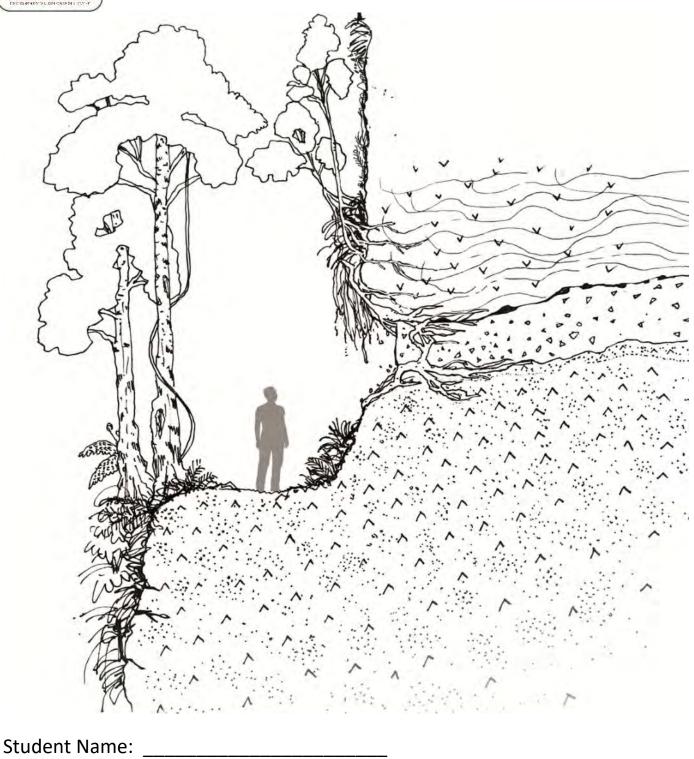
### Geology and Forest Discovery

Springbrook National Park



Primary Booklet

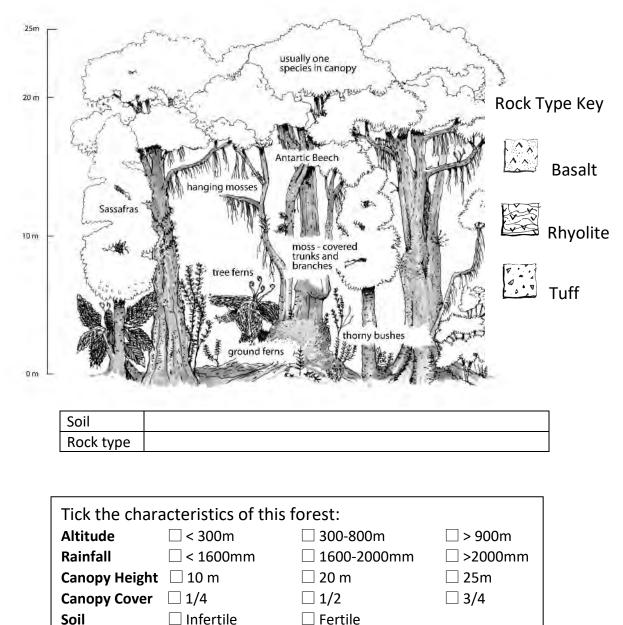


Date: \_\_\_\_\_

# **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

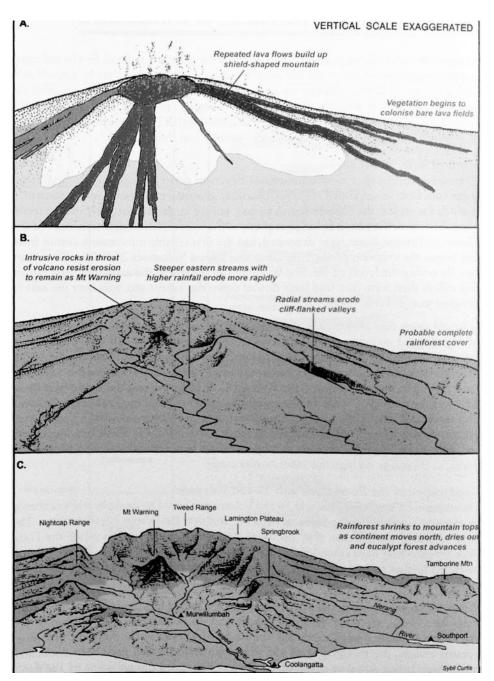


#### c) What is happening to the Antarctic Beech trees as a result of climate change?

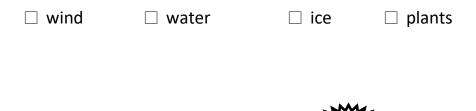


# **Best of All Lookout**

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:



