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| Prep–Year 2 multi-age Science Curriculum and assessment plan  Example |

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| Context and cohort considerations |
| This is a multiage grouping, formed for one year only, to manage uneven enrolments across year levels. Students will move into single year classes the following year.  A significant percentage of Prep students have attended a kindergarten program and their transition statements, along with conversations with the kindergartens, support understanding of those students’ early language, literacy and numeracy learning experiences and strengths. Students work in groups within their enrolled year level and also in groups based on their language and literacy levels across year levels. Use of common imaginative and informative science-themed texts in Units 1 and 3 creates a cohesive thread between the year level contexts; the use of familiar objects and materials in Units 2 and 4 provides this cohesion.  The classroom teacher provides a Science lesson once a week with flexibility around the timing of assessment to allow teacher aides to assist as required. |

| Level description — Prep | Level description — Year 1 | Level description — Year 2 | |
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| In Foundation, learning in Science builds on the Early Years Learning Framework and each student’s prior learning and experiences. Science encourages students to explore their environment and be curious about their surroundings.  Students build wonder and their natural curiosity by observing everyday objects, materials and living things and by exploring changes in the world around them, including changes they can effect, such as making things move or change shape. They learn that observations can be organised to make patterns and that these patterns can be used to make predictions about phenomena. They seek answers to questions they pose using their senses to gather different types of information. They understand that making observations and predictions is a core part of science.  Inquiry questions can help excite students’ curiosity and challenge their thinking.  Following are examples of inquiry questions that could be used to prompt discussion and exploration:   * Why do we have different senses? How do we use them? * Why is sorting important? * How are a spider and a fly alike and different? * Are wheels the only way to get around? * Why do people describe things differently? | In Year 1 students extend their understanding of patterns by exploring patterns in daily and seasonal events, recognising that all living things share the same basic needs, and that objects can behave in predictable ways. They infer relationships from their observations and experiences and begin to link function with observable properties.  They observe that changes to objects and events can be large or small and happen quickly or slowly. Students pose questions and make predictions based on their observations and are introduced to ways of organising their observations to identify patterns. They appreciate that science involves observing, asking questions about and describing changes in objects and events.  Inquiry questions can help excite students’ curiosity and challenge their thinking. Following are examples of inquiry questions that could be used to prompt discussion and exploration:   * Does a fish have a home? * How do we know what season it is? * What makes playgrounds fun? How do playground designers come up with ideas? * How can we tell if something has changed? * How does science help us care for ourselves and other living things? | | In Year 2 students build on their experiences of the natural and physical world to identify the components of simple systems. They appreciate that Earth is a planet in space and identify other celestial objects. They explore the ways components in a system interact, such as by using their bodies or combining and manipulating objects to make sounds. They build on their understanding of properties of materials to recognise that those properties stay the same when the material is changed physically.  They continue to build their understanding of patterns by observing that some patterns, such as the changing positions of the sun, moon and stars, can only be observed over certain timescales. As they explore patterns and relationships, they use counting and informal measurements to make and compare observations and recognise that organising these observations in tables makes it easier to identify and represent patterns. They appreciate that science involves making and organising observations to identify patterns and relationships, and that these patterns and relationships are the basis of scientific predictions.  Inquiry questions can help excite students’ curiosity and challenge their thinking. Following are examples of inquiry questions that could be used to prompt discussion and exploration:   * Who does science? * How do we know Earth is round? * How can we make and sense music? * What’s the best material? Why? * How does the sky change over time? |

