Rainforests

What is a Rainforest?

Rainforests are really big forests that get a lot of rain. They are found in all continents of the world apart from Antarctica (it's far too cold there). There are two types of rainforest: tropical (in the tropical, warm zone near the Equator) and temperate (in the temperate zone further away from the Equator). Most rainforests are tropical, with tall trees, warm climates (weather patterns), and lots of rain. It can rain one inch of rain per day in some rainforests! The largest of these is the Amazon Rainforest in South America.



Fact File in Numbers

- 2% of the Earth's surface is covered in rainforest.
- 50% of the plants and animals of the world live in rainforests.
- 20% of our water is found in a rainforest in the Amazon Basin.
- 25% of natural medicines have been found in rainforests.
- 70% + of the plants that are used to treat cancer are found **only** in the tropical rainforests.

The Canopy

The rainforest trees are so close together, that the branches and leaves at the top of the trees touch each other and make what is called a 'canopy', which is a bit like a roof for the forest. The canopy can be about 30m above the ground. Animals that live in the canopy have to use loud calls to communicate because they cannot see each other in the thick leaves and some can jump from tree to tree.

The Forest Floor

This is dark because the canopy blocks a lot of the light and it is humid (damp). The floor is where dead animals and plants decompose (rot) and recycle all the nutrients and materials. Also, the larger animals are found here including tapirs, elephants, tigers and jaguars.

Why are they so important?

Rainforests do a few things that are super-important to our life on Earth. One is that they use photosynthesis to take in carbon dioxide and make oxygen which we need to breathe and survive. This is why they are called 'The Lungs of The Earth'.

They also help keep our weather system stable by absorbing carbon dioxide, creating rainfall and keeping temperature stable. They also affect the water cycle as they hold so much water which condenses into the atmosphere.

So, how can we manage without them?



1. What percentage of our natural medicines have been found in rainforests?

2. Name the two types of rainforest.

3. Which rainforests are nearer the Equator – temperate or tropical?

4. Why are there no rainforests in Antarctica?

5. Where in the rainforest is the canopy?

6. What is it about the canopy that makes it easy for animals to jump from tree to tree?

7. It is very crowded and leafy in the canopy. How do some animals communicate because of this when they cannot see each other?

8. Why is the forest floor dark?

9. Why has the author put the word 'damp' in brackets in 'The Forest Floor' section?

10. Read the last line...what is your opinion and why?



Answers

1. What fraction of our natural medicines has been found in rainforests?

25%

2. Name the two types of rainforest.

Temperate and tropical.

3. Which rainforests are nearer the Equator - temperate or tropical?

Tropical.

4. Why are there no rainforests in Antarctica?

It is too cold.

5. Where in the rainforest is the canopy?

At the top.

6. What is it about the canopy that makes it easy for animals to jump from tree to tree?

The leaves and branches are <u>close together.</u>

7. It is very crowded and leafy in the canopy. How do some animals communicate because of this when they cannot see each other?

Loud calls.

8. Why is the forest floor dark?

The canopy blocks light.

9. Why has the author put the word 'damp' in brackets in 'The Forest Floor' section?

To explain what the word `humid' means.

10. Read the last line...what is your opinion and why?

Open ended: discuss and include issues such as carbon dioxide/oxygen, medicines and cures for cancer and animals species.



Rainforests

What is a Rainforest?

Rainforests are huge forests that get a lot of rain. They are found in all continents of the world apart from Antarctica (as it's too cold there). There are two types of rainforest: tropical (in the tropical, warm zone near the Equator) and temperate (in the temperate zone further away from the Equator). Most rainforests are tropical, these are forests with tall trees, warm climates (weather patterns), and lots of rain. It can rain one inch of rain per day in some rainforests! The largest of these is the Amazon Rainforest in South America.



Fact File in Numbers

- 2% of the Earth's surface is covered in rainforest.
- 50% of the plants and animals of the world live in rainforests.
- $\frac{1}{5}$ of our fresh water is found in a rainforest in the Amazon Basin.
- $\frac{1}{4}$ of natural medicines have been found in rainforests.
- 70% + of the plants that are used to treat cancer are found **only** in the tropical rainforests.

The Canopy

The rainforest is so tightly packed with trees, that the branches and leaves at the top of the trees touch each other and make what is called a 'canopy', which acts a bit like a roof for the forest. The canopy can be about 30m above the ground. The canopy is hotter and drier during the day than other parts of the rainforest. Animals have adapted to live in the canopy by having loud calls to communicate in the thick foliage and some jump from tree to tree.

The Forest Floor

This is a dark because the canopy blocks a lot of the light and it is humid (damp), but it is still a very important part of the ecosystem. The floor is where dead animals and plants decompose (rot) and recycle all the nutrients and materials. Also, the larger animals are found here including tapirs, elephants, tigers and jaguars.

Why are they so important?

Rainforests do a few things that are critical to our life on Earth. One important thing that rainforests do is they use photosynthesis to take in carbon dioxide and make oxygen which we need to breathe and survive. This is why they are called 'The Lungs of The Earth'.

