

SCIENCE







Lesson 1

Prep

Topic: Observing weather

Observing and recording the weather

Lesson concepts

-  Daily changes in our environment, including the weather
-  Science involves exploring and observing the world using the senses
-  Questions can obtain responses
-  Observations can be made using the senses
-  Observations can be discussed and ideas can be represented
-  Observations and ideas can be shared

Learning alerts

Be aware of:

- students using generalisations rather than observations (for example: if it is sunny then it is hot)
- students identifying only one characteristic to describe weather conditions.

Suggested next steps for learning

- Use images to demonstrate different variations of weather.
- Review all the senses and how these can be used to develop observations of the weather.

Today students will:

- ▶ understand that weather can be observed and represented.

Resources

Find and prepare

Sheet — Letter from Wilma 1

Sheet — Word cards for weather word wall
(cut out and select the words: observe, senses, sun, rain, wind, cloud, storm, snow, hot, warm, cool, cold)

Sheet — Senses poster

Sheet — Weather table

Sheet — Weather symbol Memory or Snap cards
(cut out and store in resealable bag)

Science journal (used throughout unit)

Key terms

observe, senses,
weather

Lesson

Note

Assist students in recording the weather every day.

In this fortnight, letters from a fictitious character named 'Wilma the Weather wombat' are provided to create a context for learning.

Before this lesson starts, print **Sheet** — [Letter from Wilma 1](#).



Explore the term 'weather'

Say to students

‘ In this lesson, we will be learning about the weather and how it affects us. To begin the lesson, there is a letter for us to read. ’

1. Display **Sheet** — **Letter from Wilma 1**.

a. Open and read the letter together.

Say to students

‘ Tell me what you already know about the weather. ’

Focus questions

Q: *Is the weather the same every day?*

A: For example: No, it can be many different kinds of weather.

Q: *How does the weather change?*

A: For example: Sometimes the sky is sunny and then the grey clouds build up and it starts to rain.

Q: *How do we know the weather is changing?*

A: For example: We can see it or maybe we hear a weather report.

Observe the current weather

Say to students

‘ The **weather** is all the conditions around us, including the amount of sun, wind and rain, and the temperature — how hot or cold it is. Like most things in science, we **observe** the weather using our **senses**. ’



2. Look at and read the word cards ‘observe’ and ‘senses’ cut from **Sheet** — [Word cards for weather word wall](#).

Focus questions

Q: *What are the senses we could use for making observations of the weather?*

A: For example: We can see things like clouds and rain; we can hear thunder; we can feel the wind and when it’s hot or cold; we can smell when it’s going to rain.

Q: *How might we taste the weather?*

A: For example: When it’s really windy and dusty we might taste the dust; we could taste the rain drops if we poke our tongues out.



3. Look at **Sheet** — [Senses poster](#) and identify the senses we can use to observe the weather.

Say to students

‘ We are now going to go outside briefly and use our senses to observe what the weather is like right now. However, **we must never look directly at the sun** when we are observing, because this will damage our eyes. We can see how sunny it is by looking at other things but we must not look at the sun itself. ’



4. Prepare students for going out in the sun for a short time.
 - a. Make and share observations of the current weather.
 - b. Use the different senses to prompt thinking. For example: *What senses can I use to observe? What can you see, smell, hear, feel?*
 - c. Discuss the likelihood of a change in the weather and how it might change.
 - d. Move back inside.

Consider how weather information is represented

Say to students

As well as observing the weather with our own senses, we can use the observations made by scientists who are observing the weather. These scientists observe the weather over a much bigger area than we are, so they can see when winds are going to blow a storm in somewhere or when cold or hot weather is on its way. They also use lots of special equipment to measure the weather in ways that we can't. The scientists then write reports to help people know out about the weather, particularly if the weather is likely to change.

Say to students

Often the people who write weather reports use symbols instead of words to tell us about the weather. For example, instead of writing words to say it will be a very sunny, hot day with the high chance of a storm, they can show us some symbols like this.



Focus questions

- Q: *What symbols can you see in a weather report? (For example: On the news.)*
- Q: *What do you think these symbols are telling us?*
- A: For example: It is hot, rainy, stormy or cloudy.
- Q: *Why do you think they use symbols instead of words to report the weather?*
- A: For example: Because it's easy to look at and understand quickly.

Say to students

Scientists use symbols to make the report easy to read and symbols take up a lot less space on a page than words do. Another good thing about symbols is that people who are visiting from other countries can understand the weather report even if they don't speak our language and can't read the words.

Represent familiar weather types

Say to students

There are many different ways of drawing weather symbols but they always show us very clearly what weather they are describing. I am going to show you some weather symbols that are on the word cards we will be using for this lesson.

5. Display the weather word cards: sun, rain, wind, cloud, storm, snow, hot, warm, cool, cold from **Sheet — Word cards for weather word wall**.

Say to students

You are now going to have a try at drawing some weather symbols. You can either copy the symbols from the word cards or you can draw your own symbol ideas.

In your science journal, spend a few minutes drawing some symbols.

- a. Ask students to identify their symbols.

Say to students

Weather scientists not only write weather reports for each day, they also keep these reports so they can study the patterns in the weather year after year. One way of looking at the patterns is to record the information in a table. Let's have a look at a weather table.

6. Display **Sheet — [Weather table](#)** and discuss the features of the table.

Say to students

This is one type of table for recording weather across many days. We are going to observe the weather at the beginning of each day and then record the symbols that best describe the weather observed.



Say to students

‘ We will begin from today. I will draw the symbols today to show you one way and you will complete the table tomorrow.
Tell me the types of weather we observed when we went outside earlier. ’

- a. Model drawing some symbols in the correct place on the weather table.

Say to students

‘ We will keep the weather table with the word cards so you can use the cards to help you if you need. ’

Recognise and respond to weather symbols

Say to students

‘ We are going to finish today’s lesson with a card game. You can choose to play Snap or Memory. ’

Note

Students choose one of the following games:

Memory or Snap: Prepared using **Sheet** — [Weather symbol Memory or Snap cards](#) and played using traditional rules.

