

Topic: Observing weather

Why observe the weather?

Lesson concepts

- Daily changes in our environment, including the weather, affect everyday life
- 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 thinking that all weather types occur in all places
- students' use of generalisations rather than observations (for example: hot sunny weather is good for everyone all the time, windy weather is not helpful).

Suggested next steps for learning

- Use images to explain that weather conditions are not the same everywhere and provide some examples that are very different to your local environment (for example: snow, cyclones, frozen lakes).
- Use real-life examples to explore variations to the generalisations (for example: builders like it when it is cooler, wind is good for drying washing and for sailing boats but not when there is a bushfire or when you are having a picnic on the beach).

Today students will:

understand that weather and changes in the weather affect everyday life.



Resources

Digitals

Slideshow — Different types of weather

Find and prepare

Sheet — Word cards for weather word wall (cut-out from Lesson 1)

Sheet — Weather table

(from Lesson 1)

Sheet — Letter from Wilma 2

Sheet — How does weather affect people's work and safety?

Lesson

Review weather observations

1. Introduce the lesson.

Say to students

6 In science, we are learning about observing the weather.

Focus question

- Q: What do you think we take notice of when we observe the weather?
- A: For example: We look at the sky and observe the clouds to see if it is raining or going to rain. We feel if it is hot or cold or if the wind is blowing.

Say to students

In this lesson, you will learn more about different types of weather and how they can affect people's everyday lives. To begin with, we are going to look at the weather table and the observations you have recorded.



2. Display observations recorded on **Sheet — Weather table**.

Key terms

observe, weather



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Say to students

6 Because you have carefully recorded the weather on your weather table, we have an accurate scientific record of the weather over the past week. This is much more reliable than trying to remember what happened. Weather scientists record their observations every day of every year.

Even though we have only recorded the weather for one week, we can still look for patterns on your weather table.

Focus questions

- Q: What did you observe about the weather during the week?
- A: For example: It has been sunny most of the time; it was raining on these days; it was windy all week.
- Q: Has the weather been hot, cold or warm most of the time?
- A: Response will depend on observations made.
- Q: How many [sunny] days did you observe?
- A: Response will depend on observations made.
- Q: What senses did you use to make your observations for your weather table.
- A: For example: seeing, hearing, feeling.
- Q: Do we need to add any new weather words to the word wall?
- A: Response will depend on observations made.

Add any additional word cards to the word wall to include all weather types observed. Use **Sheet — Word cards for weather word wall**.

Predict weather change

Say to students

- We have another letter here from Wilma the Wombat. Let's open it and read what it says.
- 3. Look at Sheet Letter from Wilma 2.
 - a. Read the letter to students.

Refer back to the student's weather table and count how many different types of weather have been observed.



Say to students

In her letter, Wilma says she loves how the weather changes. The weather can change within the same day and sometimes it can change very quickly.

Focus questions

- Q: Look at the weather table. Has the weather changed over the past week? If so, can you show me on the weather table where it has changed?
- A: For example: It changed here from being sunny to raining.
- Q: Thinking about the weather now, what do you predict the weather might be like tomorrow? Why?
- A: For example: Rainy, because it has been raining all day and its still raining; rainy, because I can see grey clouds outside; rainy because that's what the weather report told us on TV last night.

Say to students

Sometimes we can predict the weather because it is a certain time of year. These predictions are based on our science knowledge about the weather. For example, in the season of summer, we know that it is usually warm or hot. In the wet season in northern parts of Australia, we know that it rains most days.

Consider different types of weather

Say to students

- We are now going to look at some photographs of different types of weather.
- 4. Display Slideshow Different types of weather.
 - a. View and discuss how we can work out the weather by the clues in each photo.



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Consider the effects of weather and weather changes on ourselves

Say to students

Have a look at the weather today and record your observations on your weather table.

Focus questions

- Q: How do you think today's weather has or is likely to affect our day today?
- A: For example: We can't play outside because it's raining; we have to take off our shoes before we come inside; we have turned the fans on because it's really hot and sticky.
- Q: Can you tell me about another time when the weather has really affected you?
- A: Personal response required.

Recognise the importance of observing weather for people's work and safety

Say to students

- Just like in our lives, the weather affects the lives of other people. Often the weather affects people doing their work and also their safety in doing this work. We are going to look at some pictures of people doing their jobs and talk about the effects the weather might have on them.

5. Display Sheet — How does weather affect people's work and safety?

Say to students

Look at the pictures of the workers, and think about what sort of job they each do.

We are going to use some of the weather word cards to talk about how the weather affects each person doing their job.

Collect the word cards windy, hot, rainy and cold from **Sheet — Word** cards for weather word wall.

Choose one type of weather to begin with. Tell me how you think this weather might affect different workers.



a. Repeat with another type of weather.

Note	
The following may help to scaffold thinking:	
Occupation	Effects on work and safety
Bricklayer	Hot — overheating, sunburn
	Raining/wind — getting blown off roof or ladder, can't use electrical tools in rain outside, concrete doesn't stick properly
Farmer	Hot — overheating, sunburn; heat dries the ground out
	Rain — makes things grow; if too much rain it could flood and wash plants and soil away; turns soil to mud
	Windy — blows dirt and dust; might damage plants
Fisherman	Wind and rain — very difficult to catch fish, hard to steer boats in really bad weather
	Hot — overheating, sunburn
Painter	Hot — if painting outside, the sun makes you very tired, sunburn, tin roofs get very hot
	Raining — can't paint outside in rain
	Wind — blows dirt onto the paint, could blow you off the ladder
Rescue helicopter	Wind/rain/storm — strong wind/rain makes it very dangerous; hard to see people needing rescuing
Window washer	Rain/wind — windows get dirty again; dangerous being on a ladder in the rain and wind
	Heat — overheating, sunburn; windows dry quickly and glass can get hot; need sunglasses because windows are very glary in the sun.

Say to students

6 You can see that the weather is not just something that happens each day but that it actually affects what we do each day. It can also change each day. Science gives us the information we need to help us understand the weather.