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|  | Unit 1 — Farm life | Unit 2 — Unwrapped | Unit 3 — Has that changed? | Unit 4 — Fun and games |
|  | Duration: Term 1, 10 weeks | Duration: Term 2, 10 weeks | Duration: Term 3, 10 weeks | Duration: Term 4, 10 weeks |
|  | After reading a range of informative and imaginative texts and viewing videos on farm life, students pose questions, such as:   * How are living things grouped on farms? * How do farmers meet the needs of living things? * How can people use science in their daily lives?   In answering these questions students use their extended biological vocabulary to share their ideas.  In recognising that all living things are connected, students are introduced to the idea of systems and sustainability. | Food wrappers keep our lunches fresh and prevent the different foods from mixing. Food wrappers are familiar and easily accessible items that provide opportunities for students to explore the properties of matter and to build numeracy skills as students collect, sort and represent data.  Students work in groups to investigate a collection of provided wrappers. They practice decision making to share the resources fairly and identify their reasons for making those decisions. | Curious students observe their surroundings and pose questions that help them make sense of the world. In this unit students make and record observations of daily changes in the sky and seasonal changes. They use digital tools (e.g. iPads or digital cameras) to create content, including taking photographs of changing shade patterns over a day. They share their experiences of the changes they have observed and identify how they can make predictions based on observations.  Using imaginative and informative texts from First Nations authors, students identify how people use their understanding of daily and seasonal changes to identify patterns and make predictions. | Playing with a range of toys that roll, bounce, stretch and make sounds allows students to explore forces and energy and share their questions, predictions and observations with their classmates.  Students work collaboratively to share toys and use digital tools to record data. They make choices when investigating and use the data they collect to draw conclusions. |
| Prep | Prep students follow adult directions to use a digital tool (e.g. iPad) to view images of farm life. They group plants and animals based on their external features. They sort and order this data using a graphic organiser and look for patterns including the number of legs animals have and the type of food plants provide, e.g. fruit, seeds or edible roots.  To prepare for Unit 3, teachers will photograph each Prep student with an outdoor background, such as a garden bed, that will look different in six-month’s time. | Prep students describe the observable properties of the materials used as food wrappers. They use comparative language when describing the properties of different wrappers and annotate photographs of the food wrappers they have observed. | Prep students focus on the Science as a human endeavour and Science inquiry strands. They listen to stories of how people learn about the natural world and identify changes they have experienced.  Students practice posing questions and making predictions using the photographs taken in Term 1 as stimulus alongside photographs they take of changes they observe.  They answer short response questions based on the texts they have engaged with and the photographs from Term 1. | Prep students explore how the size, shape and material of a toy influences how it rolls. Based on these experiences they make predictions about how far different sized balls and different shaped soft toys roll.  Working in groups they conduct the experiment, collect data by taking photos and use a provided scaffold to individually record their predictions and observations. |
| Year 1 | Year 1 students identify how living things meet their needs on farms. They apply search terms in a search engine to locate information on particular farm plants or animals and use this information to annotate an image of a farm. They organise the needs of living things into a provided table identifying what the farmer supplies and what the environment supplies.  To prepare for Unit 3, teachers will photograph each Year 1 student with an outdoor background, such as a garden bed, that will look different in six-month’s time. | Year 1 students focus on the Science as a human endeavour and Science inquiry strands. They conduct a simple observational experiment to explore a range of food wrappers and communicate their findings through picture graphs. Students respond to questions about how they use science in their daily lives by referring to one-to-one data displays. | Year 1 students use the texts they have engaged with to identify examples of people making scientific predictions based on observing daily and seasonal changes. They build this understanding by viewing the student photos to describe the ways that seasonal changes affect their everyday lives, e.g. different clothing choices between summer and winter.  Students answer short response questions based on the texts they have engaged with and their own recorded observations of daily changes. | Year 1 students use rubber and elastic toys, such as balls, balloons and elastics, to explore how the strength and direction of pushes and pulls changes the shape and motion of objects. They pose questions and make predictions based on their observations and use a scaffolded science journal to record these observations, including photographs. |
| Year 2 | Year 2 students focus on the Science as a human endeavour and Science inquiry strands. They apply search terms in a search engine to locate information on growing beans and use this information to plant bean seeds. They use a calendar and digital photographs to record bean seed germination and growth.  They describe how farmers use science in their everyday lives and share these ideas with the Prep and Year 1 students in their class through a poster displaying a simple sequence of steps to grow beans. They use adjectives to add meaning and encourage their classmates to appreciate how they too can use science in their everyday lives. | Year 2 students identify ways to change materials without changing their material composition. They follow safe procedures to explore the materials in food wrappers, by bending, twisting, stretching and breaking food wrappers into pieces.  Students use informal units of measurement to record observations and represent patterns in provided tables. In comparing their observations with others, they identify further questions for exploration. | Year 2 students look skyward and watch videos to identify patterns in the changing positions of the sun, moon, planets and stars in the sky. They make predictions about the movement of the sun and moon and use a scaffolded diary over one week, to organise their observations of the changing positions of the sun and moon. They identify how people have made and used predictions based on the movement of celestial objects.  Students answer short response questions based on the texts they have engaged with and their own recorded observations. | Year 2 students use toys to explore sound energy. Focusing on percussion, students experiment with making different percussive sounds (i.e. sounds created by striking, shaking or scraping) and observe the effect of sound energy on objects.  They pose questions and suggest steps to investigate a relationship they observed during their playing with sound, e.g. the more force I use to strike the drum, the louder the sound.  Students use digital tools to record sounds and video. They observe sound energy causing the movement of rice laying on plastic wrap stretched over a cup when they strike a spoon on a metal tray held nearby.  They complete a scaffolded science journal and use scientific vocabulary to communicate their findings. |

