



Living things grow, change and ha	ave offspring similar to themselves (Acssuo30) 🔊	Pages
Lesson 1 What is an offspring?	Students observe living and non-living things, and discuss what <i>offspring</i> means. Students then scan QR codes to pair adult animals with their correct offspring and discuss how the animal is different or similar to its parent.	4-7
Lesson 2 How do humans grow and change from a baby to an adult?	Students use time-lapse videos and personal photographs to explore how humans grow and change, and how they predict they will look in the future. Using photographs, students compile a time- lapse video of their own personal growth so far.	8-10
Lesson 3 How do plants grow and change from a seed to a plant?	Students revise the needs of a plant and explore how a plant grows from a seed by watching time-lapse videos linked to QR codes. Students then recreate a growing plant using a simple stop-motion technique.	11-14
Lesson 4 How do offspring that look like their parents grow and change?	Students explore Instagram posts from a zoo and observe mammals and their offspring. Students compile a simple digital report to describe how the animals look at different stages of their life from birth to young to adult, and how the offspring are similar to their adult parents.	15-17
Lesson 5 How do the offspring of frogs grow and change?	Students predict how a frog lives two lives and explore how this relates to the stages of its life by viewing interactive websites. Students write and draw about how frog offspring grow and go through complete changes, and do not resemble the adult parents.	18-20
Lesson 6 How do offspring of insects grow and change?	Students explore and compare images of various insects including bees, ants, beetles, ladybugs, flies and butterflies. Students order the images according to the predictable stages that each insect goes through, from egg, to larvae, to pupa to adult, and take a digital photograph of their work.	21-26
Summative assessment	Assess students' understanding of the predictable changes in humans and animals as they grow, and that some animals have offspring that look similar to the parents while others don't.	27-28
STEM project Life cycle map	Design and create a mat for a Bee-Bot activity, based on the changes and growth of a living thing.	29-38



Curriculum scope and sequence

	Lesson							
SCIENCE UNDERSTANDING	1	2	3	4	5	6	Assessment	STEM project
Living things grow, change and have offspring similar to themselves (Acssuo30)	~	~	~	~	~	1	1	~
SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE034)	1	1	1	1	~	1	1	~
People use science in their daily lives, including when caring for their environment and living things (ACSHE035)			1			~		~
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSIS037)	1	1	1	1	~	1		
Planning and conducting			,					
Participate in guided investigations to explore and answer questions (ACSIS038)	1	~	1	~	1	1		1
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSIS039)								
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 (ACSISO40)	~	1	1	1	1	1	1	1
Evaluating							1	
Compare observations with those of others (ACSIS041)			1	1	1	1		
Communicating								
Represent and communicate observations and ideas in a variety of ways (ACSIS042)	1	~	1	~	1	1	1	1



Different materials can be o	combined for a particular purpose (ACSSU031)	Pages
Lesson 1 What are materials? What properties do materials have?	Students recall their prior knowledge of different materials and their properties. Students then explore the properties of objects made from different materials and test their knowledge of materials and their properties using an interactive game.	42-45
Lesson 2 What materials are found in the local environment? What are their properties? How are they used?	Students explore the school playground to find examples of how different materials have been used and take a digital photograph of each use. Students record the material each object is made from and list the properties which make that material useful for the object.	46-48
Lesson 3 What happens when materials are mixed? Do their properties change?	Students observe images of objects that have been made by combining different materials together. Students explore the work of Charles Macintosh, a chemist who created waterproof jackets by combining rubber with fabric. They then apply their knowledge of combining materials to draw and label a design for a house that is suitable for an underwater environment.	49-52
Lesson 4 What different materials are toys made from? Why?	Students explore toys that are made from different materials and toys that are made from more than one material. Students discuss why each material has been used to create a particular toy and then use this knowledge to draw and label a design of a toy that uses different materials for different parts.	53-55
Lesson 5 What happens to the property of materials when they are used to create a mixture?	Students explore how materials are mixed together for different purposes by examining breakfast foods that are mixtures and non-mixtures. Students conduct experiments to explore different mixtures that are commonly used while cooking and suggest different uses for each.	56-60
Lesson 6 How does paper recycling involve mixing materials?	Students explore what happens to paper after they place it in a recycling bin and how different materials are mixed together to recycle the paper we throw away. They then apply this knowledge to create a papier-mâché bowl using recycled egg cartons and discuss how mixing materials together created a bowl with different properties to the original egg carton.	61-63
Summative assessment	Assess students' knowledge of the materials that different objects are made from and their properties and how materials are combined or mixed together for particular purposes.	64-65
STEM project Oil spill clean-up	Students combine materials to recreate an oil spill and then devise a a method to remove the oil from the water and from bird feathers that have been affected by the oil. Students record a video describing the most effective method and how this could be applied to the real world.	66-74



