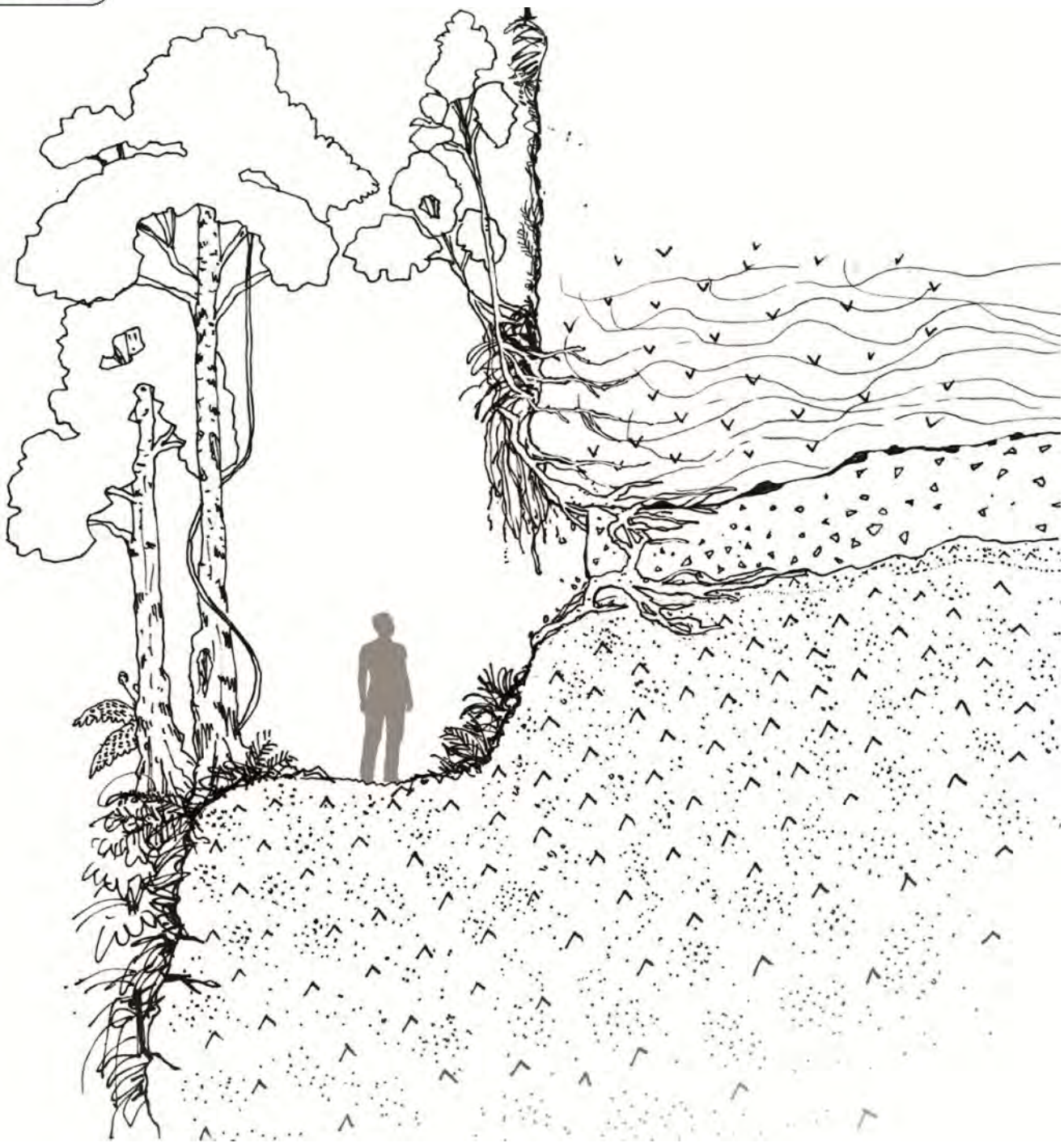
Geology and Forest Discovery

Springbrook National Park

Primary Booklet



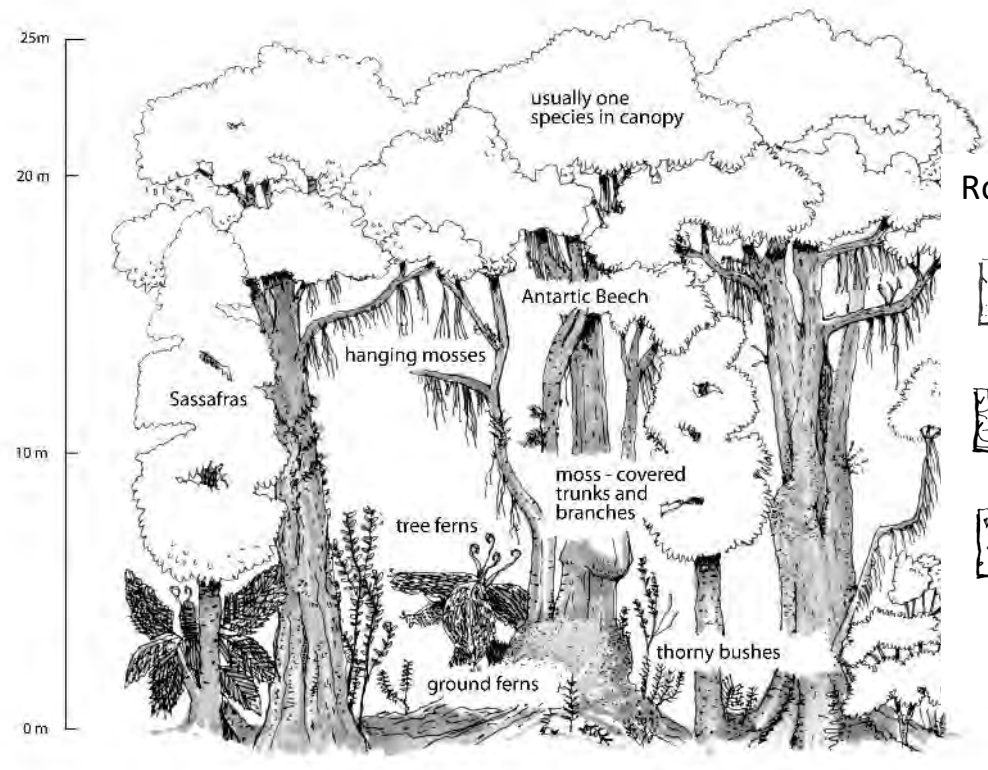
Student Name: _____

Date: _____

Version 21

Cool Temperate Rainforest

Take a moment to look around you. What do you notice about this type of forest?
a) Tick the vegetation types that you see
b) Draw in the rock type under the forest using the key