They also help keep our weather system stable by absorbing carbon dioxide, creating rainfall and keeping temperature stable. They also affect the water cycle as they hold so much water which condenses into the atmosphere.

So, how can we manage without them?



- 1. What fraction of our natural medicines have been found in rainforests?
- 2. Name the two types of rainforest.
- 3. Which rainforests are nearer The Equator temperate or tropical?
- 4. Where in the rainforest is the canopy?
- 5. What is it about the canopy that makes it easy for animals to jump from tree to tree?
- 6. It is very crowded and leafy in the canopy. How do some animals communicate because of this when they cannot see each other?
- 7. Why is the forest floor dark?
- 8. Name one way that the rainforests affect our life on Earth.
- 9. In the Fact File in Numbers, why has the author emphasised the word 'only'.
- 10. Read the last line...what is your opinion and why?



Answers

1. What fraction of our natural medicines have been found in rainforests?

One quarter.

2. Name the two types of rainforest.

Temperate and tropical.

3. Which rainforests are nearer The Equator - temperate or tropical?

Tropical.

4. Where in the rainforest is the canopy?

At the top.

5. What is it about the canopy that makes it easy for animals to jump from tree to tree?

The leaves and branches are <u>close together.</u>

- 6. It is very crowded and leafy in the canopy. How do some animals communicate because of his when they cannot see each other?
 Loud calls.
- 7. Why is the forest floor dark?

The canopy blocks light.

8. Name one way that the rainforests affect our life on Earth.

One from: weather/climate, produces oxygen, absorbs carbon dioxide, the water cycle.

9. In the Fact File in Numbers, why has the author emphasised the word 'only'.

To show how important the rainforests are. It also makes you wonder what we would do without them if there is a cancer cure there.

10. Read the last line...what is your opinion and why?

Open ended: discuss and include issues such as carbon dioxide/oxygen, medicines and cures for cancer and animals species.



Rainforests

What is a Rainforest?

Rainforests are huge forests that have a large amount of precipitation. They are found in all continents of the world apart from Antarctica (due to the temperature). There are two types of rainforest: tropical (in the tropical, warm zone near the Equator) and temperate (in the temperate zone further away from the Equator). Most rainforests are tropical, with tall trees, warm climates and lots of rain. It can rain one inch of rain per day in some! The largest rainforest is the Amazon Rainforest in South America.



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The Canopy

The rainforest trees are in such close proximity, that the branches and leaves at the top of the trees touch each other and form what is referred to as 'The Canopy', which acts a bit like a roof for the forest. The canopy can be approximately 30m above the ground. The canopy is hotter and drier during the day than other parts of the rainforest so animals that live there have adapted. Some have loud calls in order to communicate in the thick foliage and some are able to jump from tree to tree.

The Forest Floor

This is dark and humid because of the canopy, but still is a very important part of the ecosystem. The floor is where dead animals and plants decompose and all of the nutrients and materials are recycled. Also, the larger animals are found here including tapirs, elephants, tigers and jaguars.

Why are they so important?

Rainforests do a few things that are critical to our life on Earth. One important thing that rainforests do is they use photosynthesis to take in carbon dioxide and make oxygen which we need to breathe and survive. This is why they are called 'The Lungs of The Earth'.

They also help keep our weather system stable by absorbing carbon dioxide, creating rainfall and keeping temperature stable. They also affect the water cycle as they hold so much water which condenses into the atmosphere.

So, how can we manage without them?



1. Name the two types of rainforest.

2. In the fact file the author mentions 'fresh water', what is the difference between fresh water and sea water?

3. Near the end of the text, why does the author say rainforests are like the 'Lungs of the Earth'?

4. In 'The Canopy' section, what does the author mean by 'close proximity'?

5. A rainforest is an 'ecosystem'. What is an ecosystem?

6. It is very crowded and leafy in the canopy. How do some animals communicate because of this when they cannot see each other?

7. Why is the forest floor dark?

8. Name one way that the rainforests affect our life on Earth.

9. In the Fact File in Numbers, why has the author emphasised the word 'only'.

10. Read the last line...what is your opinion and why?



Answers

1. Name the two types of rainforest.

Temperate and tropical.

2. In the fact file the author mentions 'fresh water', what is the difference between fresh water and sea water?

Sea water has salt in it, fresh water does not.

3. Near the end of the text, why does the author say rainforests are like the 'Lungs of the Earth'?

They take in carbon dioxide and give out oxygen (the opposite to our lungs) OR they 'give' us oxygen to breathe.

4. In 'The Canopy' section, what does the author mean by 'close proximity'?

Near to each other.

5. A rainforest is an 'ecosystem'. What is an ecosystem?

A community where plants, animals and the environment all rely on each other.

6. It is very crowded and leafy in the canopy. How do some animals communicate because of this when they cannot see each other?

Loud calls.

7. Why is the forest floor dark?

The canopy blocks light.

8. Name one way that the rainforests affect our life on Earth.

One from: weather/climate, produces oxygen, absorbs carbon dioxide, the water cycle.

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