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|  | Unit 1 — Farm life | Unit 2 — Unwrapped | Unit 3 — Has that changed? | Unit 4 — Fun and games |
| Prep | **Assessment 1 — Investigation**  **Description:** Students populate a graphic organiser guiding them to represent their observations of external features of farm animals and plants. They identify patterns in the external features of farm animals and plants.  **Technique:** Investigation  **Mode:** Multimodal (visual and scribed)  **Conditions:**   * completed over a two-week period * graphic organiser provided | **Assessment 2 — Experimental investigation**  **Description:** In groups, students explore the materials used in food packaging. Individually they annotate images of food packages with descriptions of the properties of the materials they are made of.  **Technique:** Experimental investigation  **Mode:** Multimodal (visual and scribed)  **Conditions:**   * completed over a two-week period * group work with individual response | **Assessment 3 — Supervised assessment**  **Description:** Students provide short response answers based on an informative text read by the teacher. They pose questions, make predictions and identify examples of people learning about the natural world.  **Technique:** Supervised assessment  **Mode:** Written  **Conditions:**   * supervised conditions | **Assessment 4 —** **Experimental investigation**  **Description:** In groups, students explorehow the size and shape of provided objects influences the way objects roll. They record their observations with a camera. Individually students complete a provided scaffold to record predictions and observations.  **Technique:** Experimental investigation  **Mode:** Multimodal (visual and written)  **Conditions:**   * completed over a two-week period * group work with individual response * scaffold provided |
| Year 1 | **Assessment 1 — Investigation**  **Description:** Students annotate a photograph of a farm, identifying how plants and animals have their needs met. They complete a provided table sorting the needs of farm plants and animals into those the farmer supplies and those the environment supplies.  **Technique:** Investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * template provided | **Assessment 2 — Experimental investigation**  **Description:** Students observe food wrappers provided by the teacher. They pose a question and conduct a simple observational experiment, collecting and displaying data on the types of wrappers. They use a scaffolded science journal to record their progress.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a three-week period * scaffolded science journal provided | **Assessment 3 — Supervised assessment**  **Description:** Students respond to questions and scenarios that focus on daily and seasonal changes, how people make predictions and how to sort and order data and information.  **Technique:** Supervised assessment  **Mode:** Written  **Conditions:**   * individual response * time as required | **Assessment 4 — Experimental investigation**  **Description:** Students pose a question to explore the changing motion and shape of objects as they are pushed and pulled. They make a prediction and compare this with their observations and identify further questions. Students complete a provided scaffold.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * group work with individual response * scaffolded science journal provided |
| Year 2 | **Assessment 1 — Investigation**  **Description:** Students create a poster that describes a simple sequence of steps to grow beans and encourages their classmates to use science in their everyday lives.  **Technique:** Investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * poster template provided | **Assessment 2 — Experimental investigation**  **Description:** Students design an experiment to investigate bending, twisting, stretching and breaking lunch wrapping into pieces. They record their method and findings in a scaffolded science journal.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * group work with individual response * scaffolded science journal provided | **Assessment 3 — Supervised assessment**  **Description:** Students answer short response questions focusing on identifying celestial objects in the sky and how people use observations to make predictions. Students also make predictions and sort and order data to represent patterns.  **Technique:** Supervised assessment  **Mode:** Written  **Conditions:**   * supervised conditions | **Assessment 4 — Experimental investigation**  **Description:** In groups, students use percussion to explore how different sounds are made and describe the effect of sound energy on objects.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * group work with individual response * scaffolded science journal provided |