Soil	
Rock type	

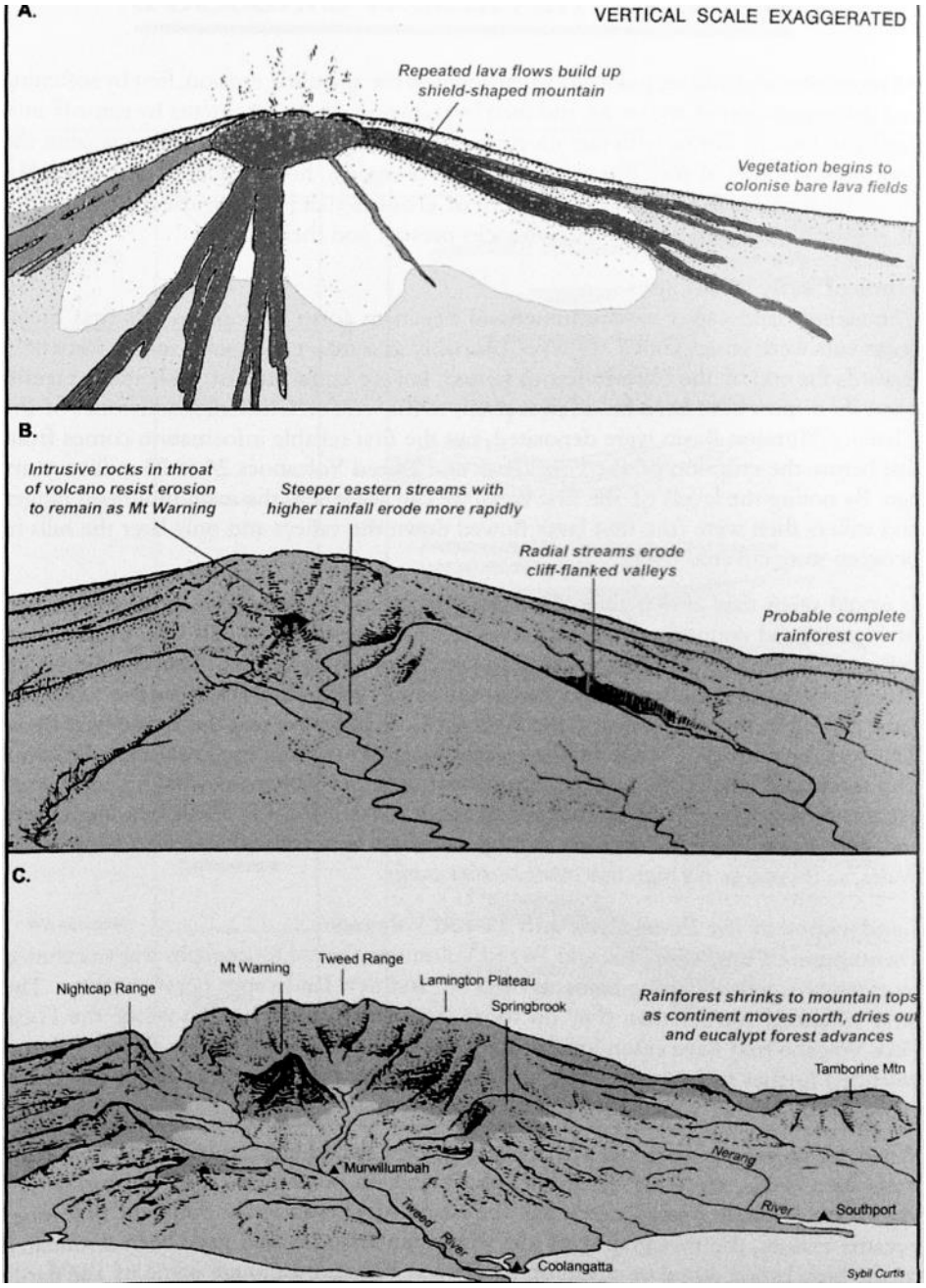
Tick the characteristics of this forest:

Altitude	☐ < 300m	☐ 300-800m	☐ > 900m
Rainfall	☐ < 1600mm	☐ 1600-2000mm	☐ >2000mm
Canopy Height	☐ 10 m	☐ 20 m	☐ 25m
Canopy Cover	☐ 1/4	☐ 1/2	☐ 3/4
Soil	☐ Infertile	☐ Fertile	

c) What is happening to the Antarctic Beech trees as a result of climate change?

