

## Science

Foundation Year  
Above satisfactory**WORK SAMPLE PORTFOLIO**

Annotated work sample portfolios are provided to support implementation of the Foundation – Year 10 Australian Curriculum.

Each portfolio is an example of evidence of student learning in relation to the achievement standard. Three portfolios are available for each achievement standard, illustrating satisfactory, above satisfactory and below satisfactory student achievement. The set of portfolios assists teachers to make on-balance judgements about the quality of their students' achievement.

Each portfolio comprises a collection of students' work drawn from a range of assessment tasks. There is no pre-determined number of student work samples in a portfolio, nor are they sequenced in any particular order. Each work sample in the portfolio may vary in terms of how much student time was involved in undertaking the task or the degree of support provided by the teacher. The portfolios comprise authentic samples of student work and may contain errors such as spelling mistakes and other inaccuracies. Opinions expressed in student work are those of the student.

The portfolios have been selected, annotated and reviewed by classroom teachers and other curriculum experts. The portfolios will be reviewed over time.

*ACARA acknowledges the contribution of Australian teachers in the development of these work sample portfolios.*

**THIS PORTFOLIO: FOUNDATION YEAR SCIENCE**

This portfolio provides the following student work samples:

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| Sample 1 | Report: How the weather affects us     |
| Sample 2 | Investigation: Watch it move           |
| Sample 3 | Worksheet: How animals move            |
| Sample 4 | Investigation: Properties of materials |

In this portfolio, the student describes the properties of familiar materials (WS4) and the behaviour of familiar objects and living things (for example, how animals move) (WS2, WS3). The student explains how the environment affects them and their needs in different environments (WS1). With teacher guidance, the student demonstrates an ability to share observations of familiar objects through verbal descriptions, drawing and written text (WS1, WS2, WS3, WS4).

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## Report: How the weather affects us

### Foundation Year Science achievement standard

The parts of the achievement standard targeted in the assessment task are highlighted.

*By the end of the Foundation year, students describe the properties and behaviour of familiar objects. They suggest how the environment affects them and other living things.*

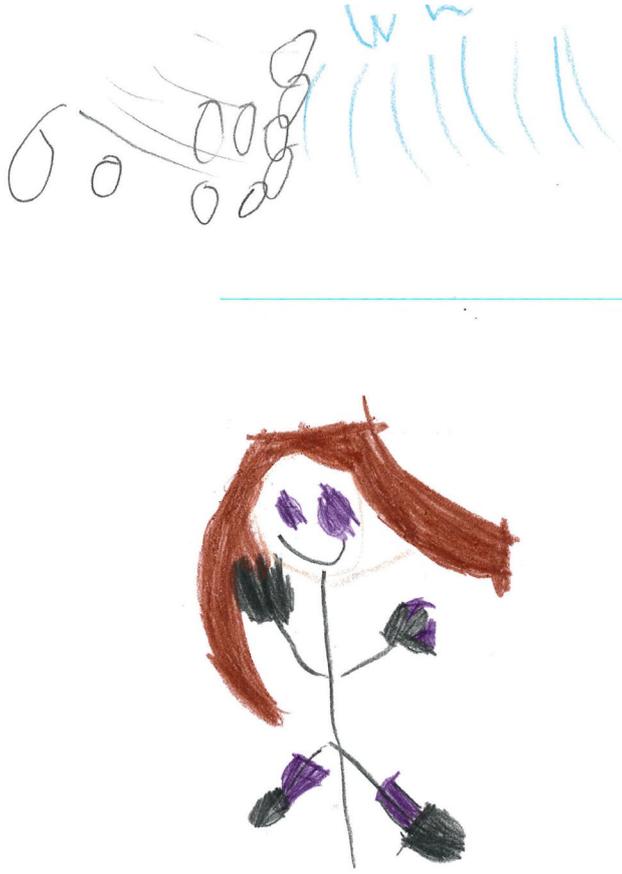
*Students share observations of familiar objects and events.*

### Summary of task

Students had participated in a class discussion about different types of weather, and developed a vocabulary list to describe weather.

Students were provided with a weather forecast and asked to draw the type of clothing they would wear. The teacher then asked the students what they would do if the weather changed.

Report: How the weather affects us



What would you do if the sun came out?  
"I would put on my hat. When it got warm,  
I would take my boots and mittens off."

Annotations

*Identifies appropriate clothing for the weather conditions.*

*Links the change in weather conditions to the need to modify clothing. Identifies transitional requirements as weather conditions change.*

*Identifies changes of clothing suitable to the changing weather conditions.*

**Annotations (Overview)**

*The student uses drawing and a verbal explanation to share ideas.*

## Investigation: Watch it move

### Foundation Year Science achievement standard

The parts of the achievement standard targeted in the assessment task are highlighted.

*By the end of the Foundation year, students describe the properties and behaviour of familiar objects. They suggest how the environment affects them and other living things.*

*Students share observations of familiar objects and events.*

### Summary of task

Students spent time playing with toys that roll and shared language to describe the ways in which the toys moved. They developed a word wall of the terms discussed.