# Prep

|  | Unit 1 — Farm life | | Unit 2 — Unwrapped | | Unit 3 — Has that changed? | | Unit 4 — Fun and games | |
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|  | Assessment — Investigation | Timing | Assessment — Experimental investigation | Timing | Assessment — Supervised assessment | Timing | Assessment — Experimental investigation | Timing |
| Assessment | **Description:** Students populate a graphic organiser guiding them to represent their observations of external features of farm animals and plants. They identify patterns in the external features of farm animals and plants.  **Technique:** Investigation  **Mode:** Multimodal (visual and scribed)  **Conditions:**   * graphic organiser completed over a two-week period * individual response * time as required | Weeks 9–10 | **Description:** In groups, students explore the materials used in food packaging. Individually they annotate images of food packages with descriptions of the properties of the materials they are made of.  **Technique:** Experimental investigation  **Mode:** Multimodal (visual and scribed)  **Conditions:**   * completed over a two-week period * group work * individual response * time as required | Weeks 9–10 | **Description:** Students provide short response answers based on an informative text read by the teacher. They pose questions, make predictions and identify examples of people learning about the natural world.  **Technique:** Supervised assessment  **Mode:** Written  **Conditions:**   * individual response * time as required | Week 10 | **Description:** In groups, students explorehow the size and shape of provided objects influences the way objects roll. They record their observations with a camera. Individually students complete a provided scaffold to record predictions and observations.  **Technique:** Experimental investigation  **Mode:** Multimodal (visual and written)  **Conditions:**   * completed over a two-week period * group work * individual response * time as required | Weeks 9–10 |
| Achievement standard | By the end of Foundation students group plants and animals based on external features. They identify factors that influence the movement of objects. They describe the observable properties of the materials that make up objects. They identify examples of people using observation and questioning to learn about the natural world.  Students pose questions and make predictions based on their experiences. They engage in investigations and make observations safely. With guidance, they represent observations and identify patterns. With guidance, they compare their observations with their predictions. They share questions, predictions, observations and ideas about their experiences with others. | | By the end of Foundation students group plants and animals based on external features. They identify factors that influence the movement of objects. They describe the observable properties of the materials that make up objects. They identify examples of people using observation and questioning to learn about the natural world.  Students pose questions and make predictions based on their experiences. They engage in investigations and make observations safely. With guidance, they represent observations and identify patterns. With guidance, they compare their observations with their predictions. They share questions, predictions, observations and ideas about their experiences with others. | | By the end of Foundation students group plants and animals based on external features. They identify factors that influence the movement of objects. They describe the observable properties of the materials that make up objects. They identify examples of people using observation and questioning to learn about the natural world.  Students pose questions and make predictions based on their experiences. They engage in investigations and make observations safely. With guidance, they represent observations and identify patterns. With guidance, they compare their observations with their predictions. They share questions, predictions, observations and ideas about their experiences with others. | | By the end of Foundation students group plants and animals based on external features. They identify factors that influence the movement of objects. They describe the observable properties of the materials that make up objects. They identify examples of people using observation and questioning to learn about the natural world.  Students pose questions and make predictions based on their experiences. They engage in investigations and make observations safely. With guidance, they represent observations and identify patterns. With guidance, they compare their observations with their predictions. They share questions, predictions, observations and ideas about their experiences with others. | |
| Moderation | **Consensus:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | | **Calibration:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | | **Consensus:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | | **Expert:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | |

