

Rainforest Photo Sort Information Gap

Emergent layer
(the tree tops)



Canopy

Investigating
Three Different Texts to
work out where the animals
and plants belong and how
they have adapted.



Mid layer
(under the canopy)



Forest Floor

Rainforest Photo Sort Information Gap

These activities form part of a group that can be used in a variety of ways and are very suitable for adaption to suit the children you are working with. The texts are quite dense and you might want to only use a few paragraphs. There is a notetaking grid to complete from the text. Once children have done this they will be equipped to sort the photographs. The sister activity is the same texts used with question sheets. There is also a Connect 4 game as a separate activity. There is also a grid you can use as an adult prompt sheet or cut up and/or get the children to reassemble it as a revision activity.

Like all information gaps you can either give different groups the same text to work on together and then jigsaw so that the new groups have all the texts, or you can give groups of three the different texts to start with. Developed with Rachel Owen, Ray Capper and the lovely Year 6 children at Camelot Primary School Southwark.

The webaddress for this activity is
<http://www.collaborativelearning.org/rainforestphotosortinfogap.pdf>

Last updated 25th July 2017

Collaborative Learning = Oracy in Context
makes challenging curriculum accessible.
improves social relations in the classroom.
provides scaffolding for exploratory talk.

Basic principles:

1. Build on prior knowledge.
2. Move from concrete to abstract.
3. Ensure everyone works with everyone else.
4. Extend social language into curriculum language.
5. Provide motivating ways to go over the same knowledge more than once.

COLLABORATIVE LEARNING PROJECT

Project Director: Stuart Scott

We support a network of teaching professionals to develop and disseminate accessible talk-for-learning activities in all subject areas and for all ages.

17, Barford Street, Islington, London N1 0QB UK Phone: 0044 (0)20 7226 8885

Website: <http://www.collaborativelearning.org>

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Good for all pupils!
Vital for EAL pupils!

Rainforests

Text A

Rainforests are found in Africa, South America, Australia, Malaysia and Indonesia. Rainforests are all similar with hot weather and daily rain. Many plants and animals living in the rainforest have adapted to this unique environment and could not survive anywhere else.

The trees grow very tall, and have dense leaves all year round. This means the forest floor is dark. Although the air is damp the soil is poor and quite dry. Plants have adapted to the low light levels. For example, Fittonia has red colouring on its green leaves to trap light. The lack of light means there are not many fruits and flowers low down, so many animals living on the floor are carnivores. These often have extremely good eyesight so they can spot food. The Banded Pitta is a bird with excellent eyesight.

Camouflage is essential both for predators and prey. Many insects look like leaves so that they cannot be seen easily. The Gabon Viper is a snake which looks just like a pile of leaves on the floor, while it waits to catch its prey.

In the mid layer at night it is very dark indeed, so the nocturnal animals have had to adapt. These animals often have enormous eyes so they can see in the dark. The only nocturnal monkey is the Night Monkey. Other animals have adapted to use other senses. The bats cannot see. They avoid the tree trunks using sound radar. The Lancehead Snake finds food by sensing warm blood with heat sensors between its eyes.

The forest floor is a difficult place to survive, so many plants and animals have adapted to live at the tops of trees instead.

Plants need light, but some cannot grow tall enough. Instead they hang from the canopy branches and their roots dangle and take water from the damp air, or they have tiny roots and grow in round cup shapes to trap water. All these plants are called epiphytes. They include beautiful orchids and bromeliads.

Rainforests

Alternative Text A

Rainforests are found in Africa, South America, Australia, Malaysia and Indonesia. Rainforests are all similar with hot weather and daily rain. Many plants and animals living in the rainforest have adapted. They could not survive anywhere else.

The trees grow very tall, and have leaves all year round. This means the forest floor is dark. Although the air is damp the soil is poor and quite dry. Plants have adapted to the low light levels. For example, Fittonia has red colouring on its green leaves to trap light. The lack of light means there are not many fruits and flowers down on the forest floor, Many animals living on the floor are carnivores. They often have extremely good eyesight so they can spot food. The Banded Pitta is a bird with excellent eyesight.



Camouflage is essential both for predators and prey. Many insects look like leaves so that they cannot be seen easily. The Gabon Viper is a snake which looks just like a pile of leaves on the floor, while it waits to catch its prey.

In the mid layer at night it is very dark indeed, so the nocturnal animals have had to adapt. These animals often have enormous eyes so they can see in the dark. The only nocturnal monkey is the Night Monkey. Other animals have adapted to use other senses. The bats flying around between the trees cannot see, and avoid the tree trunks through radar. The Lancehead Snake has heat sensors between its eyes to track down warm animals.

