

Geography

Weather And Climate



For Middle Primary

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Activity

Climate

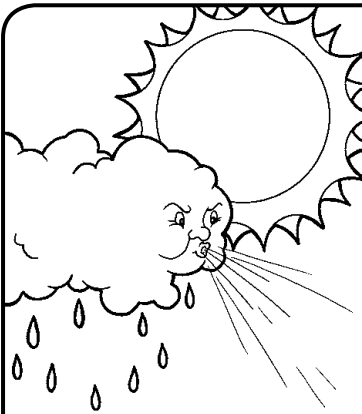
1. There is a difference between **climate** and **weather**. Read the definitions below. Label them either **climate** or **weather**.

A.

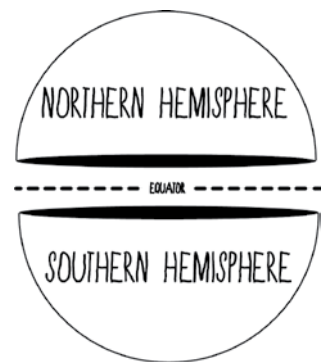
Is not mapped daily but over a long period of time. Weather averages and weather patterns are measured.

B.

Is mapped over a short period of time. It changes from minute-to-minute; hour-to-hour and is often measured in terms of: temperature, humidity, precipitation, cloudiness, brightness, visibility, wind, and atmospheric pressure (high and low pressure).



The climate is different depending where you live. The climate in the southern hemisphere tends to be warmer than in the northern hemisphere. The equator is an imaginary line which runs through the centre of the globe. Places located near to the equator enjoy warmer climates.



2. Use the information above and your own knowledge to draw lines to label the globe.

**SOUTHERN
HEMISPHERE**

**NORTHERN
HEMISPHERE**

EQUATOR

**HOTTER
CLIMATE**



**COOLER
CLIMATE**

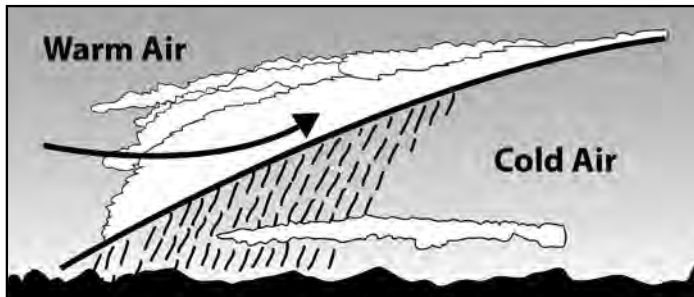
NORTH POLE

SOUTH POLE

AUSTRALIA

- ☐ Meteorologists are people who study and inform us of the weather. Read the information, and study the diagrams to complete the table below.

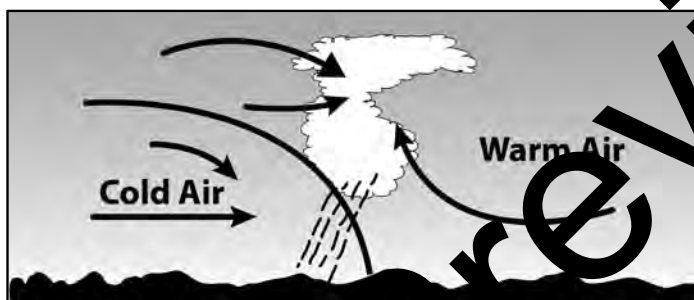
Warm Front



A WARM AIR MASS moving towards a COLD AIR MASS = A WARM FRONT.

When a warm front moves into an area, it settles over the cooler air mass and forces it away. The rain that forms with a warm front is usually lighter, but it falls over a larger area. The temperature will slowly rise and the air becomes more humid.

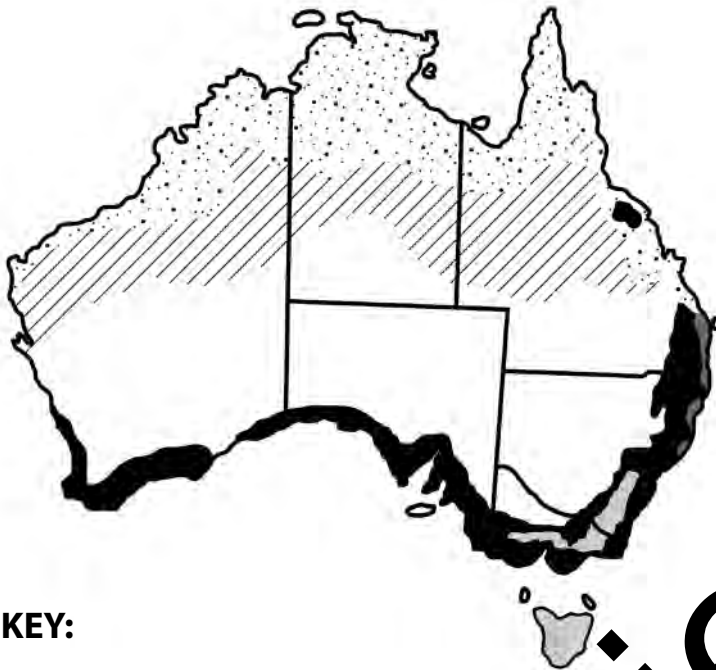
Cold Front



A COLD AIR MASS moving towards a WARM AIR MASS = A COLD FRONT.

