

# HOW DO ANANGU USE PLANTS?

Maḷu class integrated unit

**Terms 4 2021**

Science | Language & Culture | HASS



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



## Activity | 'Two-Way Science'

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

Plants | Unit 6: Leaves, roots, water and adaptations | Activity 2: Collect and sort leaves (page 224)

### TEACHER COMMENT:

Date:

Signed:

Australian Curriculum Links

#### Learning Intention

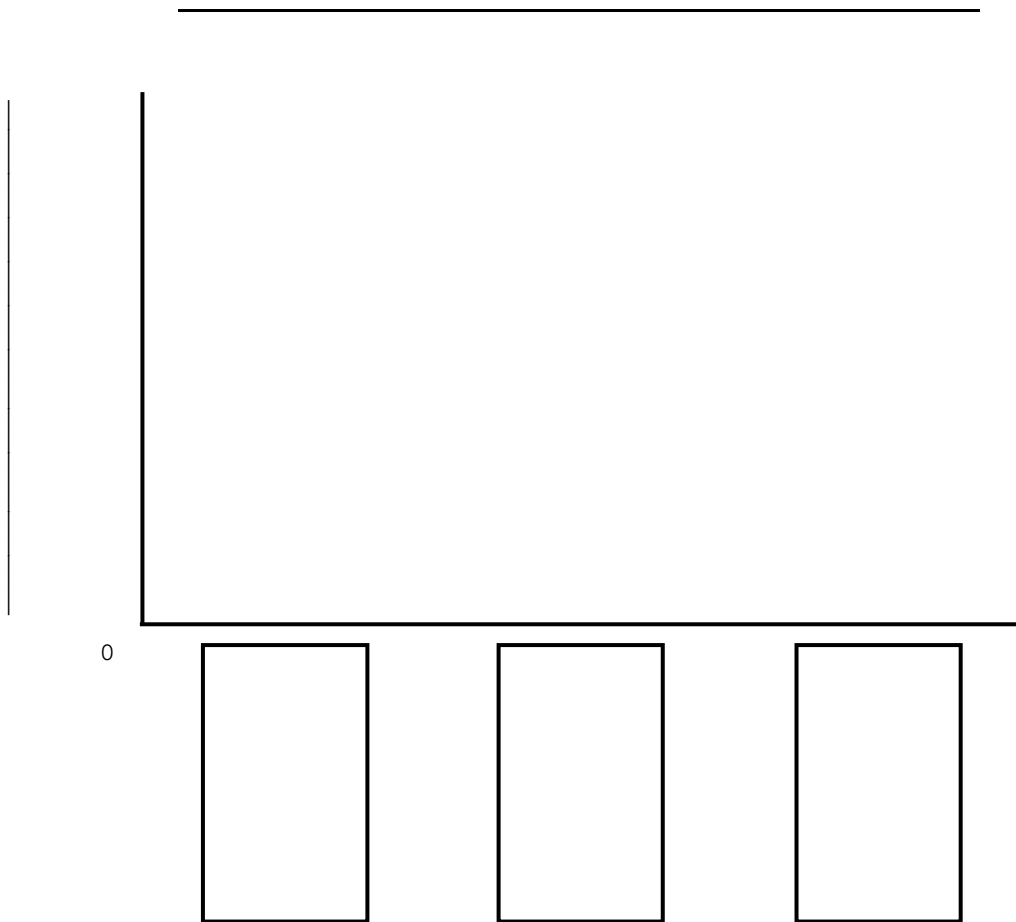
Students build their capacity to use provided tables and column graphs to organise plant samples they collected.

#### Success Criteria

Students will sort the leaves from plants into categories and distribute into the table and graph to represent their data.

Achievement Standard	Activity & Example Evidence	A	NA
Follows instructions to record and represent their observations. (Year 2 Science)	Collecting leaves from plants we know to sort and identify similarities and differences of plants around Yalata. This will also inform our artwork for the front cover of our integrated units. Investigation question: what do plants around Yalata look like?		
Students make sense of collected information. (Year 2 Maths)	Students collect their own data for their own investigation (e.g., sizes of leaves around Yalata, colours of leaves, shapes of leaves) and categorise them in the table and simple graph provided.		
Students collect, organise and represent data to make simple inferences. (Year 2 Maths)	Students collect their own data for their own investigation and categorise them in the table and simple graph provided.		