The forest floor is a difficult place to survive, so many plants and animals have adapted to live at the tops of trees instead.

Plants need light, but some cannot grow tall enough. Instead they hang from the canopy branches and their roots dangle and take water from the damp air. Some have tiny roots and grow in round cup shapes to trap water. All these plants are called epiphytes. They include beautiful orchids and bromeliads.

Rainforests

Text B

Rainforests are found on or near the Equator. This means there are no changing seasons, and all year round there are 12 hours of hot sunshine and 12 hours of night. Because of this the trees grow very tall, and have dense leaves all year round. The wood from these tall trees is very beautiful and very strong. If the timber is sold it can get a high price. The trees do not have many lower branches so the mid layer of the forest is full of long straight bare trunks. The leaves that can be seen come from creepers and climbers, which use the trees for support as they grow up to find the light.

The tree tops stand out from the main forest canopy and this emergent layer is 60 - 70 metres above the ground. The sun is very hot. The heavy rain makes the branches slippery and the trees sway in the strong winds. This is home to birds with strong talons and wide wing spans. These birds can fly long distances in search of food. Some birds are carnivores. For example, Harpy Eagles catch small monkeys for food.

The enormously tall trees growing in shallow soil have adapted by developing surface roots at the bottom. These roots stick out a long way and make a triangular shaped support, like the ones you see on old buildings, so they are called buttress roots. In the gloom trying to move amongst these roots and the trailing plants (lianas) is very difficult. The rainforests have been left undisturbed until recently, because it is difficult for people to move around.

Living 25-45 metres above the ground in the canopy presents many challenges. The animals living here have had to adapt in very special ways to take advantage of this unique environment. The huge supply of fruits, nuts and seeds, and the fact that there are not so many predators, make it worth the effort.

Rainforests are under threat from people. The huge trees provide valuable wood like mahogany, and in many areas trees are cut down to provide an income. As more people need homes, forests are being cleared to make room for new towns. Once they have been destroyed, these huge, fascinating and valuable environments will be lost for ever.

If you want to find out more visit :

'www.rainforestfoundationuk.org/kids'

'www.rainforest-alliance.org/kids'

'www.livingrainforest.org/kids/'

Rainforests

Alternative Text B

Rainforests are found on or near the Equator. This means there are no changing seasons. All year round there are 12 hours of hot sunshine and 12 hours of night. This means that the trees grow very tall, and have leaves all year round. The wood from these tall trees is very beautiful and very strong. If the timber is sold it can get a high price. The trees do not have many lower branches so the mid layer of the forest is full of long straight bare trunks. The leaves that can be seen come from creepers and climbers, which use the trees for support as they grow up to find the light.

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The tall trees grow in shallow soil. They have adapted by developing surface roots at the bottom. These roots stick out a long way and make a triangular shaped support so they are called buttress roots. In the gloom it is difficult to move amongst these roots and the trailing plants called lianas. The rainforests have been left undisturbed until recently, because it is difficult for people to move around.



Living 25-45 metres above the ground in the canopy presents many challenges. The animals living here have had to adapt in very special ways. The good news is that there is a huge supply of fruits, nuts and seeds. There are not many predators so it is a safe place to live.

Rainforests are under threat from people. The huge trees provide valuable wood like mahogany, and in many areas trees are being cut down. As more people need homes, forests are being cleared to make room for new towns. Once they have been destroyed, these huge, fascinating and valuable environments will be lost for ever.

Rainforests

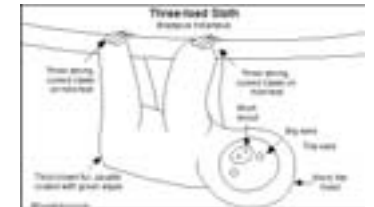
Text C

Rainforests are in low lying areas near to the equator. Some forests extend higher up the hill sides and are called cloud forests. The true rain forests are sometimes called jungles. When you think of a jungle you think of many plants growing around and into each other. The giant leafy trees absorb some of the carbon dioxide which we produce when we drive cars, fly in planes, or use electricity.

Many species of plants living in the rainforest cannot grow anywhere else, and many plants contain useful chemicals which we use as medicines. The hot wet climate is also good for growing plants that can raise a lot of money. If the trees are cut down coffee and cocoa can be grown. Some coffee and cocoa companies try to make sure that they do not harm the rainforest - if you look on the labels you will sometimes see "Rainforest Alliance" or other information about how the crops are grown.