Best of All Lookout

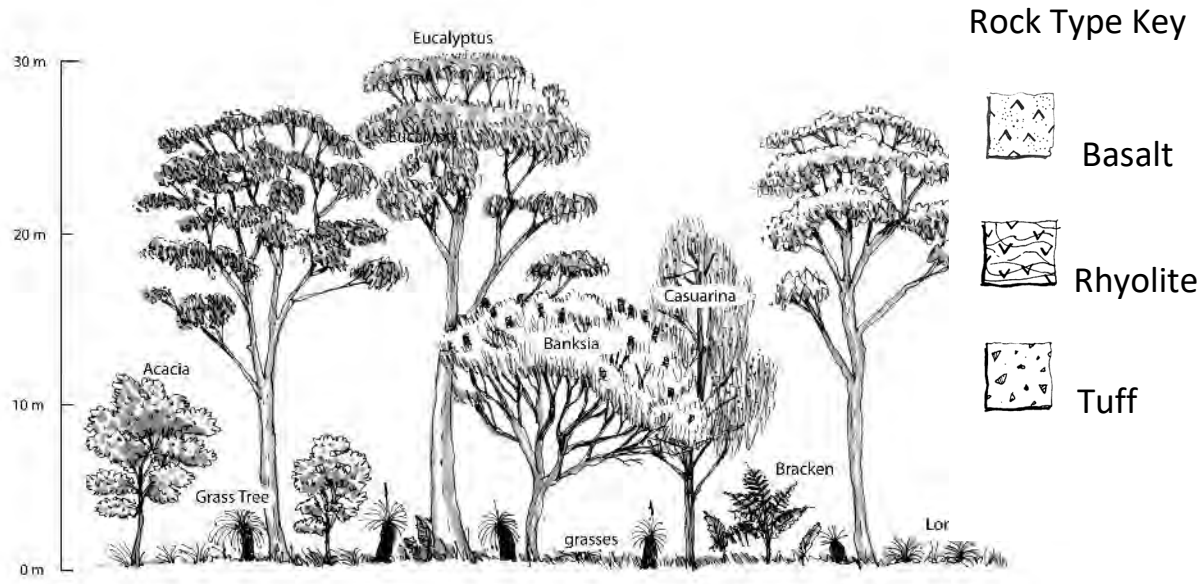
From the lookout you can see Wollumbin, the traditional Aboriginal name for Mt Warning. When it erupted 23 million years ago lava spread as far as Lismore, Mt Tamborine and 14km out to sea.



Tick the factors that have caused weathering and erosion to the Tweed Volcano over 23 million years:

☐ wind ☐ water ☐ ice ☐ plants

Dry Eucalypt Forest



Soil	
Rock type	

Tick the characteristics of this forest:

Altitude	☐ < 300m	☐ 300-800m	☐ > 900m
Rainfall	☐ < 1600mm	☐ 1600-2000mm	☐ >2000mm
Canopy Height	☐ 10 m	☐ 20 m	☐ 30m
Canopy Cover	☐ 1/4	☐ 1/2	☐ 3/4
Soil	☐ Infertile	☐ Fertile	