# COLLECTING PLANT SAMPLES



Activity | **'Two-Way Science'**

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Plants | Unit 3: What do plants need to grow? | Activity 2: Seed germination*

*Plants | Unit 3: What do plants need to grow? | Activity 4: Investigation: Plants and Light*

**TEACHER COMMENT:**

Date:

Signed:

Australian Curriculum Links

**Learning Intention**

Students sequence the key stages in the life cycle of a plant/seed that they grow in the classroom.

**Success Criteria**

Students will identify the 6 stages of plant life cycle in their work and verbally. The seed, germination, growth, reproduction, pollination, and seed spreading stages.

Achievement Standard	Activity & Example Evidence	A	NA
Describe changes to objects, materials and living things. (Year 2 Science)	Students identify key stages in the life cycle of a plant through observation of their own seed growing.		
Describe examples of where science is used in people's daily lives. (Year 2 Science)	Students are introduced to a investigation through putting 'fair test' seeds into different conditions and comparing the growth (e.g. no light, no water).		
Students order shapes and objects using informal units. (Year 2 Maths)	Students will used a scaled instrument (mm/cm ruler) to measure the size of their seeds growth.		



DAY 1

DAY 2

DAY 3

DAY 4

DAY 5

DAY 6

DAY 7

DAY 8

DAY 9

DAY 10

# Photo story of my seed growing 😊





## Activity | 'Two-Way Science'

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Plants | Unit 7: Plants as tools and shelter | Activity 1: Introduction to using plants for tool making (page 231).*

### TEACHER COMMENT:

Date:

Signed:

Australian Curriculum Links

#### Learning Intention

Students identify the colour, texture, hardness, and flexibility of tools and artefacts to explain how they can be/are used.

#### Success Criteria

Students draw and explain how they have seen different tools and artefacts made from plants be used in their lives.

Achievement Standard	Activity & Example Evidence	A	NA
Describe changes to objects, materials and living things (Year 2 Science)	Students communicate what plants materials are sourced from to create tools and artefacts. They listen to elders to understand how these objects/materials can be used and change.		
Students pose questions about the past and familiar and unfamiliar objects and places. (Year 2 HaSS)	Students ask questions about how artefacts have been made throughout Anangu history and why the specific plant is used.		
They locate information from observations and from sources provided. (Year 2 HaSS)	Students listen to the past experiences of Anangu about how plants have been used to make tools & artefacts.		



# USING PLANTS FOR TOOL/ARTEFACT MAKING

What do you know about the tool/artefact?

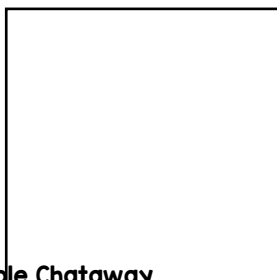
Have you used or made the tool/artefact?

What part of the plant was used to make the tool/artefact?

Invite in someone who makes tools/artefacts to talk about this with the class.



Seesaw QR Code to watch the video



Malu Class learning about artefacts:





## Activity | 'Two-Way Science'

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Plants | Unit 7: Plants as tools and shelter*

*Activity 2: Reflect, recount and write (page 233). EXTENSION*

## TEACHER COMMENT:

Date:

Signed:

### Australian Curriculum Links

#### Learning Intention

Students conduct an investigation to see which of their actions create the most heat/friction.

#### Success Criteria

Students record their investigations with multiple objects to establish what surfaces create the most friction.

Achievement Standard	Activity & Example Evidence	A	NA
Poses questions about their experiences and predict outcomes of investigations (Year 2 Science)	When we rub things together it can create heat – that heat is a form of friction. Testing what materials create friction.		
Uses informal measurements to make observations (Year 2 Science)	Experimenting with multiple objects to see what creates the most friction. Measuring heat using their sense of touch.		

# How hot is that? Friction Investigation

Australian Curriculum | *Physical Sciences*

'Forces can be exerted by one object on another through direct contact or from a distance' **and** 'comparing and contrasting the effect of friction on different surfaces, such as tyres and shoes on a range of surfaces'.

