

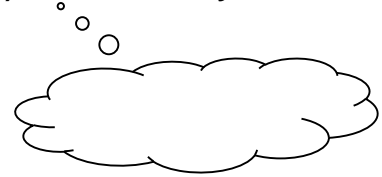


Weather: Tiritiri Matangi Island

Why study the weather? Knowing about weather is useful if you are:

- on a sports day/ tramping/ walking
- work outside,
- at a barbecue
- going swimming or yachting
- on a ferry travelling to Tiri!

a) Describe today's weather.



The earth is on a tilt and this results in the sun's rays striking different places at different angles. This causes four seasons: **spring, summer, autumn, winter**.

b) What season are we in right now?

c) Explain Matariki?

d) Is the sun high or low in the sky in this season?



Tara: white-fronted tern

A. Finding seabirds from the ferry

From the ferry watch the birds flying, swimming or floating on the sea? In the following chart **circle** the names of birds you find. Use the **ID charts on the ferry** to help identify the birds.

Circle the seabirds you ID	Numbers	Describe the birds' actions: <i>fluttering, soaring, gliding, diving, floating on the water, swimming.</i>
black backed gull - karoro		
red billed gull - tārapuna		
fluttering shearwater - pakahā		
Australasian gannet - tākapu		
little penguin - kororā		
white fronted tern - tara		
Other		

Write down how you think many sea birds and hawks can stay up in the air with little wing movement? *Hint: read the following info box.*



The sun is a great engine that drives the earth's weather machine and heats the surface of the earth unevenly that warms and cools our atmosphere of gas and water particles. Hot air rises so breezes and thermals (rising warm air currents) are created. The gravity of the sun along with the moon influence the sea and creates tides.

B. Sun and Tide

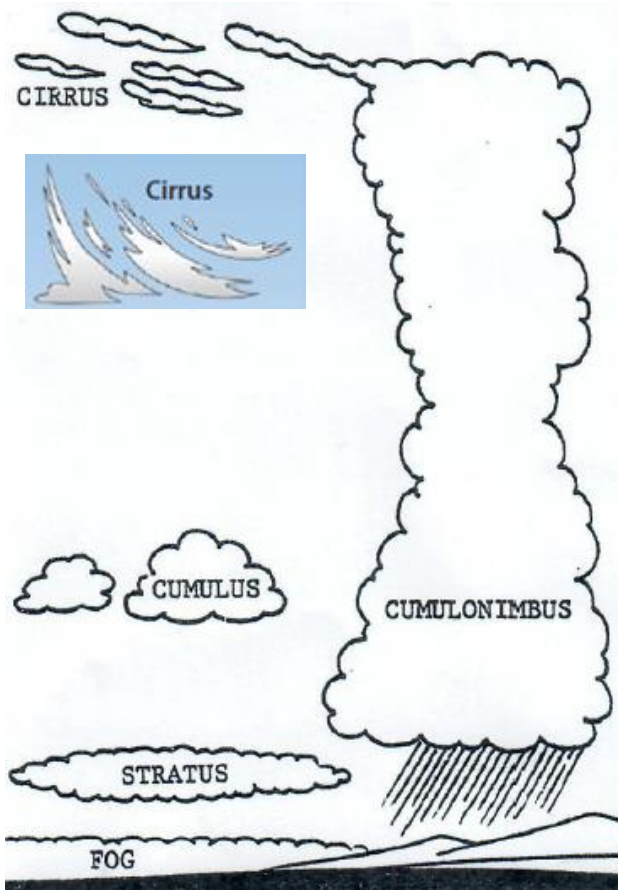
1. Note the direction of the sun: -

- a) on the ferry travelling to Tiri _____
- b) mid-day on Tiri _____
- c) when travelling home _____

2. Checking the tide level on Tiritiri

Arrival: Circle where the tide is on the wharf piles:- **low, medium, high**

Departure: Circle the tide level on the wharf piles:- **low, medium, high**



C. Reading the Clouds from the ferry and on Tiritiri

CIRRUS - high wispy clouds, contain ice; **indicate** snow drizzle, change of weather.

CUMULUS - low, white fluffy clouds with greyish bottom **indicates** fine weather, may have rain later.

STRATUS - low clouds that spread over the sky in layers; **indicates** overcast, maybe drizzle

CUMULONIMBUS or thunder head - a cumulus grows into a large cloud: **indicates** rain and storms.

FOG - stratus clouds form near the ground: **may indicate** a fine day later on. There is less visibility: very dangerous for ships and planes.

NOTE the fog horn demonstration on Tiritiri and why it was necessary to have prior to today's satellite form of navigation.

Types of Clouds you observe	State if observed on ferry or on Tiritiri

For fun: imagine shapes in the clouds! _____

D. On the ferry and Tiritiri:-



find **wind direction**.

Stand still, face north, lick the top of your index finger and point upwards. Observe which side of your finger feels the coolest. Whichever the direction the cool side is on your finger is facing (north, south, east, west), that's the **direction the wind is coming from**.



Kahu: hawk - Australasian harrier

The reason why your finger feels cool has to do with the **speedy evaporation** of the moisture on your finger as the wind's air blows by.

E. Look out for kahu to watch it's flight.

Describe the flight:

F. Unscramble: aeht _____, emraht _____, lsumuuc _____
 ogf _____, tatrssu _____, mrpheoaste _____

References: : Prism: Weather: D Beatson *The NZ Weather Book*, 1978; User Friendly Resources: Weather
Drawings: Keith Woodley. Tiritiri Education Resource, Google Images.

Answers: A. Birds use air currents/thermals to glide and soar on.
 F. Earth, thermal, cumulus, fog, stratus, atmosphere.