

Location & place knowledge



Can I locate, describe and compare the population of areas in North America?

Task 1:

- Sparsely populated areas contain a few people, including Nevada.
- Densely populated areas contain many people, including New York and New Jersey.

Key:

- Sparsely populated
- Densely populated

*Why may this be?

Most of the densely populated areas (except Illinois) are all near coastal areas. Sparsely populated areas are either small or cold or countries further away from the equator but closer to Canada.

Task 2:

Population distribution began forming the borders of the USA. In 1848, James Marshall found gold in California, causing many people to settle there.

There are 4 key elements to our geography curriculum. These core concepts underpin all our learning.

A Snapshot of Geography at OLOTR

Physical features & processes

Can I describe water cycle.

Let's begin... Molly Q. lives in the sea, surrounded by her family and friends. In fact, she has over one billion of them.

Then all of a sudden Molly felt all heavy and a pinching feeling came over her. She started falling through the sky, towards the River Severn.

And with an almighty plop, Molly Q and her friends landed back into the water, one by one. ...the end.

It was an ordinary day, Molly Q was floating around with two friends, when she started to feel a bit hot.

She suddenly had so much more energy she began to float, all the way to the top of the sea where she met three seagulls.

But to her dismay, she continued to float, high, high up into the sky. So high, she could count four aeroplanes.

She was just starting to panic, when one, two, three, four... five of her friends joined her, high up in the sky.

Molly Q started to feel really cold. So the six of them huddled together for warmth.



Geographical techniques

Can I explain the climate of countries based on their global location?

Task 1:

A biome is a large piece of land, which has its own ecology and climate. There are 100 variations of biomes, including tundra, steppe and taiga. Longitude and latitude influence the weather in between the equator and the poles, from East to West and North to South. There are 3 types of maps: physical, political and topographical. Use imaginary grid divide the globe and map showing the different latitudes and angular position.

Month	Rainfall (mm)	Temperature (°C)
Jan	100	4
Feb	80	5
Mar	80	7
Apr	80	9
May	80	11
Jun	80	13
Jul	80	15
Aug	85	16
Sep	80	14
Oct	80	11
Nov	80	8
Dec	80	5

Plot the missing data

	Rainfall	Temperature
April	75mm	10°C
August	85mm	17°C



Human interaction with the environment

Friday, 5th November 2021

Assessment Task - Can I identify the social, economic and environmental impacts of a flood and highlight what might be done in response to a flood?

FLASH FLOOD IN HEBBURN

- Location - Hebburn
- River - Tyne
- Date - Thursday 4th November

Yesterday, many people were shocked by the sight of the River Tyne bursting its banks. The water cascaded into the town of Hebburn, covering streets, leaking into homes and overall causing mass chaos.

Hebburn, (sadly) is situated just by the Tyne, which is made by two tributaries. The main problem in the disaster, they couldn't do the water and burst. And the ground it absorbs any more of the water, so it seeps in the liquid with girls men were sitting around them. It was the wettest since records began.

Alisha Rodriguez explained: "I was just driving as the rain was battering my car as the river just burst out!" "My car skidded, I ran as fast as I could."

Recovery will not be completed until further notice. Now, people cannot get work so not only does the flood affect individuals, but the wider community well.

It is hoped that the council will put up flood defences and manage to clear up quickly so the evacuated can move back to their homes.



What does the word 'climate' mean?

Sequence of learning

Big Question:
What and where are biomes?

What do we mean by 'ecosystem'?

Sequential components of learning	Climate and the Equator (locational knowledge)	Tropical Rainforests: <i>South America</i>	Temperate Deciduous Forests: <i>UK</i>	Human use of the rainforest: <i>Goods and services</i> (deforestation)	Human use of the rainforest: <i>Who killed Chico Mendes?</i>	Taking action: <i>Sustainable management</i>	Assessment task: <i>News report</i>
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Year 6: Biomes

Prior learning

I have studied geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

I have used world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage

I have located the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities

I have identified the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones

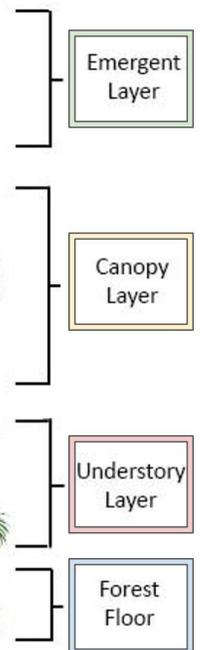
I have identified seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles

What have we already studied that will help us with this topic?