Objects to be Rubbed	Texture	Prediction	Result
sandpaper on a popstick	rough with smooth		
paper on a rock	smooth with smooth		

If you discovered that rougher surfaces produce more heat, **you're correct!**

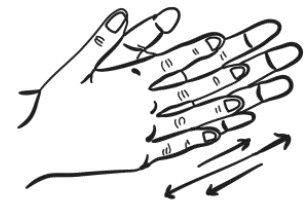
- 1. When objects are rubbed, they produce heat.**
- 2. Rougher surfaces produce more heat than smoother surfaces.**

What if you don't want heat? Sliding down a slide in your swimsuit isn't much fun because your legs keep sticking to the slide and heat is produced. Someone invented the water slide, because water will lubricate, or smooth the surface, and you will go down quickly and easily.

Machines with many moving parts will usually use oil or water to reduce the heat being made from parts rubbing together (such as a car).

## **WE NOW KNOW a lubricant can reduce the amount of heat.**

Try an experiment with Maḷu class to see how this works.



Have everyone start to quickly rub their hands together. Stop everyone so they can feel the heat. Put soap or water on some of the hands, then have them quickly rub again.

## **Is there as much heat? Why or why not?**



## Activity | 'Two-Way Science'

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Plants | Unit 7: Plants as tools and shelter*

*Activity 2: Reflect, recount and write (page 233).*

*Plant used for tools & artefacts*

## TEACHER COMMENT:

Date:

Signed:

Australian Curriculum Links

### Learning Intention

Students describe the surrounding habitat and location of where the plant used to make tools and artefacts survives.

### Success Criteria

Students can explain the uses for, location and habitat for the plant used to make tools and artefacts.

Achievement Standard	Activity & Example Evidence	A	NA
Describe changes to objects, materials and living things. (Year 2 Science)	Lead by Anangu experts, students go On Country to learn about the plant that is used for making artefacts and tools. Students describe the changes to the plant that occur.		
They locate information from observations and from sources provided. (Year 2 HaSS)	Students listen to the past experiences of Anangu about how plants have been used to make tools & artefacts.		

Plant name in English:

Plant name in Pitjantjatjara:



Seesaw QR Code to watch the video

Anangu Expert:

Date:

What is the plant used for?



Location:



Habitat (e.g. sandhill, claypan, rocky hills):



## Activity | 'Two-Way Science'

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Seasons, Weather & Astronomy | Unit 1: Seasonal calendar  
Activity 2: Animals, plants and seasons (page 252).*

*Plants | Unit 7: Plants as tools and shelter | Activity 7: Making glue (page 235).*

## TEACHER COMMENT:

Date:

Signed:

### Australian Curriculum Links

#### Learning Intention

Students predict how a plant will change through natural processes over a period of time. They compare their findings at the end of that time with their previous predictions.

#### Success Criteria

Students predict then identify the changes (big or small) in a plant over a period of time.

Achievement Standard	Activity & Example Evidence	A	NA
Poses questions about their experiences and predict outcomes of investigations. (Year 2 Science)	How do we think the plant will change over the course of a term? Students to develop questions and make predictions of likely outcomes based on their knowledge & investigation.		
Follows instructions to record and represent their observations. (Year 2 Science)	Students observe and compare the change of the plant from one season to another. They observe whether their predictions were correct and suggest reasons why they were or were not.		
Describe changes to objects, materials and living things. (Year 2 Science)	Students observe the changes of plants over a period of time. They suggest explanations for why this change has occurred.		

# CHANGING PLANTS - GLUE FOR ARTEFACT MAKING

Plant name in Pitjantjatjara:

Plant name in English:

Season:

Date:

What do we think will change?

Plant name in Pitjantjatjara:

Plant name in English:

Season:

Date:

What has changed?



Activity | **'Two-Way Science'**

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Plants | Unit 4: Bush Medicine*

*Bush Medicine: Learning on Country*

*Activity 2: Reflect, recount and write (page 210).*

**TEACHER COMMENT:**

Date:

Signed:

Australian Curriculum Links

**Learning Intention**

Students use their senses and learnt knowledge from Anangu experts to find bush medicine plants. They describe how Anangu use bush medicine in their lives.

**Success Criteria**

Students learn about, find and describe the properties of bush medicine plants. They explain how bush medicine is used.

Achievement Standard	Activity & Example Evidence	A	NA
Describe changes to objects, materials and living things. (Year 2 Science)	Students use their senses to identify bush medicine plants. They learn about and explain how bush medicine is used and made.		
Students locate information from observations and from sources provided. (Year 2 HaSS)	Students listen to the past experiences of Anangu about how plants have been used for bush medicine. They pose questions to collect information.		



# BUSH MEDICINE

What bush medicines does your family use?