The trees are so tall that going up and down to the floor would use huge amounts of energy. Instead many animals have adapted with ways of moving from tree to tree in the canopy without ever needing to go down to the floor. Gibbons have flexible shoulders, long arms and a very good grip so they can swing from tree to tree. Flying snakes can flatten out their ribs to enable them to glide short distances. It is not easy for birds because of all the trees and branches; Macaws have short wings to enable them to fly amongst the dense foliage.

Below the canopy the air is damp, and little light gets through. For those who cannot swing or fly, the tall straight trunks are the pathways from top to bottom. These animals have adapted to climb easily. The tree frogs have sticky pads on their feet to give them a good grip. Silky Anteaters have long curly tails which wrap around the trunks and keep them safe while they sleep on the tree trunks. The Three Toed Sloth has long claws and can sleep hanging from a branch. They also move slowly to save energy and so they do not have to find much food.



In the dark of the mid-layer the animals are often brightly coloured. They are also very noisy as they call to each other. Howler Monkeys are one of the noisiest creatures in the rain forest. This is not a place to visit for a quiet rest.

Alternative Text C

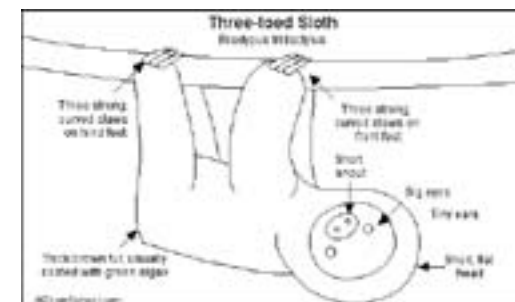
Rainforests or jungles are near to the equator in low lying areas. When you think of a jungle you think of many plants growing around and into each other. The giant leafy trees use some of the carbon dioxide which we produce when we drive cars or fly in planes.

Many plants living in the rainforest cannot grow anywhere else. These plants contain useful chemicals which we use as medicines. The hot wet climate is also good for growing plants like coffee and cocoa can be grown but the big trees have to be cut down. Some coffee and cocoa companies try to make sure that they do not harm the rainforest.

The trees are so tall that going up and down from the top to bottom would use huge amounts of energy. Instead many animals have adapted with ways of moving from tree to tree in the canopy without ever needing to go down to the forest floor. Gibbons have flexible shoulders, long arms and a very good grip so they can swing from tree to tree. Flying snakes can flatten out their ribs to enable them to glide short distances. It is not easy for birds because of all the trees and branches; Macaws have short wings to enable them to fly amongst the dense foliage. Toucans don't fly at all but they hop.

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Rainforest Grid - write notes from the text you have read then compare notes with the rest of your group.

Layer	conditions	animals	plants	adaptations
emergent layer tree tops				
canopy				
mid layer				
forest floor				

Emergent layer (the tree tops)	Canopy	Mid layer (under the canopy)	Forest Floor

Fold the labels in half and with a partner sort the photographs to match.

Emergent layer (the tree tops)	Canopy	Mid layer (under the canopy)	Forest Floor

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Macaw



Sugar glider



night monkey



Sloth



Silky Anteater



Poison Frog



Lancehead snake



Bromeliad (Epiphyte)



Gibbon



Harpy Eagle



Fittonia



Hoatzin Bird



Gabon viper



Flying frog



Banded Pitta



Tarsier



Buttress roots



Liana

Layer	conditions	animals	plants	adaptations
emergent layer tree tops	60 - 70 metres above the ground Hot and sunny Windy	Eagles, large birds Harpy Eagle Monkeys	The tops of the forest trees	Huge wing span Sharp talons
canopy	25- 45 metres above the ground Thick green leaves Branches full of plants Wet Dark	Macaws Gibbons Flying Frogs Flyng snakes Monkeys	The main leaf covered branches of the forest trees. Epiphytes including orchids	Short wingspan A ribcage that flattens to enable flight Flexible shoulders and long arms and good grip
mid layer	Underneath the main canopy Straight tree trunks, lots of creepers Very dark - especially at night	Silky Anteaters Bats Sloths Tree frogs	The trunks of the forest trees Epiphytes including Bromeliads Lianas (creepers)	Sticky pads on feet Strong claws Huge eyes Radar Fast growing to get to light Slow moving to save energy
forest floor	Ground level. Very dark especially at night Damp air Poor soil Huge tree roots	Banded Pitta Bird Gabon Viper Lancehead Snake	The roots of the forest trees Fittonia	Good eyesight. Good camouflage Huge triangular roots Red colouring on leaves Heat sensors to sense prey