I can describe aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

I can describe aspects of physical geography, including: climate zones and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle

Tropical Rainforest:



Big Question: What and where are biomes?

Sequence of learning

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Can I explain the climates of countries based on their global location?

Task 1

A biome is a large piece of land which has its own ecosystem and climate. There are ten different variations of biomes including tundra, mixed and deciduous forest and Mediterranean vegetation. Longitude and latitude measure the North-South position of land around from North to South, East to West. These lines divide (and the Equator) our imaginary and divide the globe and maps into different locations around and over the world.

Plot the missing data

	Rainfall	Temperature
April	13mm	10°C
August	85mm	17°C

Task:
Using your knowledge of biomes and the climate graphs, explain the climate in what it is in the United Kingdom and Brazil, based on their global location.

Use the vocabulary table to support you with your answers.

Useful Vocabulary...	UK	Brazil	North	South
equator	position	sun	located	latitude
seasons		rainfall		temperature

The UK is very located far from the Equator and has a large position on the latitude lines, and is North. Since UK is North, it has less rainfall and is further away the temperature is very cold in the winter because it is away from the Equator. Brazil is South and has a lot of sun in the hotter seasons; that the weather is really hot. Brazil is closer to the Equator than the UK, so it gets warmer because the sun shines on the Equator line. Brazil is located inside the Equator. Since that both Brazil and the UK are placed differently on the world, and the Equator sits differently on the climate, position relies on the placement of the sky.

Describe the position of the sun in each of the sky.

Great explanation of climates.

Can I explore how flora and fauna have adapted to life in the tropical rainforests?

Task 1

Identify which fact matches which layer of the rainforest.

Emergent Layer	Has the most sunlight	Only 2% of the sunlight actually reaches this layer	80% of sunlight, which leaves little sunlight for the plants and trees below	Cool, dark and damp
Canopy Layer	Large animals roam in this layer e.g. jaguars	Home to a large amount of plant species e.g. palms, ferns and the cacao tree	Home to eagles, bats and butterflies	Home to nearly 90% of all rainforest life is found here
Understorey Layer	Forest litter and fungi	Young trees, competing for sunlight, grow to 30-40m tall	Small trees around 10m tall but plants have large leaves and drip lip leaves	Trees that grow almost 80m tall and can cope with high winds and rainfall

Task 2 ■ Make more precise vocabulary choices.

Buttress roots have adapted to living in the rainforest by developing their roots, so they have on the surface the rainforest doesn't have a deep amount of soil underneath the surface, so they lay attach to the surface. The rainforests nutrients are near the surface on the forest floor, so the buttress roots can easily gather the food. The roots are wide and the biggest roots face where the wind hits, so the tall tree doesn't fall over. The drip lip leaves thrive in the rainforest because because they have made adaptations such as the conical shape, so when it rains, the leaf can absorb water and the drip lip water drips down the central canal so it doesn't drain. The

slits then drip off the end of the plant and drops fall to the end of the tip. If an animal is smart, they may open their mouths and drink the water from the plant.

② hormleon

Claws - this helps it to grip onto branches and vines

prehensile tail - it helps it to coil around branches, which helps with grip and also balances the hormleon.

Slow moving - the Chameleon walks so slowly on branches, so it gets mistaken by a leaf. It is camouflaged so predators don't kill it.

hormleons adapted to live in the rainforest Understorey of the rainforest because it's not too hot and there's lots of bugs down near the floor that they can eat.

Sloth

Claws that resembles meat hooks, which helps them to grip onto the trees.

Sloths live in the Canopy layer of the rainforest, as they spend most of their lives in the trees.

Sloths always hang upside down on branches, their parts on their stomach instead of its head and back.

Sloths live in the canopy, so they can't move fast and don't have the ability to run from jaguars; so if they need on the Understorey Forest floor, they would have been eaten.

Great explanations of flora and fauna adaptations.

Big Question: What and where are biomes?

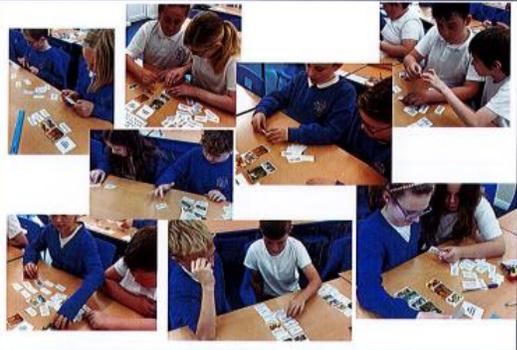
Sequence of learning

Sequential components of learning	Climate and the Equator (locational knowledge)	Tropical Rainforests: <i>South America</i>	Temperate Deciduous Forests: <i>UK</i>	Human use of the rainforest: <i>Goods and services</i> (deforestation)	Human use of the rainforest: <i>Who killed Chico Mendes?</i>	Taking action: <i>Sustainable management</i>	Assessment task: <i>News report</i>
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Monday, 4th October, 2021

Can I explain how the UK is different to Brazil, and its tropical rainforests?