Where is it found?

How do they make it?





## Activity | 'Two-Way Science'

By Chris Deslandes, Sally Deslandes, David Broun, Cameron Hugh, Fiona Walsh, Felicity Bradshaw and Joanna Griffith (2019).

*Plants | Unit 4: Bush Medicine*

*Bush Medicine: Learning on Country*

*Activity 2: Reflect, recount and write (page 210).*

## TEACHER COMMENT:

Date:

Signed:

### Australian Curriculum Links

#### Learning Intention

Students use their senses and learnt knowledge from Anangu experts to find bush medicine plants. They describe how Anangu use bush medicine in their lives.

#### Success Criteria

Students learn about, find and describe the properties of bush medicine plants. They explain how bush medicine is used and where its habitat is located.

Achievement Standard	Activity & Example Evidence	A	NA
Describe changes to objects, materials and living things. (Year 2 Science)	Students use their senses to identify bush medicine plants. They learn about and explain how bush medicine is used and made.		
They locate information from observations and from sources provided. (Year 2 HaSS)	Students listen to the past experiences of Anangu about how plants have been used for bush medicine.		

Plant name in English:

Plant name in Pitjantjatjara:



Seesaw QR Code to watch the video

Anangu Expert:

Date:

What is the plant used for?



Location:



Habitat (e.g. sandhill, claypan, rocky hills):

# Plant Poster Project - Rubric

Category	1	2	3	4
Plants	There is only one plant on the poster. It is poorly labelled and lacks images.	The poster displays 1 plant but is not labelled appropriately with both images and text.	The poster displays 1-2 plants and is labelled appropriately with images and text.	The poster displays 2 or more plants and is labelled appropriately with images and text.
Labels & Verbal Explanation	No labels or verbal explanation was provided.	The student included a few labels on their poster and could explain some parts.	The student was able to accurately explain most of the elements on the poster through labelling and orally.	The student was able to accurately explain all the elements on the poster both on their labelling and orally.
Creativity and Neatness	The poster is not organized and the ideas are poorly displayed.	The poster is somewhat organized. Some ideas are displayed.	The poster is attractive and well-organized. The ideas are Neatly written and drawn.	The poster is attractive and well-organized. The ideas are clearly displayed on the poster. The poster is visually appealing
Presentation	Student often lost focus while presenting.	Student did work, but lost focus while presenting.	Student showed some enthusiasm and was focused on the task while presenting.	Student showed great enthusiasm and focused on the task while presenting.

## TEACHER COMMENT:

Date:

Signed:

Score:

/16

### Australian Curriculum Links

#### Learning Intention

Students make a poster presentation on their findings about how Anangu use plants.

#### Success Criteria

Students create a poster detailing different plants and how they are used.

Achievement Standard	Activity & Example Evidence	A	NA
They use a variety of strategies to engage in group and class discussions and make presentations. (Year 2 English)	Students present their poster detailing the knowledge they have gained about how Anangu use plants.		
Students communicate findings in a range of texts using language to describe direction, location and the passing of time. (Year 2 HaSS)	Students create a poster to share their knowledge about how Anangu use plants.		

# POSTER ABOUT PLANTS



My completed poster:



TEACHER COMMENT:

Date:

Signed:

Australian Curriculum Links

**Learning Intention**

- Modified achievement standard

**Success Criteria**

- How they can show you that they can reach that

Achievement Standard	Activity & Example Evidence	A	NA



TEACHER COMMENT:

Date:

Signed:

Australian Curriculum Links

**Learning Intention**

- Modified achievement standard

**Success Criteria**

- How they can show you that they can reach that

Achievement Standard	Activity & Example Evidence	A	NA





## TEACHER COMMENT:

Date:

Signed:

Australian Curriculum Links

### Learning Intention

Students communicate their observations and findings about how Anangu use plants.

### Success Criteria

Students actively contribute to discussions about the topic using contextual language. They communicate their findings about how Anangu use plants in their booklet.

Achievement Standard	Activity & Example Evidence	A	NA
Communicates their ideas to others. (Year 2 Science)	Students communicate their observations and findings about how Anangu use plants.		
They use a variety of strategies to engage in group and class discussions and make presentations. (Year 2 English)	Students discuss as a class what they have learnt throughout the term about the different ways that Anangu use plants.		

# REFLECTION ON MY LEARNING – PLANTS

Draw a picture of something you have learnt about plants.