| Content descriptions | Units | | | | Content descriptions | Units | | | | | Content descriptions | Units | | | |
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| Science understanding | 1 | 2 | 3 | 4 | Science as a human endeavour | 1 | 2 | 3 | 4 | | Science inquiry | 1 | 2 | 3 | 4 |
| **Biological sciences**  observe external features of plants and animals and describe ways they can be grouped based on these features AC9SFU01 |  |  |  |  | **Use and influence of science**  explore the ways people make and use observations and questions to learn about the natural world AC9SFH01 |  |  |  |  | | **Questioning and predicting**  pose questions and make predictions based on experiences AC9SFI01 |  |  |  |  |
| **Physical sciences**  describe how objects move and how factors including their size, shape or material influence their movement AC9SFU02 |  |  |  |  |  |  |  |  |  | **Planning and conducting**  engage in investigations safely and make observations using their senses AC9SFI02 | |  |  |  |  |
| **Chemical sciences**  recognise that objects can be composed of different materials and describe the observable properties of those materials AC9SFU03 |  |  |  |  |  |  |  |  |  | **Processing, modelling and analysing**  represent observations in provided templates and identify patterns with guidance AC9SFI03 | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | **Evaluating**  compare observations with predictions with guidance AC9SFI04 | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | **Communicating**  share questions, predictions, observations and ideas with others AC9SFI05 | |  |  |  |  |

# Year 1

|  | Unit 1 — Farm life | | Unit 2 — Unwrapped | | Unit 3 — How has that changed? | | Unit 4 — Fun and games | |
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|  | Assessment — Investigation | Timing | Assessment — Experimental investigation | Timing | Assessment — Supervised assessment | Timing | Assessment — Experimental investigation | Timing |
| Assessment | **Description:** Students annotate a photograph of a farm, identifying how plants and animals have their needs met. They complete a provided table sorting the needs of farm plants and animals into those the farmer supplies and those the environment supplies.  **Technique:** Investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * individual response * template provided * time as required | Weeks 9–10 | **Description:** Students observe food wrappers provided by the teacher. They pose a question and conduct a simple observational experiment, collecting and displaying data on the types of wrappers. They use a scaffolded science journal to record their progress.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a three-week period * individual response * scaffolded science journal provided * time as required | Weeks 8–10 | **Description:** Students respond to questions and scenarios that focus on daily and seasonal changes, how people make predictions and how to sort and order data and information.  **Technique:** Supervised assessment  **Mode:** Written  **Conditions:**   * individual response * time as required | Week 10 | **Description:** Students pose a question to explore the changing motion and shape of objects as they are pushed and pulled. They make a prediction and compare this with their observations and identify further questions. Students complete a provided scaffold.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * individual response * scaffolded science journal provided * time as required | Weeks 9–10 |
| Achievement standard | By the end of Year 1 students identify how living things meet their needs in the places they live. They identify daily and seasonal changes and describe ways these changes affect their everyday life. They describe how different pushes and pulls change the motion and shape of objects. They describe situations where they use science in their daily lives and identify examples of people making scientific predictions.  Students pose questions to explore observations and make predictions based on experiences. They follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and information and, with guidance, represent patterns. With guidance, they compare observations with predictions and identify further questions. They use everyday vocabulary to communicate observations, findings and ideas. | | By the end of Year 1 students identify how living things meet their needs in the places they live. They identify daily and seasonal changes and describe ways these changes affect their everyday life. They describe how different pushes and pulls change the motion and shape of objects. They describe situations where they use science in their daily lives and identify examples of people making scientific predictions.  Students pose questions to explore observations and make predictions based on experiences. They follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and information and, with guidance, represent patterns. With guidance, they compare observations with predictions and identify further questions. They use everyday vocabulary to communicate observations, findings and ideas. | | By the end of Year 1 students identify how living things meet their needs in the places they live. They identify daily and seasonal changes and describe ways these changes affect their everyday life. They describe how different pushes and pulls change the motion and shape of objects. They describe situations where they use science in their daily lives and identify examples of people making scientific predictions.  Students pose questions to explore observations and make predictions based on experiences. They follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and information and, with guidance, represent patterns. With guidance, they compare observations with predictions and identify further questions. They use everyday vocabulary to communicate observations, findings and ideas. | | By the end of Year 1 students identify how living things meet their needs in the places they live. They identify daily and seasonal changes and describe ways these changes affect their everyday life. They describe how different pushes and pulls change the motion and shape of objects. They describe situations where they use science in their daily lives and identify examples of people making scientific predictions.  Students pose questions to explore observations and make predictions based on experiences. They follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and information and, with guidance, represent patterns. With guidance, they compare observations with predictions and identify further questions. They use everyday vocabulary to communicate observations, findings and ideas. | |
| Moderation | **Consensus:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | | **Calibration:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | | **Consensus:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | | **Expert:**  Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area. | |

