

5.1 Introducing climate

Topic: Weather

Subtopic: Climate

Activity type/skill: Orientation

Literacy focus: Vocabulary

Objective

- Provide orientation to the subtopic.
- Make links with previous knowledge.

What you need

- Student worksheet (see the third page)
- [Audio track 5.1a](#)
- [Audio track 5.1b](#)

What to do

1. Look out the window and discuss the current weather. Ask what other kinds of weather students can name in English. Draw out the basic words – weather, sun, wind, rain.
2. Look at the first page of the student worksheet and have students draw a sunny day, a windy day and a rainy day in the circles and label them.
3. Play track 5.1a (Track 1 for this topic) and listen to the poem, pausing the track after the first time it is read.
4. Discuss the poem and what it means.
5. Continue playing the track, letting the students complete each line and then supplying alternate lines.
6. Look at the second, third and fourth pages of the student worksheet. Play track 5.1b (Track 2 for this topic) and listen to and read the text together.
7. Talk about the ideas in the text. Draw out the students' existing knowledge of the causes of weather. Discuss the weather vocabulary used.
8. Draw the weather symbols on the board and get the students to label them.
9. Look at the weather page of a newspaper and discuss the weather vocabulary and symbols used there. Ask the students to read pieces of the text from the newspaper and then explain the related graphic(s). If students come from the northern hemisphere, relate the current season/weather in their country to the season/weather here.
10. Look at the fifth page of the student worksheet. Explain to students that they need to keep a weather diary for 5 days and describe the weather using simple, accurate sentences. Leave information like this on the board during the time they are writing this diary, to support their writing:
 - Temperature: cold? cool? warm? hot? – work with them to add examples of modifiers like 'fairly' or 'very' as needed and give them practice in estimating the temperature in degrees Celsius.
 - Wind: none? a breeze? a gale? direction? – help them add any needed modifiers like 'slight', 'strong' and an estimate of speed (in km/h) and direction.
 - Precipitation: mist? fog? drizzle? showers? rain? hail? snow? – work together to add modifiers like 'light', 'heavy' and so on.
 - Cloud cover: complete? scattered? patchy? clear sky? fine? sunny? thick cloud? thin? overcast? a few clouds? dark clouds? fluffy clouds? white?
 - Storm activity: thunder? lightning?

11. Each day, when the students have finished writing the weather for the day, study the weather report in the previous day's newspaper together. Is it similar to what they wrote? Did it predict what happened?

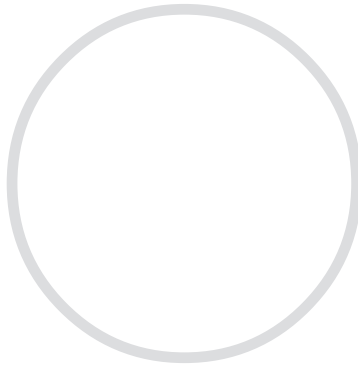
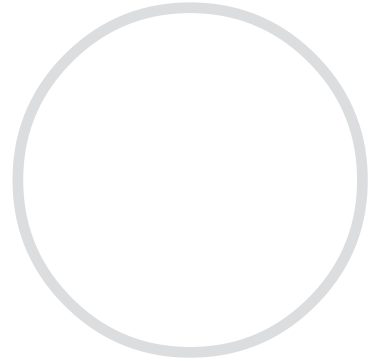
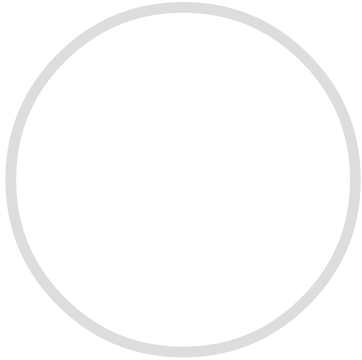
Extending the activity

- Go to the library and find books about weather. Books for younger children are useful.
- The internet is a particularly useful source of weather information because it is up to date and provides graphics to illustrate weather concepts. Try:
 - <http://home.nzcity.co.nz/weather/>
 - www.metservice.com
 - www.niwa.co.nz/education-and-training/schools/students/
 - <http://vortex.plymouth.edu/sun/sun1.html>
 - <http://vortex.plymouth.edu/sun/sun3d.html>
- Use the newspaper weather report or websites such as www.worldclimate.com or <http://weather.noaa.gov/weather/ccworld.html> to find out what the weather is like in the students' home countries. Help them to interpret the information, which is usually in numerical and table form, clearly and accurately.
 - 'It is very hot in Hong Kong today, and there is a strong wind.'
 - 'In Bangkok today, it is raining heavily and it is not as hot as usual.'

What is weather?