a) Draw a diagram of a grass tree

b) Draw lines matching the adaptation with your diagram

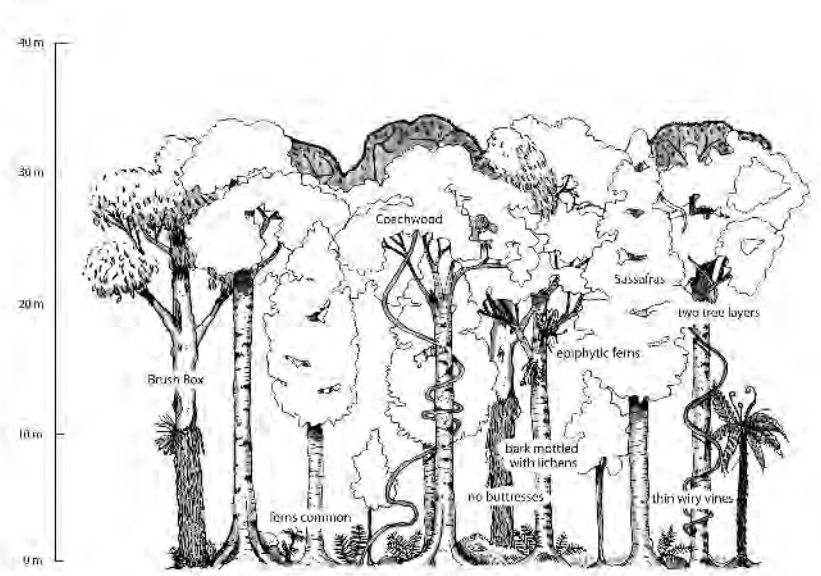
Flowers after fire

Long thin leaves to reduce water loss

Growing tip protected by outer leaves during fire

Thick bark to protect from fires

Warm Temperate Rainforest



Rock Type Key

Basalt

Rhyolite

Tuff

Soil	
Rock type	

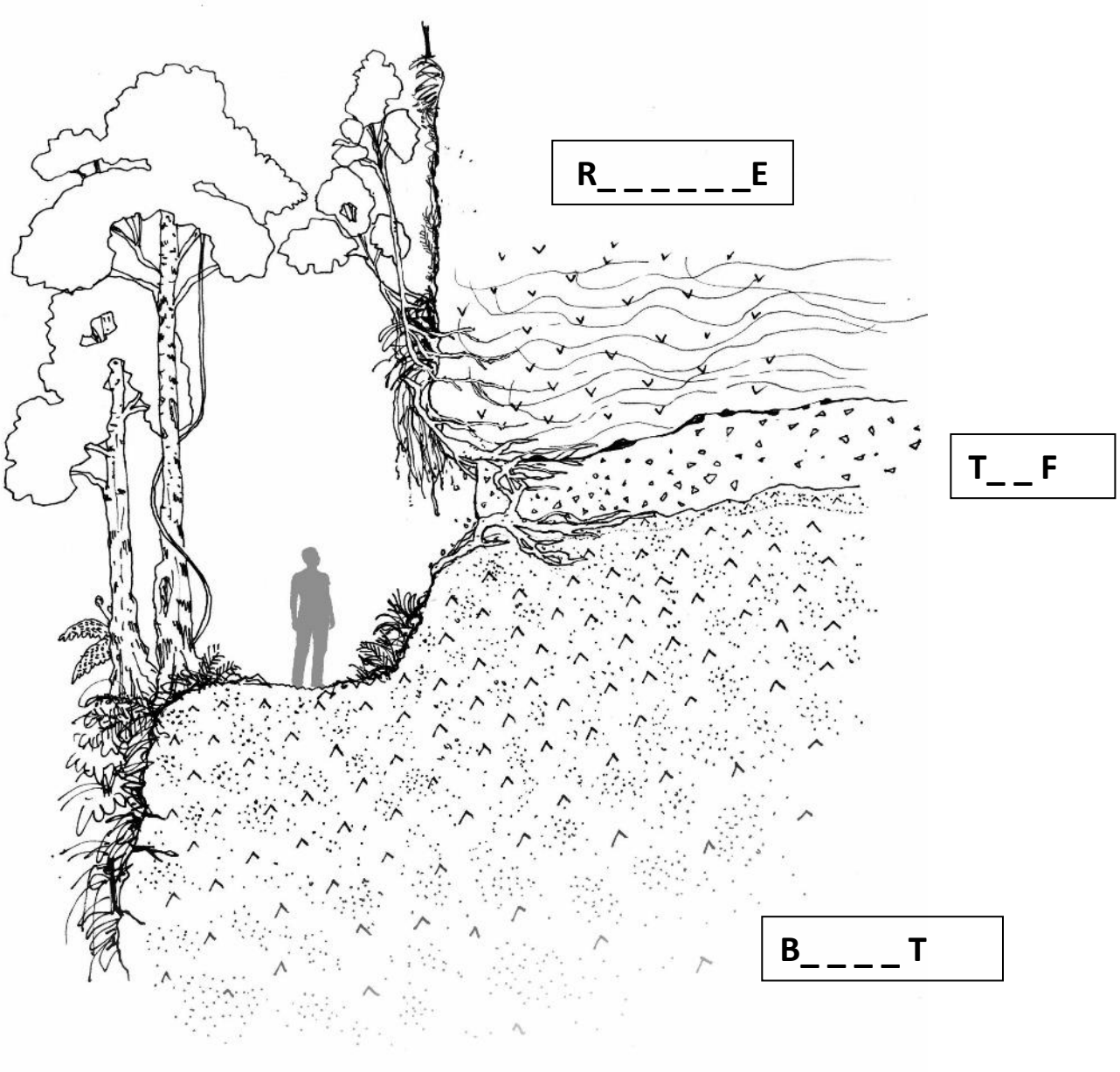
Tick the characteristics of this forest:

Altitude	☐ < 300m	☐ 300-800m	☐ > 900m
Rainfall	☐ < 1600mm	☐ 1600-2000mm	☐ >2000mm
Canopy Height	☐ 15 m	☐ 25 m	☐ 35m
Canopy Cover	☐ 1/4	☐ 1/2	☐ 3/4
Soil	☐ Infertile	☐ Fertile	

What are the factors that affect plant growth?