### **Dry Eucalypt Forest**

30 m 🖵				Euc	alyptus				Rock T	уре Кеу
		當院。				ġ M	it			Basalt
	20 m —	ating	ale (	ALL	1/40	AND HE	Con all	Contraction of the second		Rhyolite
	10 m -	Acac	ia Grass Tree		Bani	casuarir sia asses	Bracken	Lor		Tuff
9	Soil									
F	Rock type									
ſ	Tick the	chara	acteristic	s of this	forest:					
	Altitude		□ < 300n		300-80		□ > 900ı			
	Rainfall		□ < 1600	mm		2000mm	□ >2000	mm		
	Canopy H		□ 10 m		□ 20 m		□ 30m			
	Canopy Co	over	□ 1/4		□ 1/2		□ 3/4			
	Soil		🗌 Infertil	е	🗌 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

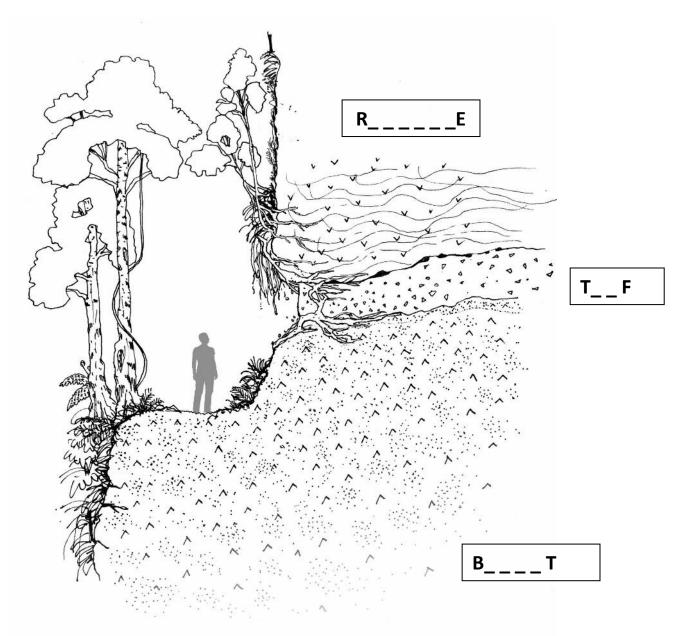
-10 m				Rock T	уре Кеу
30 m	Costwo		<ul> <li>A state</li> </ul>		Basalt
20m		Sussaires Event	e Contractoria de la contractori		Rhyolite
10m =		bark mottled with lichens			Tuff
ym L	Terrs common	thin wiry	vines		
Soil					
Rock type					
Tick the chara	acteristics of this f	orest:			
Altitude	□ < 300m	🗌 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?

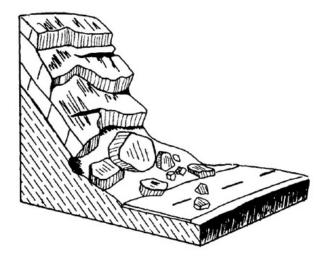
Water Carbon Dioxide Iron oxide Oxygen

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?

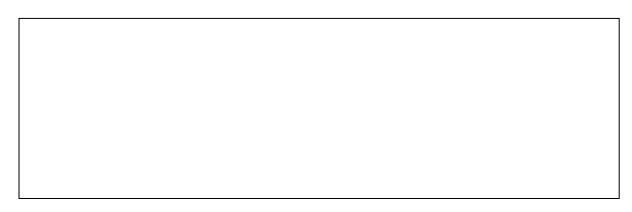


# **Subtropical Rainforest**

50 m _	a manand	Rock Type Key
	emergent tree	Basalt
40 m —	many tree species	Rhyolite
30 m —		Tuff
20 m —	Bangalow Palm Strangler Fig	
10 m —		
om L	ground herbs	-
Soil		
Rock type	2	
Tick	the characteristics of this forest:	

Tick the chara	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**

and the second		Rock Type Key
5 m	Banksia	Basalt
Grass Tree Tea Tree	Bottle Brush	Rhyolite
0 m	Hakea Mint bush	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?