Curriculum scope and sequence

	Lesson							
SCIENCE UNDERSTANDING	1	2	3	4	5	6	Assessment	STEM project
Different materials can be combined for a particular purpose (ACSSU031)	1	1	1	1	1	1	1	~
SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE034)	1	1	1	1	~			~
People use science in their daily lives, including when caring for their environment and living things (ACSHE035)	~	~	1	1	~	1		~
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSIS037)	1	1	1	1	~	1		
Planning and conducting								
Participate in guided investigations to explore and answer questions (ACSIS038)	~	~	~	~	~	~		~
Use informal measurements to collect and record observations, using digital technologies as appropriate (AcSIS039)						~		
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 (ACSIS040)	1	1	1	1	1	1	~	~
Evaluating								
Compare observations with those of others (ACSIS041)	1	1	1	1	1			
Communicating		·						
Represent and communicate observations and ideas in a variety of ways (ACSIS042)	1	1	1	1	~	1	1	~





Earth's resources are used in	a variety of ways (ACSSU032) 🔎	Pages
Lesson 1 What are Earth's resources? Where do they come from and how do we use them?	Students explore types of Earth's resources and how we use these resources in our everyday lives. Students conduct a school walk to find and take digital photographs of how Earth's resources are used in their natural or transformed state around the school.	78-81
Lesson 2 What natural resources do we use for food? How do different foods get from a farm to our fork?	Students identify Earth's resources that we use for food and the types of food products that come from each resource. Students watch videos and participate in interactive games to identify how food products are produced and how they are transported from a farm to a supermarket for us to buy.	82-85
Lesson 3 What do we use water for? How does water get from a source to our house? How does water get removed from our house?	Students identify natural sources of water on Earth and how we use water in our everyday lives. Students use an interactive game to explore how water is transported from a source to our homes and back to the ocean, through several processes, and how this changes in different locations, such as the city or the country.	86-89
Lesson 4 What do we use Earth's minerals for and where are they found? How do minerals get from a source to a factory and what happens to them at the factory?	Students investigate different minerals found on Earth and conduct an activity to extract different types of minerals from a tub filled with sand. They then classify these minerals into three groups–rocks, gems and metals. Students explore how minerals are mined from the ground and transported to factories to be transformed into different products.	90-91
Lesson 5 How did Aboriginal and Torres Strait Islander people use Earth's resources? How did they ensure there were enough resources for future generations?	Students explore how Aboriginal and Torres Strait Islander people used Earth's resources for food, water, shelter and to make tools to help them perform everyday tasks. Students scan QR codes to watch videos of Aboriginal and Torres Strait Islander people explaining how they use Earth's resources and how they ensure there are resources available for future use.	92-95
Lesson 6 How can we use Earth's resources wisely and how can we reduce, reuse and recycle our waste?	Students identify possible issues that may arise in the future if humans continue to use Earth's resources faster than they are replenished. They explore how we can be kinder to the environment by reducing, reusing and recycling our waste.	96-100
Summative assessment	Students communicate their understanding of how we use each of Earth's resources in our daily lives, the types of resources we get from farms, rivers and mines, and how we can reduce, reuse and recycle our waste.	101-102
STEM project Compost bin	Students design and create a miniature compost bin to show the school gardener how he/she can reuse waste materials to make free compost. Students record a video explaining how a compost bin works and how to look after it.	103-110