Using information from a range of sources, the children worked in pairs to sort multiple facts into two groups - Temperate Deciduous Forest or Tropical Rainforest. They then provided reasons for their answers in order to explain how the UK's biome was different to that of Brazil.



Reflection Questions:

- Which fact surprised you the most?
There's no seasons in the rainforest.
- In your opinion, what is the most important difference between the biomes of the UK and Brazil and why?
The temperature, because if there wasn't a temperature difference, most animals wouldn't be able to survive in their ecosystem and environment. It would be too hot for animals in the UK, but too cold for Brazilian animals. They wouldn't be able to adapt quick enough.

Excellent explanation here, Anna!

Can I explain how humans use the rainforest?

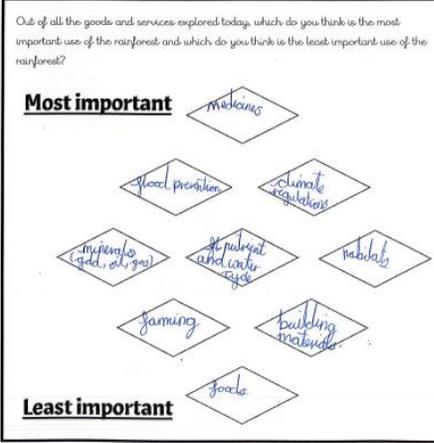
Task 1

Circle G if it is goods we receive from the rainforest or S if it is a service (job) the rainforest provides.

Medicines	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S	Building Materials	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S	Nutrient & Water Cycle	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S
Climate Regulation	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S	Habitats	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S	Minerals (gold, oil, gas)	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S
Flood Prevention	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S	Farming	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S	Foods	<input checked="" type="checkbox"/> G <input checked="" type="checkbox"/> S

Task 2

Out of all the goods and services explored today, which do you think is the most important use of the rainforest and which do you think is the least important use of the rainforest?



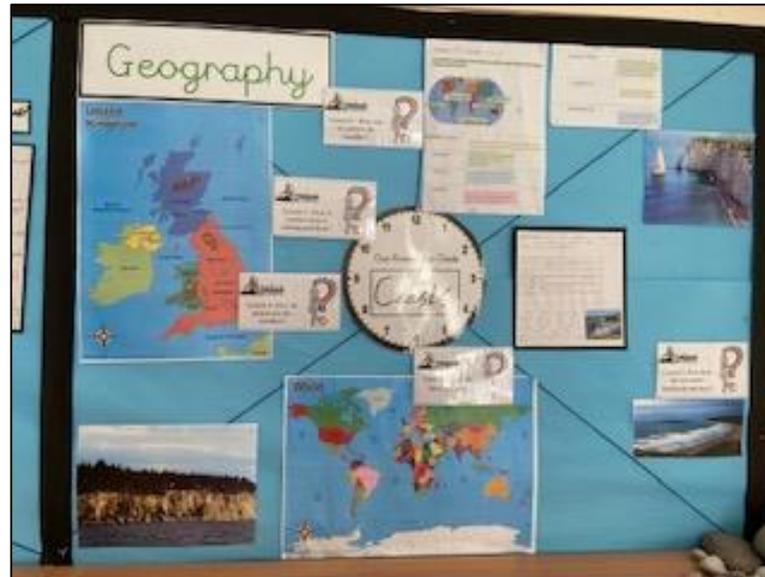
In my opinion, the most important use of the rainforest is medicine, because if we didn't have the medicine, the population will be extinct, as the disease will spread like wildfire and there's no cure to the diseases, then it would keep spreading and spread until we all catch it. There would be no end to it.

In my opinion, the least important use of the rainforest is meat food, because foods grow elsewhere in the world that we can eat. It would be healthier to not eat food from the rainforest, as cocoa beans make chocolate and coffee, so that are unhealthy and addicting for human bodies.

Good explanations of human uses!
How do humans affect rainforest habitats?
They effect it badly, for resources and take it for granted. Most habitats are destroyed for wood which...



Our learning journey is reinforced through knowledge clocks on display and in books



We celebrate children's work



Children can refer to previous learning

