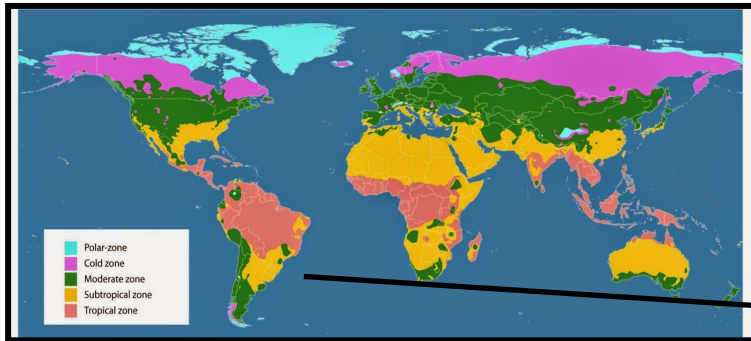


Year 5 Spring Term Knowledge Organiser

KEY QUESTION: What is the human impact on the Rainforests?

Rainforest Vocabulary

Continent	sunlight	flora	predator	Deforestation
equator	photosynthesis	fauna	prey	nutrients
tropic	Emergent layer	Nocturnal	Carbon dioxide	Palm oil
temperate	Canopy layer	camouflage	oxygen	cattle
climate	Understory layer	mimicry	transpiration	endangered
rainfall	Forest Floor layer	ecosystem	recycled	extinction
temperature	habitat	shade	Global warming	medicines



Climate

Because South America is such a huge continent, the climate can vary dramatically. While most areas are tropical, in higher areas the temperature can drop well below freezing.

Most areas receive plenty of rain. However in some regions, very little rain falls. In fact, Arica (in Chile) is the driest city on the planet getting less than 1mm of rain per year.

The Countries of South America



Amazon Rainforest Timeline

Before 1500– Deforestation is a feature of Amazonian life long before Europeans arrive around 1500. Indigenous peoples maintained extensive areas of agriculture, and cleared areas for living.

1880– The invention of the rubber tyre starts the 'Amazon Rubber Boom.'

1900 – Rapid clearing in begins in Brazil. Whole state of Parana cleared in 30 years.

1970 – Huge clearing for the Transamazon Highway.

Early 2000s– Amazon loses 4.3 million hectares per year.

Present Day – 289,000 sq. miles of Amazon lost. 100 years predicted no rainforest left.

This map shows the different biome regions across South America. The positions of the main physical features are also shown.



These are the main physical features located in South America.

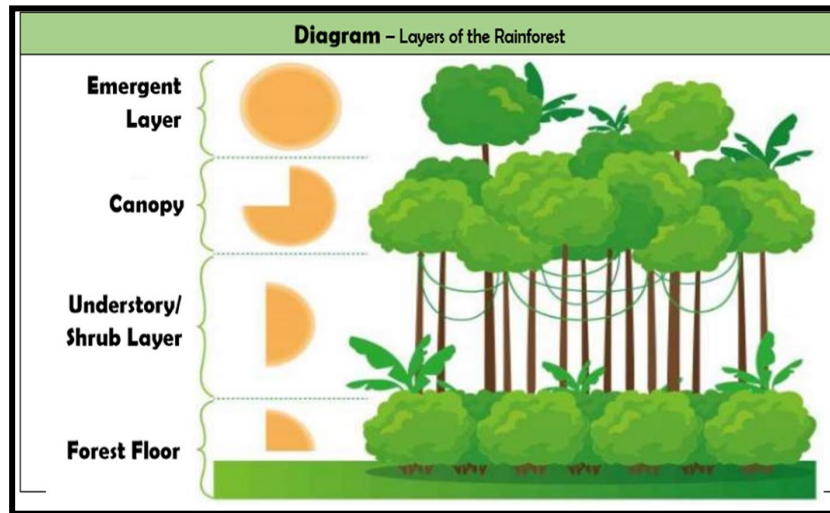
Rainforests are extremely important. They give us oxygen, absorb carbon dioxide and are home to over 50% of the animal and plant species on the planet. Many medicines are made from the plants that grow there.

Deforestation

Unfortunately, the rainforests are being destroyed. This is happening so fast that an area the size of one football pitches being destroyed every minute. At this rate, it will take less than 100 years to destroy all the rainforests on Earth. Animals and plants will become extinct and the affect on our climate will be devastating.



WE MUST ACT TO STOP THIS NOW!



The Amazon Rainforest

- Rainforests are warm and wet areas.
- The Amazon Rainforest is the largest tropical rainforest in the world with more than half located in Brazil. It is full of wildlife.
- Tribes of people still live in some areas of the rainforest with no contact with the outside world.
- 20% of the world's bird species live here, such as toucans, hummingbirds and the hoatzin.

Emergent Layer



The emergent layer is the name given to the very tops of trees that grow above the canopy level. There is lots of sunshine and rainfall here, and only the strongest and tallest plants grow to this height. Anything above 45 metres (150 feet) are emergent, however some trees can grow to a massive 70 metres (230 feet)! Only some birds, bats, butterflies and small monkeys live here.

Canopy



The canopy is a dense layer of vegetation at around 30-45 metres (100-150 feet). It is sometimes called the 'ceiling' of the rainforest, as it blocks a great deal of sunlight with its thick, overlapping leaves. As a result, the layers below the canopy level are often quite shaded. Lots of animals: e.g. insects, bats, birds and monkeys can be found in the canopy layer.

Understory/ Shrub Layer



The understory level is a muddle of intertwining shrubs, young trees, vines, saplings, and palms. It is very hot and damp here, and the air very still. Compared to the canopy, plants here receive little sunlight. This lack of light limits the growth of plants, and so they must have special adaptations in order to survive here. For example, leaves on plants here tend to be much broader. Snakes, lizards and sloths are examples of animals living here.

Forest Floor



The forest floor is exceptionally hot and humid, due to the constant shade from the levels above. Despite this, the forest floor remains an important part of the rainforest's eco-system. The forest floor is where decomposition takes place – dead plants and animals are broken down and their nutrients recycled. Most of the largest animals of the rainforest live here, for example elephants, tigers, the tapir and the jaguar.

Activities to complete at home



1. Create a rainforest in a shoebox: Choose different materials to make different plant and animal features of the rainforest.
2. Imagine you an explorer. Write a diary or create a blog to describe your experiences as you travel through the rainforest.
3. Get creative!! Draw, paint or make a model of animals that live in the rainforest.
4. Bake your own rainforest themed biscuits. They could be tree, flower or animal shaped. Write your recipe for someone to follow!
5. Choose a country in South America and create a fact-file. *You could include info about its capital city, flag, currency, landmarks as well as describing the climate and famous people who have come from the country.*

