



RAINFOREST TOPIC: GEOGRAPHY

tropical debate

Arthur Kelly delves into the rainforest and discovers huge potential for developing children's geography skills...



As a theme, rainforests provide an excellent opportunity to develop pupils' geographical thinking. Children can investigate where they are situated, what they are like, why they are like that, how they compare to where they live, how they are changing, what the causes of those changes are, and the possible consequences.

Tropical forests are an example

of a biome, a broad grouping of flora and fauna, which straddles the equator and extends across regions and continents. Within the biome there are different habitats: local adaptations to environmental conditions. Tropical forests only cover a small part of the Earth's surface (about 7%) but scientists estimate that over half the world's wildlife lives within them and there is still plenty more to be discovered. It is this diversity of life and its uniqueness that will fire pupils' learning.



At the outset, it would be good to do a KWL exercise on Rainforests – Ask them what they think they Know, what they Would like to learn and, at the end of the topic, what they have Learned.

USEFUL WEBSITES

- www.blueplanetbiomes.org
- www.ran.org/new/kidscorner/home
- www.rainforestlive.org.uk
- www.livingrainforest.org/for/kids

1. Where in the world are rainforests?

Introduce the class to a map of the world showing where rainforests are located. Hold a discussion with the class: are rainforests near to the equator or far from it? Do we have rainforests in our country? Has anyone read stories/information books about rainforests or seen TV programmes/films? How far away are rainforests? How could we get there?

TASK 1

Using their atlas or an outline map of the world, pupils should plot the locations of the world's rainforests. What continents have rainforests on them, and can they find at least one country in each continent that has rainforest within its borders? This should lead to the discovery that rainforest location is related to equatorial climate.

TASK 2

The climate of tropical forests is quite

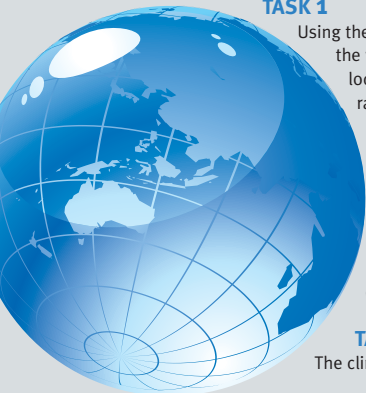
constant, characterised by heat, humidity and heavy rain – some areas get over 4000mm per year! This provides perfect conditions for the dense forests to grow. Provide pupils with climate data for both a rainforest locality and where they live. Ask them to allocate these statements and come up with some of their own:

- This place is warmer and wetter
- This place is cooler and drier
- This place has cooler winters
- Temperature here is quite constant

www.metoffice.gov.uk/education/data/climate/tropical/index.html gives climate data for locations in tropical regions

Literacy link

Jill Tomlinson's children's novel *The Gorilla Who Wanted to Grow Up* (Egmont, 2004) provides detailed descriptions of the lives and habitats of Western, silverback gorillas.





2. Human impact

Even though the rainforest is one of the most unique ecosystems on our planet, the human impact on these areas has been mixed and overall can be regarded as negative – many species of plants and animals in rainforests are endangered. These issues are complex and pupils should be encouraged to think about the complexity rather than seeing things in 'black and white' terms. Encouraging them to consider why some of the negative actions have occurred may help them frame possible solutions.

TASK 1

Ask pupils to consider if they feel the statements (all of which are documented fact) below are true, and then sort them into those which depict a positive human impact on rainforests and those which are negative. (Additional categories could be 'Could be either' or 'Not sure'.)

- People set up 'orphanages' for baby gorillas and orang-utans separated from their parents.
- Rainforest is cut down to create space to build houses.
- Hunters kill apes and sell them as 'bushmeat'.
- Scientists explore to find new species of plants and animals.
- Areas of forest cut down to grow crops or raise cattle.
- Loggers cut down trees to sell at home and abroad.
- In some places rangers try to stop people poaching.
- Trees are cut down to build roads.
- People separate young orang-utans from their mothers to sell as pets.
- Doctors use rainforest plants to develop new medicines.

Taking it further

Pick out one of the statements pupils felt was a negative impact. Ask them to try and research why people do this and what the possible solutions could be. For more information on go to: <http://gowild.wwf.org.uk/gowild>

Visit www.wwf.org.uk to find out how your class could become involved by sponsoring an endangered species

3. It's a jungle out there!

Although tropical forests are a distinct biome with particular features, there is huge diversity both within small areas and regionally/continentally. Helping children to understand this is an important part of teaching them about the geography of rainforests.

Rainforests have distinct layers, which have different names and are the habitats of different species of plants and animals. Children may have the idea that 'jungle animals' such as silver backed gorillas, orang-utans and piranhas live side by side, but the reality is that they live thousands of miles apart.

TASK 1

This exercise will help pupils understand the different 'zones' within a rainforest. Provide pupils with a copy of Table 1. They should then use secondary sources to match the descriptions (right) to the appropriate layer. (A picture of tropical forest layers can be found at using the search term 'Rainforest layers' in Google images.)

TASK 2

This is designed to help pupils understand that different rainforest layers are home to different animal species. It will also introduce them to the variety of life in a tropical forest. Provide pupils with the list of animals suggested below and, using their secondary sources, match them to the right rainforest layer (Table 1 can be used for this).

- Jaguar • Green Iguana • Leaf Cutter Ants • Silverback Gorilla • Amazon Manatee • Macaw • Colobus monkey • Lar Gibbon • Western Pygmy Chameleon • Anaconda • Crocodile • White Lipped Tree Frog • Red Piranha • Three Toed Sloth • Tree Kangaroo • Golden Tree Boa • Green tree Python • Common Marmoset • Capybara • Giant Armadillo

TABLE 1

Tropical Forest Layer	Description
Emergent Layer	
Canopy	
Understorey	
Forest Floor	
Streams/Rivers	

Rainforest descriptions

- The easiest way for people to travel through the rainforest.
- Made up of the thick branches and leaves of taller trees. A gentle breeze can keep you cool.
- Dark, hot and humid with a soft carpet of dead leaves.
- The highest layer, above the canopy, the very tops of the tallest trees. Can be very windy.
- Leafy bushes and tops of the smaller trees make up this layer. Hot and dark.

TASK 3

Ask the pupils to use their atlas to help them plot where the animals (listed to the left) live on an outline world map. Do they all live in the same place?