Physical and Chemical Weathering

1. Label the three types of rocks (basalt, tuff and rhyolite)
2. In the picture draw two arrows representing the main forces (pressure) acting on breaking up the rocks due to physical/biological weathering.
3. In the picture colour the chemical weathering in red.



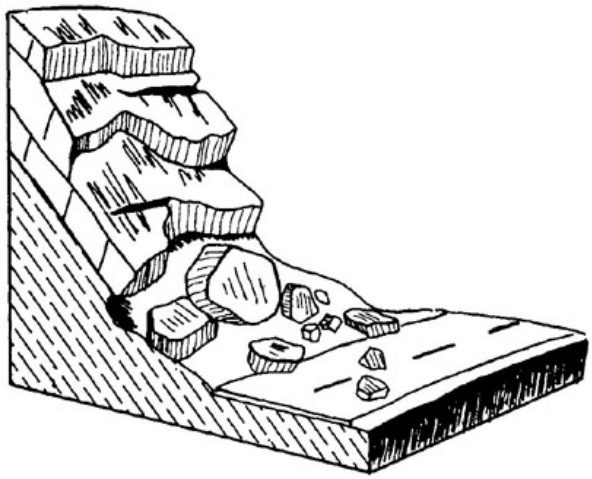
4. Circle the compounds needed for rusting to occur?

Water Carbon Dioxide Iron oxide Oxygen

5. What suggestion can you make in relation to the age of the each one of rocks at this site? List from the least old to the oldest