Students were asked to select four objects and describe the way each object moved. They then chose a single object from their selection to design a new game. They described why they chose that object for the game.

Students completed the task over approximately one hour.

## Investigation: Watch it move

### Watch it Move!

Name: \_\_\_\_\_

Find out which object will be best for playing our rolling game.

Item	How did it move? <small>Use our word wall to help you.</small>	Why did it move that way?
 ← BASKETBALL	it rolls	because it's a circle shape
 ← BIRTHDAY HAT	it slides	because it's flat
 ← table	the table does not move	because it has plastic stoppers on the leg. It is too heavy.
 ← dice	it rolls and then stops	it rolls + stops because it's a square shape

I think the best object for our game will be the

~~table~~ + think the ball because  
will be the best for our game  
because it is round. it rolls

### Annotations

Describes ways differently shaped objects move.

Links a variety of factors such as shape, size and weight to the way objects move.

Responds to questions about how and why objects move with accurate and plausible observations and ideas.

Organises observations in a provided table.

Considers observations and suggests an object suitable for a purpose based on its properties.

### Annotations (Overview)

The student uses annotated drawing and written text to share ideas and observations.

## Worksheet: How animals move

### Foundation Year Science achievement standard

The parts of the achievement standard targeted in the assessment task are highlighted.

*By the end of the Foundation year, students describe the properties and behaviour of familiar objects. They suggest how the environment affects them and other living things.*

*Students share observations of familiar objects and events.*

### Summary of task

Before undertaking this task, the class had read various books about the way animals move and the body parts that assist them in their movements. A word wall was created in the classroom that displayed words describing how animals move.

For the first part of the task, students were asked to choose pictures of two animals and select a word to describe how each animal moves. Part two required students to design their own animal that is able to move in two ways. The teacher scribed the students' answers.

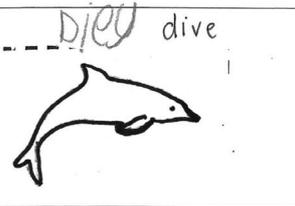
Worksheet: How animals move

Annotations

**Animals Move**

Name: \_\_\_\_\_

Choose 2 animal pictures and use our word wall to describe how it each animal moves.

	
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Describes the movements of different animals.

Design your own animal that moves in 2 different ways.



Represents an animal from different perspectives to show different types of movement and associated body parts. Links body parts to particular types of movement.

How does your animal's body help it to move?

The wings make it fly  
The feet and legs help it to walk on the land.

Explains the relationship between the animal body parts and the type of movement.

**Annotations (Overview)**

The student uses drawing, written text and a verbal explanation to share ideas.

## Investigation: Properties of materials

### Foundation Year Science achievement standard

The parts of the achievement standard targeted in the assessment task are highlighted.

*By the end of the Foundation year, students describe the properties and behaviour of familiar objects. They suggest how the environment affects them and other living things.*

*Students share observations of familiar objects and events.*

### Summary of task

Students engaged in a class discussion about the materials that make up everyday objects, and the properties of those materials. They developed a word wall of terms to describe materials and properties.

Students were asked to investigate a number of objects and record their findings on an observation sheet.

Students completed the task over approximately 30 minutes.

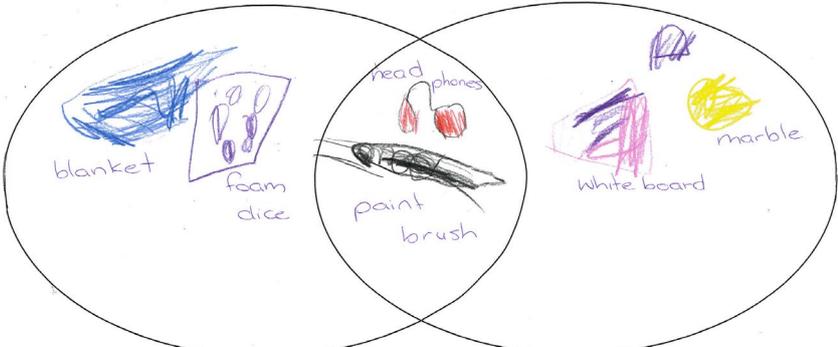
## Investigation: Properties of materials

**Materials**

Object name or drawing	Material What is it made of?	Properties Can you describe it?
 headphones	plastic foam	hard
 dice	foam	soft
 chalk	chalk dust	soft
 paint brush	wood hair	hard
 marble	plastic	hard round

Venn Diagram

soft
hard



My material is metal. A shelf is made of metal because it is hard and strong.

### Annotations

Identifies a range of observable properties of everyday objects including flexibility, texture, shape and hardness.

Identifies that everyday objects can be made from multiple materials.

Uses provided tables and graphic organisers to organise and sort observations.

Groups a variety of everyday materials on the basis of the property of hardness.

Identifies that some materials are a mixture of materials and so can be hard and soft.

Links the properties of a material to the uses of the object.

### Annotations (Overview)

The student uses visual representations and written text to share ideas and observations.