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| Science understanding | 1 | 2 | 3 | 4 | Science as a human endeavour | 1 | 2 | 3 | 4 | Science inquiry | 1 | 2 | 3 | 4 | |
| **Biological sciences**  identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs AC9S1U01 |  |  |  |  | **Use and influence of science**  describe how people use science in their daily lives, including using patterns to make scientific predictions AC9S1H01 |  |  |  |  | **Questioning and predicting**  pose questions to explore observed simple patterns and relationships and make predictions based on experiences AC9S1I01 |  |  |  |  | |
| **Earth and space sciences**  describe daily and seasonal changes in the environment and explore how these changes affect everyday life AC9S1U02 |  |  |  |  |  |  |  |  |  | **Planning and conducting**  suggest and follow safe procedures to investigate questions and test predictions AC9S1I02 |  |  |  |  | |
| **Physical sciences**  describe pushes and pulls in terms of strength and direction and predict the effect of these forces on objects’ motion and shape AC9S1U03 |  |  |  |  |  |  |  |  |  | make and record observations, including informal measurements, using digital tools as appropriate AC9S1I03 |  |  |  |  | |
|  |  |  |  |  |  |  |  |  |  | **Processing, modelling and analysing**  sort and order data and information and represent patterns, including with provided tables and visual or physical models AC9S1I04 |  |  |  |  | |
|  |  |  |  |  |  |  |  |  |  | **Evaluating**  compare observations with predictions and others’ observations, consider if investigations are fair and identify further questions with guidance AC9S1I05 |  |  |  |  | |
|  |  |  |  |  |  |  |  |  |  | **Communicating**  write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary AC9S1I06 |  |  |  |  | |

