

Knowledge area:



Weather Seasons

TEACHING NOTES




Aboriginal Weather Seasons Indicator Map (Interactive)

Text type: written, interactive, online, multimodal

VISUAL STIMULUS FOCUS

The *Aboriginal Weather Seasons Indicator Map* is an engaging online interactive activity that explores the environmental knowledge that different language groups around Australia used to predict the weather.

PRIOR TO VIEWING

-  Introduce the *Aboriginal Weather Seasons Indicator Map* interactive to students.
-  Start the interactive on the website.
-  To engage your students, explain that Aboriginal & Torres Strait Islander people used native animals and plants to know what weather was coming.

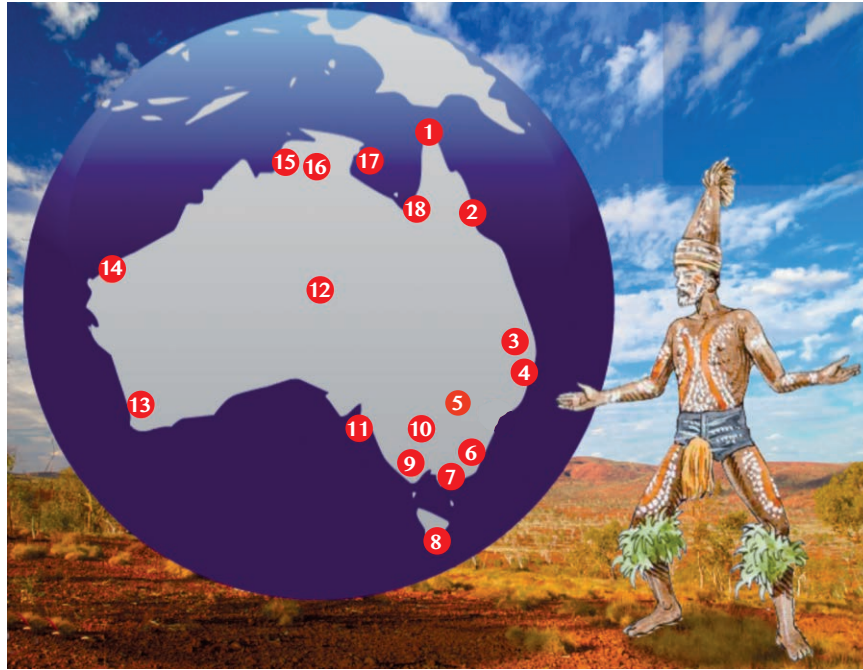
Background

- The cycle of the weather seasons influenced where Aboriginal people lived, what they ate and helped them prepare for the changes in the weather.
- Critical to their survival, Aboriginal & Torres Strait Islander people needed to know the behaviours and breeding patterns of all the animals that lived in their area. This meant they had to know where they lived, their tracks, when they were at their fattest and when they had their young.
- Most Aboriginal people had many more weather seasons than people of modern Australia. Instead of four main seasons (spring, summer, autumn, winter), Aboriginal people had names for hot weather, cold weather, just before the hot and windy season, summer storm season, and winter rain clouds, just to name a few. Some groups had up to twelve weather events they named and looked out for.
- While these are the seasons that relate to changes in climate, it was also important to look at environmental events — such as plants flowering or fruiting and animal behaviour patterns — to understand the weather and when to hunt or collect foods. The night sky was equally important.

SHARED VIEWING

For thousands of years, Aboriginal & Torres Strait Islander people did not have TV, paper and pens, radios or computers. They had to rely on what was familiar and around them to find out information about the weather. Instead of setting four seasons for the entire country, they allocated seasons depending on how the weather felt and acted.

The *Aboriginal Weather Seasons Indicator Map* features facts about environmental indicators from 18 locations around Australia. Select a dot on the map to bring up images and information about that location.



Nº	LOCATION	DESCRIPTION
1	Thursday Island	The appearance of Pleiades also showed the Torres Strait Islander people the turtles were laying eggs and that their veggie gardens should be prepared for planting. ¹
2	Mossman Gorge	When the Black Bean seeds were ready to be eaten, it was time to catch the jungle fowls. ²
3	Wild passionfruits	When the wild passionfruits were ripe, this was a sign to the local Aboriginal people that the carpet snakes were fat and could be hunted. ³
4	Brisbane	In the Brisbane area, the flowering of waterlilies signalled that the river mussels were ready to eat. ⁴
5	Western NSW	In western New South Wales, the Aboriginal people learned to watch the moon for signs of weather to come. A big ring around the moon meant big rain, while a little line meant light rain. ⁵

