

ABORIGINAL AND TORRES STRAIT ISLANDER
HISTORIES AND CULTURES

LIVING CULTURES – FIBRES

DEPARTMENT OF
EDUCATION
learners first

YEAR 5

The
Orb

FIBRES**ADAPTATIONS**

Learners examine a range of natural materials and conduct experiments to establish their properties. They explore ways Tasmania's Aboriginal people have used and adapted materials from their environment as their world changes.

CROSS CURRICULUM PRIORITY**Aboriginal and Torres Strait Islander Histories and Cultures***Organising idea 3*

Aboriginal and Torres Strait Islander Peoples have holistic belief systems and are spiritually and intellectually connected to the land, sea, sky and waterways.

Organising idea 5

Aboriginal and Torres Strait Islander Peoples' ways of life are uniquely expressed through ways of being, knowing, thinking and doing.

ACHIEVEMENT STANDARDS**Science**

Students classify substances according to their observable properties and behaviours.

Students discuss how scientific developments have affected people's lives, help us solve problems and how science knowledge develops from many people's contributions.

CONTENT DESCRIPTORS**Humanities and Social Sciences (HASS)**

Types of resources (natural, human, capital) and the ways societies use them to satisfy the needs and wants of present and future generations (ACHASSK120).

Science

Solids, liquids and gases have different observable properties and behave in different ways (ACSSU077).

Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083).

GENERAL CAPABILITIES**Critical and Creative Thinking***Generating ideas, possibilities and actions*

Imagine possibilities and connect ideas

Level 4 – combine ideas in a variety of ways and from a

range of sources to create new possibilities

Seek solutions and put ideas into action

Level 4 – assess and test options to identify the most effective solution and to put ideas into action

Intercultural Understanding

Reflecting on intercultural experiences and taking responsibility

Reflect on intercultural experiences

Level 4 – explain what and how they have learnt from a wide range of intercultural interactions and experiences

Learning Goals

Learners will:

- » Consider the different characteristics of materials.
- » Recognise and discuss that access to resources influences cultural expression, as well as survival.
- » Understand the scientific thinking involved in traditional technologies.

Learning Sequence**Activating and Engaging**

Non-verbal

Have learners explore natural materials such as flax, bark (stringy), kelp, grass cord and animal fur.

Ask learners:

- » What are the features of these materials that make them useful?
- » What could these materials be used for?

Organise learners into groups and investigate one material each. Ask learners to design experiments to determine the objects:

- » water resistance
- » flexibility/malleability
- » tensile strength
- » durability

Have learners share their findings with the class and

rate the usefulness based upon the experiments completed.

Generate a class discussion:

- » What do humans need to survive?
- » How did Aboriginal and Torres Strait Islander people use fibres to survive?

Advise learners to complete a list of minimum number of tools or materials that would be needed for people to survive. Remind them students that some tools required fibres to function.

Have learners share and simplify the list collaboratively. Investigate with learners the tools and resources identified as used by Tasmanian Aboriginal people.

Discuss what the minimal number of tools might tell us about the scientific thinking involved in traditional technologies.

Exploring and Discovering

Land Links

Take learners to an outdoor space that includes a variety of fibres and ask them to investigate the area and identify resources that are useful, or harmful.

- » What natural resources can you use in this environment that could be useful for survival?

Assign learners groups and focus on a particular area of the site. Advise them that they can only use the resources available in that space. Ask each group to develop a technology to provide:

- » water
- » food
- » warmth
- » shelter

Have learners share with the rest of the groups. Generate a class discussion:

- » Which environments/sites were most rich with useful resources?
- » How would that have implications for where Aboriginal people lived?
- » Does this have implications for why Tasmanian Aboriginal people were nomadic?

Synthesising and Applying

Learning Maps

Symbols and Images

Once learners return to school, advise them to use a graphic organiser to compare scientific method with developing traditional technologies.

Ask learners:

- » How does scientific knowledge aid survival?

- » What properties have you observed that makes resources useful?

Have learners map the area that their group had during the excursion and identify the resources that were useful for survival. Use keys and labelling.

Combine all the maps to create a view of all the resources and features of the environment.

Success Criteria

Learners:

- » Explain how access to resources changes the liveability of spaces.
- » Complete a comparative learning map to show the scientific thinking of traditional technologies.
- » Draw conclusions about how changing circumstances effected Tasmanian Aboriginal way of life.

GOING FURTHER:

Ask learners:

- » What impact would it have on Tasmanian Aboriginal people if their land was fragmented by farming?
- » How important is a nomadic lifestyle is technology development and access to resources?

Have learners investigate the challenges faced by fragmentation of country and multiple uses of country. Using the map created by the class previously, ask the learners to create a map of their area pre-contact.

Ask learners:

- » What would be different?
- » What would be the same?

Create another whole class map that explores how European occupation of country has changed the flora, fauna and environmental diversity.

Resources

- » [The Orb](#)
- » [Australian Curriculum](#)
- » [Aboriginal Sharers of Knowledge \(ASK Program\) Guidelines](#)
- » [Aboriginal Sharers of Knowledge \(ASK Program\) Application Form](#)
- » The Aboriginal Education Library: email Aboriginal.education.library@education.tas.gov.au or telephone 03 6165 5480 for more resources, including the ones listed below.
- » The Eight-Way Framework of Aboriginal Pedagogy

AM	Australian Museum
C	Cambridge Dictionary
CO	Collins Dictionary
G	General understanding
WP	Wikipedia

Glossary

Traditional technologies

Some technologies are referred to as 'traditional' because farmers have used them for many years, in some cases for centuries. **G**

Tool

A tool is any instrument or simple piece of equipment that you hold in your hands and use to do a particular kind of work. **CO**

Tensile

Ultimate tensile strength, often shortened to tensile strength, is the capacity of a material or structure to withstand loads tending to elongate. **WP**

Malleable

A metal or other material's capacity to be hammered or pressed into shape without breaking or cracking. **G**

Flexible

Capable of bending easily without breaking. **G**

Fibre

Aboriginal people have used in the past and continue to use natural fibres – plant and animal – to make useful and important objects. **G**

Country

In Aboriginal English, a person's land, sea, sky, rivers, sites, seasons, plants and animals; place of heritage, belonging and spirituality; is called 'Country'. **AM**

Traditional

Following or belonging to the customs or ways of behaving that have continued in a group of people or society for a long time without changing. **C**



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