Rain is coming!

Overview

About the lesson

Through contemporary Aboriginal storytelling and observation learn about how clouds can help predict rain, and consider the patterns of rainy weather in the context of Aboriginal seasons.

Year level

Year PP – 2

Learning objectives

Students will:

- Listen and respond to a story about people predicting and awaiting a change in the weather.
- Consider how the weather affects human activity.
- Record and describe clouds, and consider the link between cloud types and rain.
- Explore the concept of seasons, in particular the Aboriginal seasons relevant to their local area.

Curriculum Links

HASS	
Geography	ACHASSK032
Science	
Earth and space sciences	ACSSU004
	ACSSU019
Nature and development of science	ACSHE021
	ACSHE022
Aboriginal and Torres Strait Islander histories and cultures	OI.3
	OI.5

Lesson Plan

Engage and set the scene

1. Discuss what the weather is like today where you live.
    - Do you enjoy this weather? Would you like it to be hotter/ cooler / wetter /drier? Why?
    - How do we know what the weather will be like tomorrow/next week?

Explore

Read *Big Rain Coming*, by Katrina Germein, about people in an Aboriginal community in the Northern Territory waiting for rain to come.

1. Discuss:
    - Why does the old man believe the rain is coming?
    - What was the weather like before the rain came? How do we know this?
    - How did the frogs and dogs keep cool before the rain came? Do you think the animals know rain is coming?
    - How did everyone feel when the rain finally came?
    - What does the earth, plants and sky look like when there is no rain? What do they look like after rain?
    - Why might it be useful to predict the weather?

Equipment and Links

Germein, K. (2002). *Big rain coming*. Book or ClickView video

Explain

We can't control the weather, but we can collect information about it. By measuring how hot, cold, wet, windy or cloudy it is, we can look to see if there are any patterns. Understanding these patterns can help us make educated guesses (predictions) about what the weather will be like in the future.

People who study the weather are called meteorologists. In the past, people relied on observation of the clouds and wind, plants and animals to predict the weather. Today, meteorologists have powerful computers to analyse weather information, and use other technology to help them gather data and make very accurate predictions (e.g. satellites can take photos from space, radars can measure rain in different levels of the atmosphere).

Predicting the weather can help us make good choices about what to wear and plan daily activities, e.g. Aboriginal people used weather knowledge to decide when to set fire to the land, or when to move to a different area to use different food sources. Farmers need weather information to make good decisions about planting and harvesting and airlines use it to schedule flights. Accurately predicting the weather can also help to keep us and our property safe e.g. by giving us time to prepare for storms.

Extend and elaborate

1. Explain that looking at clouds can help predict the weather.
   - Discuss how clouds are made and show students a video about different types of clouds.

   As a class, agree on a symbol which might be used to represent the three main types of cloud:
   - Cumulus
   - Stratus
   - Cirrus
2. Get students to go outside and observe and record the clouds they see, and then discuss the link between the clouds and rain. Based on the clouds you see, is rain likely to be coming today?

   Show students some live web cams from around Australia and compare the clouds they can see in different places.
3. Discuss how:
   - the weather can be different in different places on any given day
   - How the patterns of weather (seasons) differ across Australia.

   Explain that *Big Rain Coming* was set in the Minyerri Northern Territory, where the rains come during the hottest months.
4. Discuss which months of the year get the most rain where you live, and whether it is hot or cold during that time.
5. Explore the relevant Aboriginal calendar in your area. Identify the name(s) of the the wettest season and discuss what people, plants and animals would be doing at that time.

   If possible, invite a member of your local Aboriginal community to discuss indigenous weather knowledge with your class.

Equipment and Links

- Cloud types for kids or
- Types of clouds or
- What are clouds made of?
- Looking at clouds observation sheet
- Cloud diagram and explanation of types of cloud
- Willy Weather web cams
- Indigenous weather knowledge - calendars

Evaluate and reflect

Have a look at a weather app and check how your weather predictions based on cloud observations compare with the app prediction.

Write a story or draw a pic about what you like to do in the rain.

Useful resources

- Water Corporation (2016). Aboriginal season examples. https://www.watercorporation.com.au/-/media/files/education/lessons-and-teaching-resources/lesson-plans/activity-sheets-and-fact-sheets/aboriginal-season-examples-fact-sheet.pdf
- Water Corporation (n.d.). Western Australian Aboriginal language centres contact list. https://www.watercorporation.com.au/-/media/files/education/lessons-and-teaching-resources/lesson-plans/activity-sheets-and-fact-sheets/western-australian-aboriginal-language-centres-contact-list.pdf
- ABC (n.d)Indigenous seasons. http://www.abc.net.au/btn/classroom/indigenous-seasons/10522128
- Australian Bureau of Meteorology (2016). Indigenous Weather Knowledge. http://www.bom.gov.au/iwk/index.shtml
- CSIRO (n.d.). Indigenous seasons calendars. https://www.csiro.au/en/Research/Environment/Land-management/Indigenous/Indigenous-calendars
- Germain, K (1999). Big rain coming. Houghton Mifflin Harcourt
  Also see: https://www.youtube.com/watch?v=OIhkV491UyE
- National Geographic (n.d.). Cloud https://www.nationalgeographic.org/encyclopedia/cloud/

Looking at clouds

Day	**Cloud type** Draw an example of the cloud: fluffy (cumulus), wispy (cirrus) or layered (stratus)	**Colour** Circle which one	**How many clouds can you see?**	**Are there rain drops?**
		White Light grey Dark grey Other _____	0 1 to 10 11 to 20 More than 20	Yes No
		White Light grey Dark grey Other _____	0 1 to 10 11 to 20 More than 20	Yes No
		White Light grey Dark grey Other _____	0 1 to 10 11 to 20 More than 20	Yes No