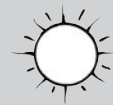
Track 1



Whether the weather
is fine



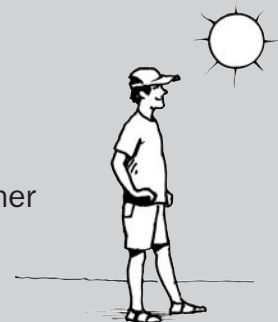
Or whether the weather
is hot



Whether the weather
is cold



Or whether the weather
is not.



We'll weather the weather

Whatever the weather

Whether we like it or not.

Weather



Track 2

Weather is the state of the atmosphere at any time.
What is happening in the atmosphere today, where you live?

atmosphere



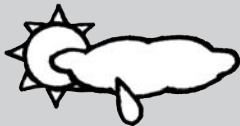
Fine



Mainly fine



Cloudy



Isolated showers



Showers



Rain



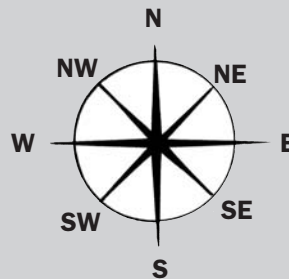
Hail



Thunder



Snow



	Under 5°	6° - 10°	11° - 15°	16° - 20°	21° - 25°	Over 25°
Temperature	Very cold	Cold	Cool	Warm	Hot	Very hot
Wind speed	10 - 29 km/h A breeze		30 - 59 km/h A wind		60+ km/h A gale	

The sun causes our weather

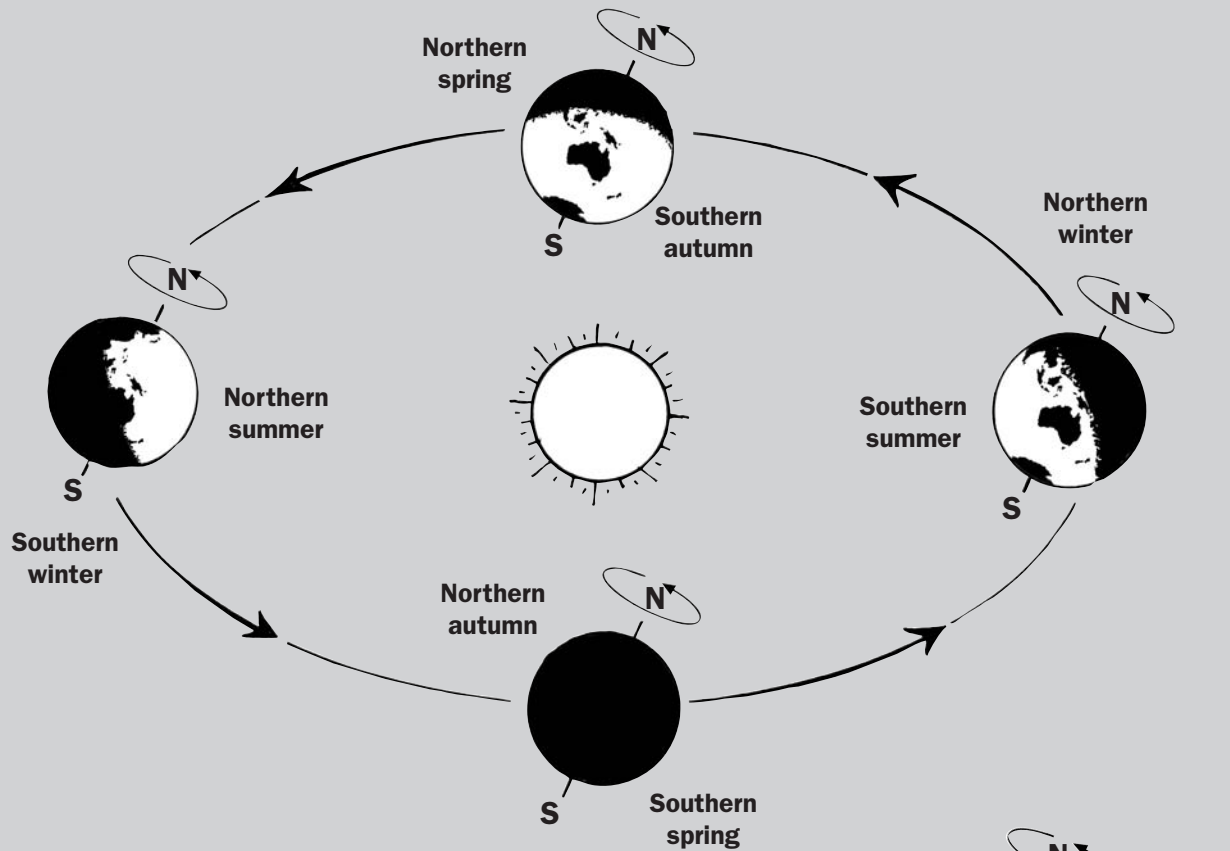
The sun causes all of our weather, even rain!