When a cold front arrives, it cannot mix with the warmer air mass so it forces the warmer air to rise. The water vapour in the warm air begins to form clouds. As the cold front replaces the warm air, temperatures will drop and it may rain heavily in a small area for a short period of time.

Type of pressure or front	Type of weather it brings
Low pressure system brings ...	
High pressure system brings ...	
Warm air mass moving towards cold air mass ...	
Cold air mass moving towards warm air mass ...	

CLIMATE ZONES IN AUSTRALIA

KEY:

- ☐ hot & humid
- ☒ hot dry summer - warm winter
- ☐ hot dry summer - cold winter
- ☒ temperate (warm summer & cool winter)
- ☐ cool temperate
- ☐ warm & humid

☐ Study the diagram left, then answer the questions.

1. How many climate zones does Australia have?

2. What climate do you experience in your state and territory?

3. Which is your favourite climate in Australia?

4. Do Queenslanders experience the same climate?

5. How is Tasmania's climate different from other states and territories in Australia?

Label on the map:

- i. where you would be most likely to find snow
- ii. the area that is closest to the equator
- iii. where you would most likely experience no difference between winter and summer

1. In drier parts of Australia, droughts are a problem. Look at the images and brainstorm what problems droughts might cause.



Brainstorm

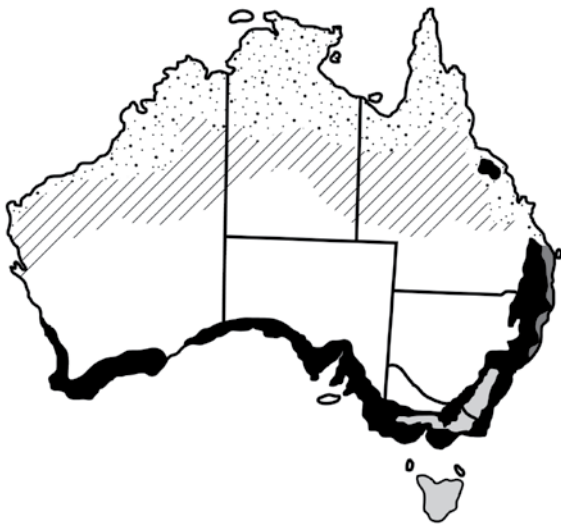
2. Can you think of ways to drought-proof Australia? Work in a pair and list your ideas.









Activity

Australian Climate 3

Study the diagram then answer the questions.



KEY:

-  hot & humid
-  hot dry summer - warm winter
-  hot dry summer - cold winter
-  temperate (warm summer & cool winter)
-  cool temperate
-  warm & humid

1. Which place in Australia do you think experiences the best climate? Why?

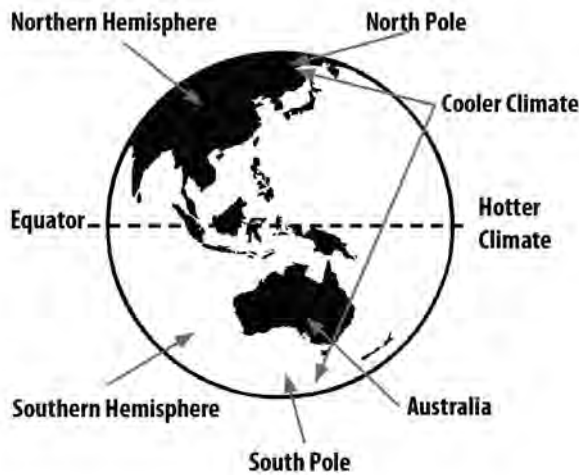
2. Choose a place that experiences a different climate to where you live. Write a paragraph about how life might be different there.

Place:



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1. A = climate B = weather
- 2.



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2.

Pressure or front	Weather it brings
Low pressure system brings...	stormy weather and strong winds.
High pressure system brings...	fine weather and light winds.
Warm air mass moving towards cold air mass brings...	light rain over a large area; humid weather.
Cold air mass moving towards warm air mass brings...	cool temperatures, short periods of heavy rain.

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1. Six
4. No, Queenslanders experience five different climate zones.
5. It only experiences one climate.
 - i. Students should indicate the south-east
 - ii. Students should indicate the tip of Queensland (Cape York)
 - iii. Students will possibly indicate the areas with a hot dry summer and warm winter.

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1. Possible responses: no water for cattle; fewer food supplies; less income; no water in dams and reservoirs; low supply of irrigation for crops
2. Possible responses: drinking reclaimed water; water tanks; building more dams, etc.

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Student responses