N°	LOCATION	DESCRIPTION
6	Koalas fighting	The loud growling sound of koalas fighting indicated to local Aboriginal people that the hot summer was approaching.
7	Yarra Valley	In the Yarra Valley around Melbourne, the Silver Wattle grows. This wattle likes living near riverbanks. It means eel season is happening when wattle blossoms fall into the river. ⁶
8	Hop Bush	Known as 'oyster bush' by Aboriginal tribes, the conspicuous orange/red winged seed capsules acted as a seasonal indicator. They showed the best time to collect the succulent oysters from the nearby rocky estuarine foreshores. ⁷
9	Grampians	When butterflies appear in the Grampians in Victoria, it means the summer heat is approaching.
10	Riverland	In the Riverland area of South Australia, they looked to the Milky Way to know when summer was coming. They knew this because it was hot when it went from south to north, and it went across the other way from east to west in winter. ⁸
11	Yorke Peninsula	The prolific flowering of the tea trees was a sign to the Narangga people of South Australia that the mullet fish would soon come in large numbers. ⁹
12	Alice Springs	When the weather was cold and the bush tomato was ripe and bright yellow in colour, it meant the goannas and kangaroos were fat and good to eat. ¹⁰
13	Perth	In December and January when it was dry and hot, the Noongar people of Western Australia started to burn off to hunt out large animals such as the kangaroo.
14	Karatha	The Pandanus was important to the Aboriginal people of north west Western Australia. As the fruit ripened, it meant that the 'straight down rains' and the 'cold time' weather was starting. ¹¹

N°	LOCATION	DESCRIPTION
15	Daly River	When the Kapok tree was in flower, this signalled that freshwater crocodile eggs were ready to be collected and eaten. ¹²
16	Kakadu	When the ground was hot to walk on, there was little water and the mango was fruiting, this meant the local Aboriginal people could hunt stingrays and small sharks.
17	Groote Eylandt	On Groote Eylandt, the appearance of two stars in Scorpio in the evening sky let the local Aboriginal people know that the wet season had ended. ¹³
18	Gulf of Carpentaria	The Pandanus was like a calendar tree to the local Aboriginal people. When the nuts ripened red and dropped off the tree, it was a time to start to fish. ¹⁴

ACTIVITY

Design a Weather Picture

Aboriginal people observed what was happening with animals and plants to know the weather seasons.

STEP 1

Go outside with the students and have them observe what natural events are happening in the environment around them.

STEP 2

Ask the students to describe the weather events and indicators for that day (e.g. is it windy; are the birds singing or is there thunder?)

STEP 3

Go back inside and have the students draw some of the weather events they have spotted to create a 'weather picture'.

AFTER VIEWING DISCUSSION

- Discuss the weather in your area with the students.
- Ask the students:
 - What is the weather like today?
 - How do you know when the weather has changed?
 - What happens during the different seasons?
- Explain to the students that a weather indicator is something occurring in nature with a behaviour or production that is predictable at certain times of the year.
- Discuss with the students how certain plants flower or bear fruit, and how animals have their young at certain times of the year. If observed closely, animals can very accurately foretell the weather (e.g. ants climbing, frogs croaking or kookaburras laughing mid-afternoon can all mean rain. If emus lay only one or two eggs in autumn or spring, it means drought or at least a very dry summer.)

SUPPORTING WORKSHEETS



Worksheet 1: Aboriginal Art Symbols — Weather Indicators

A drawing activity where students design their own Aboriginal art symbols for weather indicators.



Worksheet 2: Weather Seasons Wheel

A drawing activity where students draw weather indicator symbols onto the weather wheel based on their understanding of changing seasons.

CURRICULUM

HISTORY

Content description

How the present, past and future are signified by terms indicating time, as well as by dates and changes that may have personal significance, such as birthdays, celebrations and seasons (ACHASSK029)

Elaboration

- examining seasonal calendars of Aboriginal and Torres Strait Islander groups (for example, the Gagudju (Kakadu) and the D’harawal (Sydney) calendars, each with six seasons, the Arrernte (central Australia) with five, the Woiwurrung (Upper Yarra Valley) with seven, and north-east Tasmania with three)

GEOGRAPHY

Content description

The weather and seasons of places and the ways in which different cultural groups, including Aboriginal and Torres Strait Islander Peoples, describe them (ACHASSK032)

Elaboration

- comparing the Aboriginal or Torres Strait Islander People’s seasonal calendar for the local area with one students are familiar with, such as the four-seasons calendar derived from Europe

SCIENCE

Content description

Observable changes occur in the sky and landscape (ACSSU019)

Elaboration

- recording short and longer term patterns of events that occur on Earth and in the sky, such as the appearance of the moon and stars at night, the weather and the seasons

KNOWLEDGE AREAS AND THE NATIONAL CURRICULUM

History

The cycle of the weather seasons influenced where Aboriginal people lived, what they ate and helped them prepare for the changes in the weather. Instead of setting four seasons for the entire country, they allocated seasons depending on how the weather felt and acted. (ACHASSK029)

Geography

Most Aboriginal people had many more weather seasons than people of modern Australia. Instead of four main seasons (spring, summer, autumn, winter), Aboriginal people had names for hot weather, cold weather, just before the hot and windy season, summer storm season, and winter rain clouds, just to name a few. Some groups had up to twelve weather events they named and looked out for. (ACHASSK032)

Science

It was also important to look at environmental events — such as plants flowering or fruiting and animal behaviour patterns — to understand the weather and when to hunt or collect foods. The night sky was equally important. (ACSSU019)

REFERENCES

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