# Year 2 Science

## **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 every day and scientific vocabulary to communicate observations, findings and ideas.

### **Assessable Elements**

An overall level of achievement in this subject is determined by the teacher's on-balance judgment of the evidence presented in students' summative assessment across the following:

- Science Understanding Chemical Sciences, Earth and Space Sciences, Physical Sciences
- Science as a Human Endeavour Use and influence of science
- Science Inquiry Skills Questioning and predicting, planning and conducting, processing, modelling and analysing, evaluating, communicating

#### **Delivery (mode, time requirements, lessons)**

Students have access to scheduled lessons each week. Lessons are delivered via the Learning Management System. Students are also expected to undertake independent study to complete tasks and assessment in accordance with the Work Rate Calendar. Course materials can be accessed in QLearn.

#### **Student Requirements**

Computer, internet access, email, printer, scanner, headset with microphone, stationery, resource list and SRS list.

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Units and Learning Experiences, Summative Assessment, Criteria Assessed		
		Unit 1
	Unit 1	Earth and Space Sciences: Our Moving Sky
		How do objects in the sky appear to move, and how do people use these patterns to understand the world around them?
		In this unit, students will go on an amazing adventure to explore space and the patterns in the sky. We'll learn about our solar system, find out why the Earth spins, and how it goes around the Sun. We'll also have fun exploring how shadows are made, how sundials work, and what the Moon looks like at different times. Plus, we'll discover the incredible knowledge of First Nations people about the stars and the sky.
		Summative Assessment, criteria assessed:
		Short Response Items - ST1.1 Patterns in the Sky
		You are going to become a Sky Observer! Your task is to describe a pattern you have observed in the sky and explain how it changes over time. You will also identify celestial objects and describe how people use these patterns in their daily lives.
	Unit 2	Unit 2
		Physical Sciences: Hearing Sounds
		What happens when we make a sound?
Semester 1		In this unit, students develop their early understanding of how sound is produced. They explore various actions that generate sound and discover how sound energy triggers vibrations in objects. Students build a vocabulary to describe sound qualities, such as volume and pitch, and compare sounds created by musical instruments and everyday objects. Cultural perspectives will be enriched by examining traditional First Nations Australian instruments.
		Summative Assessment, criteria assessed:
		Experimental Investigation: Students will demonstrate how different sounds can be produced and describe the effect of sound energy on objects.
		Unit 3
		Biological Sciences: Changing Materials
	Term 3	How can materials be changed?
		In this unit students will learn that objects are made of a range of materials that have observable properties. They will understand the various ways we can physically change materials including bending, twisting, stretching and cutting. Students will learn that some materials have a greater impact on the environment than others. They will get hands-on experience working with and manipulating materials with a series of exciting in-class activities and experiments.
		Summative Assessment, criteria assessed:
		Written Response – Students will identify ways to change materials without changing their material composition.

**Disclaimer** All of the above information is accurate at the time of development.