### **Year 9 Ecosystem Work**

### Glossary of key words

Key Word	Definition
Rainforest	The rainforest consists of several layers. Each layer has plants and animals which
structure	are adapted to the conditions found there.
Rainforest	Rainforests are often called the lungs of the planet for their role in absorbing
function	carbon dioxide, a greenhouse gas, and producing oxygen, upon which all animals
	depend for survival.
Resilience	The capacity of an ecosystem to return to its normal state after changes (e.g.
	climate change).
Transpiration	Transpiration is the evaporation of water / loss of water from plants, especially
	leaves.
Biodiversity	Biodiversity is a measure of how many different species live in an ecosystem.

## How does climate change present a threat to the structure, function and biodiversity of forest ecosystems?

Make notes on the five reasons given.

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3.		
3.		
4.		
5.		

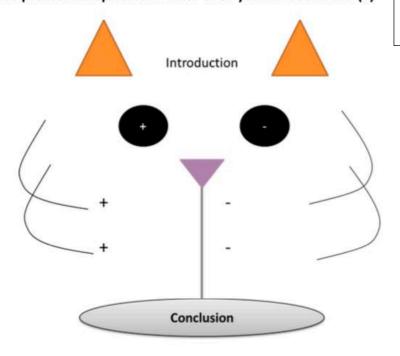
Which do you think is the largest threat to tropical rainforests and why?

# 3.5 D Sustainable Management in Costa Rica

Sustainable r	nanagement of the tropical rainfores	st in Costa Rica.
Sustainability rank. Rank each activity in Costa Rica. 1 being the most effective scheme. 4 being the least effective.	What the scheme involves	How is this scheme sustainable?
	The government set up national parks which protect 18% of the country and privately owned reserves make up another 13%.	
	Direct government action—tax deductions and grants to owners of rainforest if they conserved their forest area and used it to benefit society. \$50 annually for each hectare of forest they protect.	
	Areas previously deforested are being used to economically support the country e.g. farming banana crops.	
	The certificate for sustainable tourism for businesses proves their commitment to sustainable tourism.	
Which scheme i	s the most effective and why?	

Assess the methods used to protect a tropical rainforest area you have studied. (8)

Use Slide 7 to help you with and essay structure here.



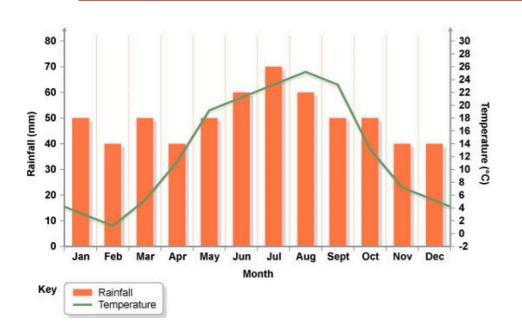
Answer	

### The distinguishing features of a deciduous woodland

List the biotic and abiotic factors in the images on slide 8.

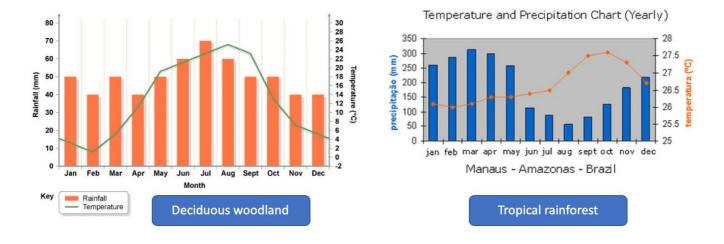
iving

### **Deciduous woodland climate graph**



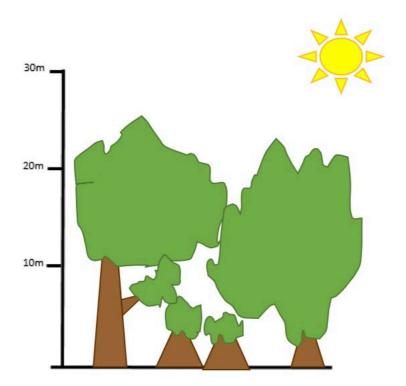
Describe what the graph shows

Extension- how could this change in the future (think of climate change)



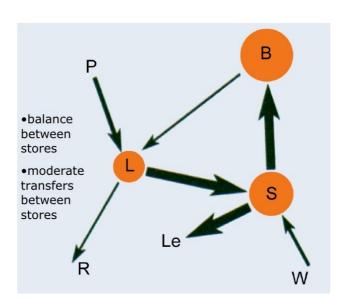
### Describe the differences between the two climate graphs (4)

The distinguishing features of a deciduous woodland \_ Follow the instructions on slide 11 and information from the slides on 12-14 as well as the video.



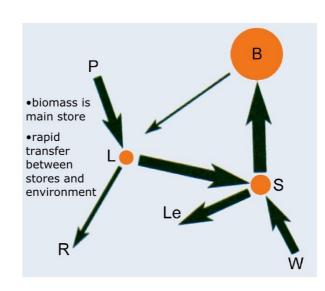
Use the key on the slide to label your own diagram.





Comparing Gersmehl modes – look at the diagram below of a Gersmehl model for a tropical rainforest. What are the similarities and differences between the two environments? Helpful hint – the larger the circle of arrow the more nutrients is stored or flows here.

ropical rain forest

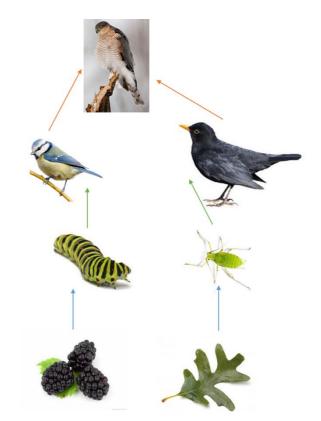


Tertiary Consumer

Secondary Consumer

Primary Consumer

Producer



Label your own version of this food web.

Answer the following questions

- What would happen to the ecosystem if the number of caterpillars decreased?
- 2. What would happen to the ecosystem if the amount of oak leaves increased?

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