and landscape of a school scene by listing changes in a table.	117-118
STEM project A scene for a day and night video game	Design a day and night scene for a video game, and use video to explain the scenes and how the video game character interacts with the scenes.	119-128



Curriculum scope and sequence

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SCIENCE UNDERSTANDING								
Observable changes occur in the sky and landscape (ACSSU019) AC	✓	✓	✓	✓	✓	✓	✓	✓
SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE021) AC	✓	✓	✓	✓	✓	✓	✓	✓
People use science in their daily lives, including when caring for their environment and living things (ACSHE022) AC		✓	✓			✓		✓
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSI024) AC	✓	✓	✓	✓	✓	✓		
Planning and conducting								
Participate in guided investigations to explore and answer questions (ACSI025) AC		✓	✓	✓	✓	✓		✓
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSI026) AC								
Processing and analysing data and information								
Use a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions (ACSI027) AC		✓	✓	✓	✓	✓	✓	✓
Evaluating								
Compare observations with those of others (ACSI213) AC		✓	✓	✓	✓			
Communicating								
Represent and communicate observations and ideas in a variety of ways (ACSI029) AC		✓	✓	✓	✓	✓	✓	✓



Light and sound are produced by a range of sources and can be sensed (ACSSU020) 		Pages
<p>Lesson 1</p> <p>What is light? What is sound? What parts of our body do we use to detect light and sound?</p>	<p>This lesson is used to assess students' level of prior knowledge regarding light and sound. Students will rotate in small groups to answer six questions about light and sound. Students then take a photograph or record one thing they think relates to light and one thing they think relates to sound.</p>	132-134
<p>Lesson 2</p> <p>What are some sources of light? What is the difference between natural and man-made/artificial sources of light?</p>	<p>Students define what light is and watch a video to research and identify sources of light. Students also explore what natural and man-made light is and sort the sources as a class using an online T-chart.</p>	135-137
<p>Lesson 3</p> <p>How does light help us see? Does light help us see colours?</p>	<p>Students observe that (white) light is made up of different colours, as demonstrated with a Newton disc. Students conduct an experiment to test whether changing the colour of light will change how the colour of objects are perceived.</p>	138-142
<p>Lesson 4</p> <p>What is sound? How can we hear or feel sound?</p>	<p>Students explore what sound is and identify examples of sound. Students then investigate what sound 'looks like' and what vibrations are, through viewing what happens when hundreds and thousands are placed on a cling-wrapped bowl and a humming sound is made.</p>	143-146
<p>Lesson 5</p> <p>How can sounds be made?</p>	<p>Students create sounds made with simple musical instruments by striking, blowing, scraping or shaking. Students record the sounds and identify what actions caused the sound.</p>	147-150
<p>Lesson 6</p> <p>How are sounds different?</p>	<p>Students explore how sounds differ in terms of pitch and volume, then investigate by comparing sounds made by different musical instruments. Students use vocabulary such as <i>loud</i>, <i>soft</i>, <i>high</i>, <i>low</i>, <i>pitch</i> and <i>volume</i>, and identify how the sounds are created and can be changed.</p>	151-153
<p>Summative assessment</p>	<p>Assess students' understanding of light and sound by drawing examples of each.</p>	154-156
<p>STEM project</p> <p>A sun chime</p>	<p>Students design and create a product that is a combination of a sun catcher and a wind chime. Students need to use materials that will 'catch' the sun and materials that will make sounds in the wind.</p>	157-165



Curriculum scope and sequence

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SCIENCE UNDERSTANDING								
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SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE021) AC	✓	✓	✓	✓	✓	✓		✓
People use science in their daily lives, including when caring for their environment and living things (ACSHE022) AC	✓	✓	✓	✓	✓	✓		✓
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSI024) AC	✓	✓	✓	✓	✓	✓		✓
Planning and conducting								
Participate in guided investigations to explore and answer questions (ACSI025) AC	✓	✓	✓	✓	✓	✓		✓
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSI026) AC								
Processing and analysing data and information								
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Evaluating								
Compare observations with those of others (ACSI213) AC	✓		✓	✓	✓			
Communicating								
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