Curriculum scope and sequence

	Lesson							
SCIENCE UNDERSTANDING	1	2	3	4	5	6	Assessment	STEM project
Earth's resources are used in a variety of ways (ACSSU032)	1	1	1	1	1	1	1	✓
SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE034)	1	1	1	1	1	1		~
People use science in their daily lives, including when caring for their environment and living things (ACSHE035)	~	1	1	~	~	1	1	~
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSIS037)	1	1	1	1	1	1		~
Planning and conducting								
Participate in guided investigations to explore and answer questions (ACSIS038)	1	~	~	~	~	~		~
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSISO39)								1
Processing and analysing data and information							1	
Use a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions (ACSIS040)	1	1	1	1	1	1	1	1
Evaluating								
Compare observations with those of others (ACSIS041)	1	1		1	1			1
Communicating								
Represent and communicate observations and ideas in a variety of ways (ACSIS042)	1	~	~	~	~	1	1	1

Unit overview 🥪 🖓 🦉 🚅



A push or a pull affects ho	w an object moves or changes shape (ACSSU033) 📀	Pages
Lesson 1 What is a force and what does it do?	Students explore different ways they can move a balloon and sort into two categories–push or pull. Students conduct an experiment to investigate how objects move or change when a force is applied to each side of an object.	114-117
Lesson 2 What is the difference between a push and a pull?	Students explore the difference between pushes and pulls. Students predict where they think a person must be positioned to move an object from one place to another using a given force. Students participate in an interactive game and compare the information in the game to their predictions.	118-121
Lesson 3 Does the amount of force applied to an object affect how it moves or changes shape?	Students investigate how different amounts of force being applied to different sides of a hula hoop can change its shape or how it moves. Students conduct an experiment and then apply their knowledge to participate in an interactive game. Students also observe how obstacles placed in an object's path can affect how they move.	122-124
Lesson 4 Does the size and/or mass of an object change how much force is needed to move it?	Students explore if the size and weight of an object affects the amount of force needed to move it. Students investigate ways more force can be added through an interactive game and by using more muscle power during their experiment. Students should conclude that the amount of force needed to move objects depends on an object's mass, not its size.	125-128
Lesson 5 Why do objects fall to the ground when there is no surface for them to sit on?	Students briefly learn about Sir Isaac Newton and one of his famous discoveries, gravity. Students conduct an experiment to explore how gravity affects the path objects travel when they are dropped from a given height, when they are pushed or pulled off a surface and when they are thrown in the air.	129-131
Lesson 6 How do pushes and pulls affect objects in water?	Students conduct an experiment to test objects that float and sink in water. Students investigate which objects are getting pulled to the bottom of the tub of water by gravity and which are getting pushed to the surface of the water by another invisible force. They identify how pushes and pulls affect the movement and position of objects in water.	132-136
Summative assessment	Students demonstrate their knowledge of pushes and pulls and how these forces are used in our everyday lives, such as when playing games or moving boxes, and they investigating objects that float or sink.	137-138
STEM project Air vs gravity	Students design and create a floating ball toy for each partner that uses a push force to make a table tennis ball float in the air. The toy must have a small container to catch the ball when gravity pulls it towards the ground. Students take two digital photographs of their floating ball toy, one while the ball is at rest and one while it is in action, and upload these to a computer, labelling the type of force at work and the direction of the force in each image.	139-145



Curriculum scope and sequence

	Lesson							
SCIENCE UNDERSTANDING	1	2	3	4	5	6	Assessment	STEM project
A push or a pull affects how an object moves or changes shape (ACSSU033)	~	1	1	~	~	~	1	✓
SCIENCE AS A HUMAN ENDEAVOUR								
Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE034)	1	~	~	1	~	1	~	~
People use science in their daily lives, including when caring for their environment and living things (ACSHE035)	~	~	~	~	~	~	1	✓
SCIENCE INQUIRY SKILLS								
Questioning and predicting								
Pose and respond to questions, and make predictions about familiar objects and events (ACSIS037)	1	1	1	1	1	1		~
Planning and conducting								
Participate in guided investigations to explore and answer questions (ACSIS038)	~	1	~	1	1	~		✓
Use informal measurements to collect and record observations, using digital technologies as appropriate (ACSIS039)			1	1				1
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 (ACSIS040)	1	1	1	1	1	1	1	1
Evaluating								
Compare observations with those of others (ACSIS041)	1	1	1	1	1	1		
Communicating								
Represent and communicate observations and ideas in a variety of ways (ACSIS042)	~	~	~	~	~	~	~	✓