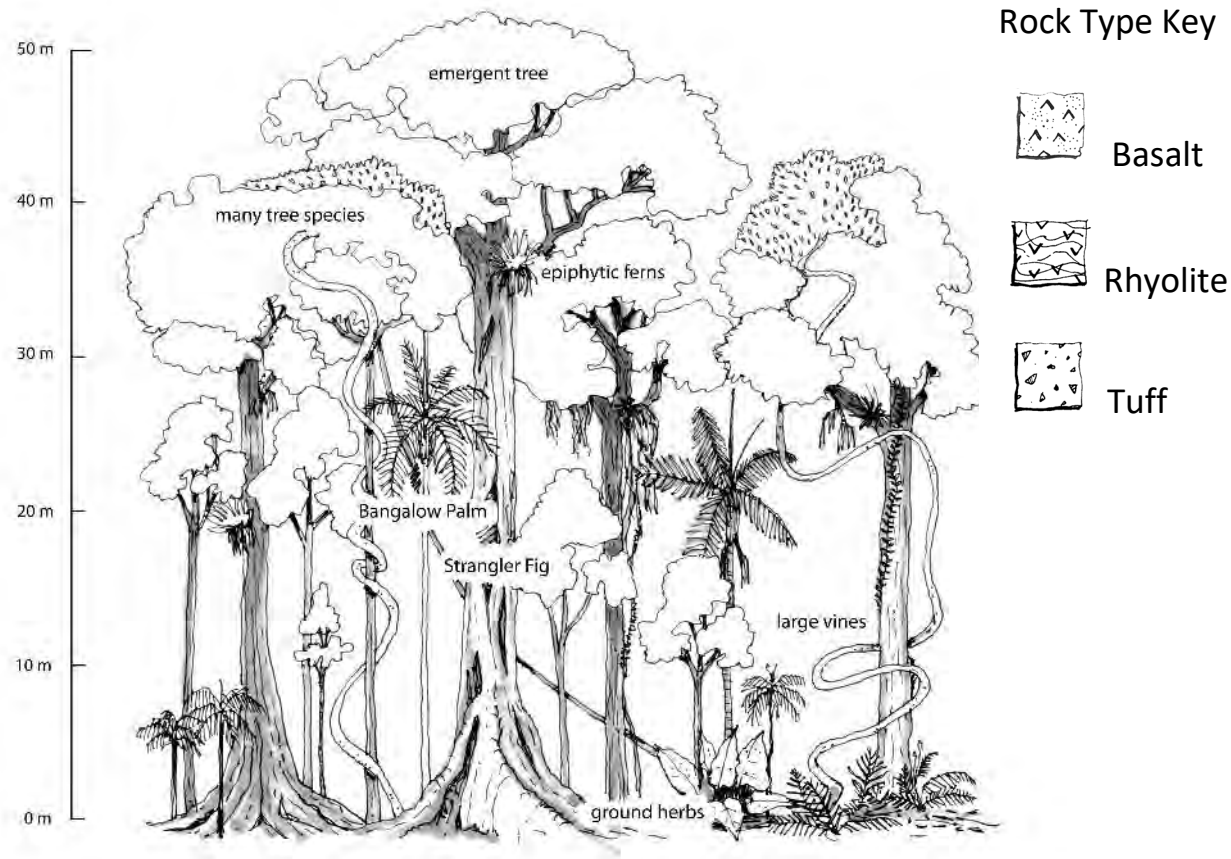
Landslide

What effects has the landslide had on this area?



Why are weeds growing and surviving in this area?

Subtropical Rainforest



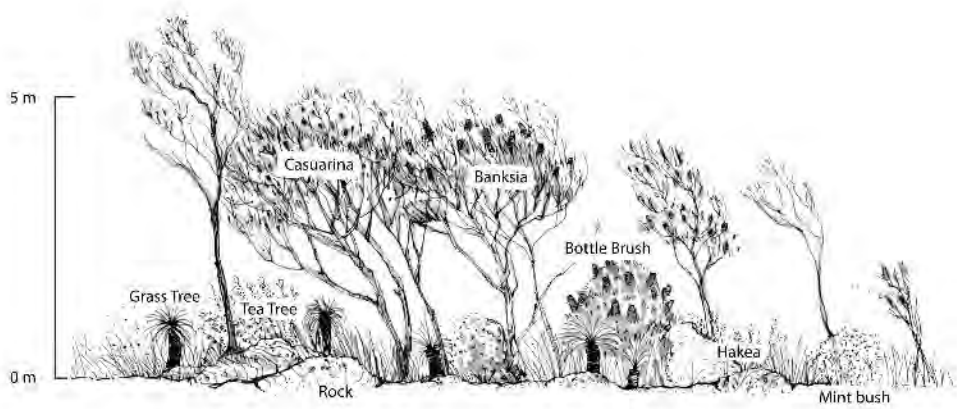
Soil	
Rock type	

Tick the characteristics of this forest:

Altitude	☐ < 300m	☐ 300-900m	☐ > 900m
Rainfall	☐ < 1600mm	☐ 1600-2000mm	☐ >2000mm
Canopy Height	☐ 25 m	☐ 45 m	☐ 55m
Canopy Cover	☐ 1/4	☐ 1/2	☐ 3/4
Soil	☐ Infertile	☐ Fertile	

Describe two advantages that buttress roots would give to a subtropical rainforest tree

Montane Heath



Rock Type Key

Basalt

Rhyolite

Tuff

Soil	
Rock type	

Tick the characteristics of this forest:

Altitude	☐ < 300m	☐ 300-900m	☐ > 900m
Rainfall	☐ < 1600mm	☐ 1600-2000mm	☐ >2000mm
Canopy Height	☐ 1 m	☐ 2 m	☐ 5m
Canopy Cover	☐ 1/4	☐ 1/2	☐ 3/4
Soil	☐ Infertile	☐ Fertile	

Draw pictures and label the living and non-living features of this environment that may affect the survival of animals and plants:

Living	Non Living

Extra Activities

What are three things you have learnt today?

Describe your favourite part of the day?

Make up a geology joke - What did one volcano say to the other?