

Rainforests

Read the passage below, then answer the questions that follow.

What is a Rainforest?

As their name suggests, rainforests consist of dense forest areas with tall trees and heavy rainfall almost every day. Found on every continent of the world except Antarctica, rainforests are teeming with life. Amazing plants and creatures flourish in the rich habitat the forest provides. In fact, more than half of the earth's animal and plant species live in the rainforest and there are some which have not even been discovered yet. Many medicines are derived from plant substances found in the rainforest. Rainforests are under threat from deforestation and climate change. Large areas of forest have been cleared for logging, cattle ranching and mining.

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Although it is often the exotic tropical rainforests which are depicted in books and films, there are actually two types of rainforest: temperate and tropical. Temperate rainforests are found in areas of the world with mild temperatures, but still experience a great deal of rain. Tropical rainforests are warm, humid places, located in the area above and below the equator. The largest rainforest in the world is the Amazon rainforest, which is in South America. It covers an area of 5.5 million square kilometres: big enough to fit the UK and Ireland in it 17 times. Tropical rainforests are sometimes called 'the lungs of the planet', because of the way they draw in carbon dioxide from the atmosphere and give off oxygen.

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Rainforest Structure

Rainforests are made up of several layers, with different kinds of plants and animals living in each.

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Canopy – the layer of branches and leaves at the top of the rainforest. This layer is high above the ground and contains an abundance of species. Conditions in the canopy tend to be hotter and drier than elsewhere in the rainforest. Through the uppermost part, a few plants are able to peek through to the light above the forest. This is known as the **emergent layer**.

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Understorey – a layer of vegetation formed underneath the canopy. Only a small amount of light is able to penetrate the canopy to reach the understorey, resulting in large leaves adapted to maximise the small amount of sunlight they receive. 30

Forest floor – the very bottom of the rainforest. Plants which grow here must be able to survive in very low levels of light. The moist, warm conditions make it ideal for decaying plant and animal matter to decompose quickly. 35

- Ⓐ Find and copy **two** words or phrases in paragraph one which make it clear that the rainforest is a good place for animals and plants to live. [2]

1 _____

2 _____

- Ⓑ Circle **one** answer. In the phrase *rainforests consist of **dense** forest areas*, the word *dense* tells us the trees are: [1]

Overgrown and tangled

Tall and spindly

Tightly packed together

Dark green

- Ⓒ What does the expression *lungs of the planet* suggest about the rainforest? Why is it a good way of describing the rainforest? [2]

Ⓓ What is the main difference between temperate and tropical rainforests? [1]

Ⓔ What does the word *humid* in paragraph two tell you about conditions in the rainforest? [1]

Ⓕ Where is the Amazon rainforest located? [1]

Ⓖ Reread the section of text which describes the structure of the rainforest. Tick to show whether the statements below are true or false. [1]

	True	False
Many plants and animals live in the canopy layer.		
The understorey contains smaller leaves due to the limited light.		
Conditions on the forest floor are very wet with little sunlight.		
Not many species live in the canopy.		

Ⓗ Why does dead plant and animal matter rot quickly on the forest floor? [1]

Unit 2

- Ⓐ Refer to any two of the following: teeming (with life) / flourish / rich habitat / more than half of the earth's animal and plant species. [2]
- Ⓑ tightly packed together [1]
- Ⓒ Mention the exchange of gases being similar to that in lungs and the importance of lungs for living. For example, *lungs of the planet* shows that the rainforest takes in one gas and gives out another which is what actual lungs do. Lungs are important for staying alive and the rainforest is important for keeping the earth alive. [2]
- Ⓓ mild temperatures in temperate rainforests / tropical rainforests are warmer (hotter) [1]
- Ⓔ it is steamy, the air is wet and hot, the air is moist (answer must refer to moisture not just heat) [1]
- Ⓕ South America [1]
- Ⓖ All correct for 1 mark: True, False, True, False [1]
- Ⓗ because it is warm and moist [1]