It is the sun's energy that heats air and water and causes different kinds of weather.

The sun warms the earth's surface unevenly. This makes the air and water move and change.

Weather changes with the seasons

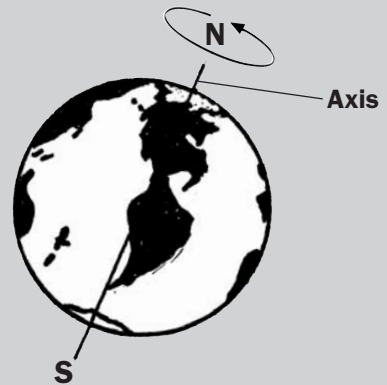
The earth moves around the sun. It takes a whole year to travel around the sun.



As the earth travels around the sun, it spins on its axis.

The axis is not upright. It is tilted.

It is this tilt of the earth that causes the seasons.



When the southern hemisphere is tilted towards the sun, it is summer in New Zealand.

In summer the sun is high in the sky. The days are longer and it is hotter than at any other time of the year.

When the southern hemisphere is tilted away from the sun, it is winter in New Zealand.

In winter the sun is low in the sky. It is colder than at other times of the year.

Activity one

Weather changes with distance from the equator

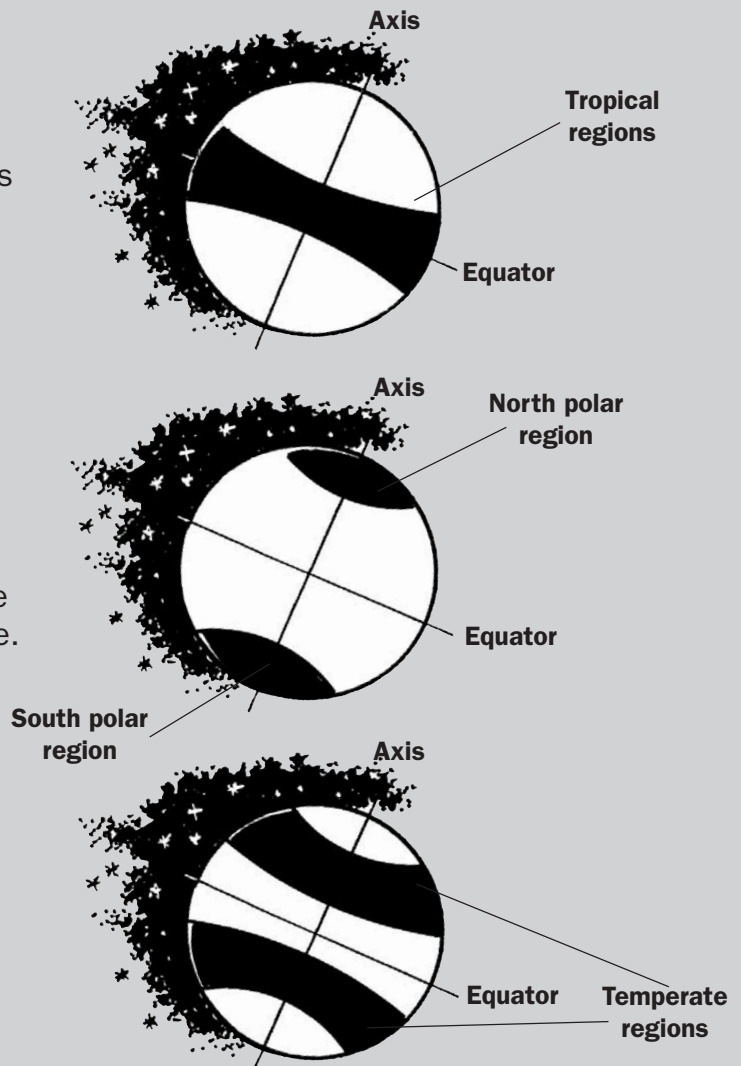
Places near the equator are nearly always very hot because the sun shines directly overhead for all of the year. These regions have a tropical climate.

The regions near the north and south poles are always cold because the sun is low in the sky.

For several months the sun does not rise at all. These regions have a polar climate.

Places in between the equator and the poles have temperate climates. Temperate climates have four seasons.

Nearly half the people in the world live in temperate climates. New Zealand has a temperate climate.



Glossary

atmosphere: the gases that surround the earth

axis: an imaginary line that runs through the earth from north to south. The earth spins on its axis.

climate: the pattern of weather in a region

equator: a line drawn on a map around the middle of the earth at an equal distance from the North Pole and the South Pole

hemisphere: half of the earth divided at the equator

poles: the opposite ends of the earth's axis

polar climate: a very cold climate. Regions near the North and South Poles have polar climates.

temperate climate: a mild climate. It is not often very hot or very cold, very wet or very dry.

tropical climate: a very hot and wet climate. Countries near the equator have tropical climates.