## Year 2

|  | Unit 1 — Farm life | | Unit 2 — Unwrapped | | Unit 3 — Has that changed? | | Unit 4 — Fun and games | |
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|  | Assessment — Investigation | Timing | Assessment — Experimental investigation | Timing | Assessment — Supervised assessment | Timing | Assessment — Experimental investigation | Timing |
| Assessment | **Description:** Students create a poster that describes a simple sequence of steps to grow beans and encourages their classmates to use science in their everyday lives.  **Technique:** Investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * individual response * poster template provided * time as required | Weeks 9–10 | **Description:** Students design an experiment to investigate bending, twisting, stretching and breaking lunch wrapping into pieces. They record their method and findings in a scaffolded science journal.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * group work * individual response * scaffolded science journal provided * time as required | Weeks 9–10 | **Description:** Students answer short response questions focusing on identifying celestial objects in the sky and how people use observations to make predictions. Students also make predictions and sort and order data to represent patterns.  **Technique:** Supervised assessment  **Mode:** Written  **Conditions:**   * individual response * time as required | Week 10 | **Description:** In groups, students use percussion to explore how different sounds are made and describe the effect of sound energy on objects.  **Technique:** Experimental investigation  **Mode:** Written  **Conditions:**   * completed over a two-week period * group work * individual response * scaffolded science journal provided * time as required | Weeks 9–10 |
| Achievement standard | By the end of Year 2 students identify celestial objects and describe patterns they observe in the sky. They demonstrate how different sounds can be produced and describe the effect of sound energy on objects. They identify ways to change materials without changing their material composition. They describe how people use science in their daily lives and how people use patterns to make scientific predictions.  Students pose questions to explore observed patterns or relationships and make predictions based on experience. They suggest steps to be followed in an investigation and follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and represent patterns in data. With guidance, they compare their observations with those of others, identify whether their investigation was fair and identify further questions. They use everyday and scientific vocabulary to communicate observations, findings and ideas. | | By the end of Year 2 students identify celestial objects and describe patterns they observe in the sky. They demonstrate how different sounds can be produced and describe the effect of sound energy on objects. They identify ways to change materials without changing their material composition. They describe how people use science in their daily lives and how people use patterns to make scientific predictions.  Students pose questions to explore observed patterns or relationships and make predictions based on experience. They suggest steps to be followed in an investigation and follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and represent patterns in data. With guidance, they compare their observations with those of others, identify whether their investigation was fair and identify further questions. They use everyday and scientific vocabulary to communicate observations, findings and ideas. | | By the end of Year 2 students identify celestial objects and describe patterns they observe in the sky. They demonstrate how different sounds can be produced and describe the effect of sound energy on objects. They identify ways to change materials without changing their material composition. They describe how people use science in their daily lives and how people use patterns to make scientific predictions.  Students pose questions to explore observed patterns or relationships and make predictions based on experience. They suggest steps to be followed in an investigation and follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and represent patterns in data. With guidance, they compare their observations with those of others, identify whether their investigation was fair and identify further questions. They use everyday and scientific vocabulary to communicate observations, findings and ideas. | | By the end of Year 2 students identify celestial objects and describe patterns they observe in the sky. They demonstrate how different sounds can be produced and describe the effect of sound energy on objects. They identify ways to change materials without changing their material composition. They describe how people use science in their daily lives and how people use patterns to make scientific predictions.  Students pose questions to explore observed patterns or relationships and make predictions based on experience. They suggest steps to be followed in an investigation and follow safe procedures to make and record observations. They use provided tables and organisers to sort and order data and represent patterns in data. With guidance, they compare their observations with those of others, identify whether their investigation was fair and identify further questions. They use everyday and scientific vocabulary to communicate observations, findings and ideas. | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Science understanding | 1 | 2 | 3 | 4 | Science as a human endeavour | 1 | 2 | 3 | 4 | Science inquiry | 1 | 2 | 3 | 4 | |
| **Earth and space sciences**  recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky AC9S2U01 |  |  |  |  | **Use and influence of science**  describe how people use science in their daily lives, including using patterns to make scientific predictions AC9S2H01 |  |  |  |  | **Questioning and predicting**  pose questions to explore observed simple patterns and relationships and make predictions based on experiences AC9S2I01 |  |  |  |  | |
| **Physical sciences**  explore different actions to make sounds and how to make a variety of sounds, and recognise that sound energy causes objects to vibrate AC9S2U02 |  |  |  |  |  |  |  |  |  | **Planning and conducting**  suggest and follow safe procedures to investigate questions and test predictions AC9S2I02 |  |  |  |  | |
| **Chemical sciences**  recognise that materials can be changed physically without changing their material composition and explore the effect of different actions on materials including bending, twisting, stretching and breaking into smaller pieces AC9S2U03 |  |  |  |  |  |  |  |  |  | make and record observations, including informal measurements, using digital tools as appropriate AC9S2I03 |  |  |  |  | |
|  |  |  |  |  |  |  |  |  |  | **Processing, modelling and analysing**  sort and order data and information and represent patterns, including with provided tables and visual or physical models AC9S2I04 |  |  |  |  | |
|  |  |  |  |  |  |  |  |  |  | **Evaluating**  compare observations with predictions and others’ observations, consider if investigations are fair and identify further questions with guidance AC9S2I05 |  |  |  |  | |
|  |  |  |  |  |  |  |  |  |  | **Communicating**  write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary AC9S2I06 |  |  |  |  | |

| General capabilities | Units | | | |  | Cross-curriculum priorities | Units | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |  |  | 1 | 2 | 3 | 4 |
| Critical and creative thinking |  |  |  |  |  | Aboriginal and Torres Strait Islander histories and cultures |  |  |  |  |
| Digital literacy |  |  |  |  |  | Asia and Australia’s engagement with Asia |  |  |  |  |
| Ethical understanding |  |  |  |  |  | Sustainability |  |  |  |  |
| Intercultural understanding |  |  |  |  |
| Literacy |  |  |  |  |
| Numeracy |  |  |  |  |
| Personal and social capability |  |  |  |  |

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