

Oak Class Geography Outcomes - Rainforests

Key Vocabulary

Climate - The average weather conditions over a long period of time.

Deforestation - The cutting down and clearing of forests.

Equator - An imaginary circle running round the centre of the earth.

Humid - Feeling very damp due to water vapour in the air.

Native tribes - The original settlers of an area.

Species - A group of similar animals or plants.

Weather - The specific condition on a given day.

Evergreen - trees that stay green all year.

Growing season - period that trees grow.

Carbon dioxide - gas absorbed by trees.

Oxygen - gas released by trees.

Deforestation

Trees are cut down:

- to create fields for farming cattle and growing crops,
- to produce timber and wood pulp to make furniture and paper,
- to create space for housing.

Positive Impacts

- Jobs are created in logging and transporting timber and manufacturing products.
- Selling land raises money for local people.

Negative Impacts

- People's homes are destroyed.
- Animals and plants may become extinct through habitat loss.
- Plants that may have been useful could be lost.

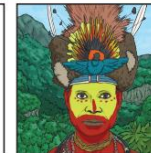


The Amazon Rainforest

- 5.5 million square km (previously covered a much larger area)
- Parts in Brazil, Peru, Colombia, Venezuela, Ecuador, Bolivia, Guyana, Suriname and French Guiana
- 2.5 million insect species
- 40 000+ plant species
- 3 000 edible fruits
- 2 000+ species of birds and mammals



- 2 million tourists per year
- 170 different languages spoken
- 250 000 native tribes currently live there











Physical Characteristics of a Tropical Rainforest

Climate	Water	Soils	Plants	Animals
<ul style="list-style-type: none"> • hot (20-28°C) • Sun is overhead all year round so there is no seasonal variation. • wet (2000mm per year) • Convectional rainfall every day. 	<ul style="list-style-type: none"> • The roots of plants take up water from the ground. • Rain is intercepted as it falls - much of it at the canopy level, this will evaporate as it heats up to form convectional rainfall. 	<ul style="list-style-type: none"> • Rain washes away nutrients from soil. • Soil is not very fertile. • Humus layer of rotting leaf-fall is very thin (heat speeds up decomposition). 	<ul style="list-style-type: none"> • Most trees are evergreen. • Continual growing season. • Five layers: forest floor, shrub layer, under-canopy, canopy (30m) and emergent. • Epiphytes (plants that feed off other plants and take moisture from the air) e.g. ferns. • Absorb CO2 and release oxygen. 	<ul style="list-style-type: none"> • Many species of animals live in the tropical rainforest. • Food is plentiful and grows all year. • Hundreds of different types of monkeys, snakes and birds. • Thousands of insect species live in the tropical rainforest.

Global Distribution of Tropical Rainforests

- Most of the world's tropical rainforests lie between the Tropic of Cancer and the Tropic of Capricorn.
- Tropical rainforests are found on either side of the equator in South America, Central Africa, South East Asia and Northern Australia.
- The world's largest tropical rainforest (the Amazon) is found in South America.



Emergent Layer	Canopy Layer	Understorey Layer	Forest Floor
			
Trees can be up to 60m tall	Trees form a roof over the plants below	Trees grow to less than 4m tall	Very few plants
Lots of sunlight	Lots of sunlight but also plenty of rain	Very little sunlight	Almost no sunlight
Cold and windy	Lots of food for animals	Warm and humid	Leaves and debris decompose quickly
Birds, bats, monkeys and butterflies	Snakes, toucans and tree frogs	Lots of insects	Gorillas, anteaters, leopards and tigers
			



Oak Class Geography Outcomes - Rainforests

Year 3

Can I locate and name the continents on a World Map?

Can I locate geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use patterns, and understand how some of these aspects have changed over time?

Can I name and locate some countries of South America?

Can I compare geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use?

Can I identify the main physical and human characteristics of Brazil?

Can I describe geographical similarities and differences between a region in the United Kingdom and one in Brazil?

Can I ask and answer geographical questions about the physical and human characteristics of a location?

Can I compare key aspects of physical geography, including rivers, mountains, volcanoes and earthquakes of an area in the United Kingdom and an area in Brazil?

Can I describe some key aspects of human geography including settlements and land use of an area in the United Kingdom and an area in Brazil?

Can I use maps, atlases, globes and digital/computer mapping (Google Earth) to locate countries and describe features studied? Can I use locational and directional language such as: near, far, left, right to describe the location of features on a map?

Can I use a wider range of resources to identify the key physical and human features of a location?

Can I use the eight points of a compass, symbols and keys to communicate knowledge of the United Kingdom and the wider world?

Can I create maps of locations identifying some features using a key?

Year 4

Can I locate, name and describe the position of South America on a World Map, using the eight points of a compass, symbols and keys to communicate knowledge of the wider world?

Can I locate geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use patterns, and understand how some of these aspects have changed over time?

Can I describe some of the features of the following areas: the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circles and date and time zones?

Can I compare geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use? Can I describe geographical similarities and differences between countries?

Can I identify the main physical and human characteristics of Brazil?

Can I describe geographical similarities and differences between a region in the United Kingdom and one in Brazil?

Can I ask and answer geographical questions about the physical and human characteristics of a location?

Can I compare key aspects of physical geography, including rivers, mountains, volcanoes and earthquakes of an area in the United Kingdom and an area in Brazil?

Can I describe some key aspects of human geography including settlements and land use of an area in the United Kingdom and an area in Brazil?

Can I use maps, atlases, globes and digital/computer mapping (Google Earth) to locate countries and describe features studied? Can I use locational and directional language such as: near, far, left, right to describe the location of features on a map?

Can I use a wider range of resources to identify the key physical and human features of a location?

Can I create maps of locations identifying some features using a key?



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Year 5

Can I name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time? In particular, can I name and locate the countries of South and Central America?

Can I identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)?

Can I understand some of the reasons for geographical similarities and differences between countries?
Can I explain how locations around the world are changing and explain some of the reasons for change?

Am I beginning to understand and explain geographical diversity across the world?

Am I beginning to collect and analyse statistics and other information in order to draw clear conclusions about locations?

Can I identify and describe the main human and physical characteristics of South and Central America? Am I beginning to identify and describe how these physical features affect the human activity within a location?

Am I beginning to understand and explain how countries and geographical regions are interconnected and interdependent?

Can I describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle? Can I also describe and understand key 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?

Can I use a few geographical resources to give descriptions and opinions of the characteristic features of a location?

Can I use the eight points of a compass, symbols and keys to build my knowledge of the United Kingdom and the wider world?

Can I create maps of locations, identifying patterns such as: land use, climate zones, population densities and height of land?

Year 6

Can I locate the world's countries, using maps to focus on South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities?

Can I name and locate counties and cities in South America and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time?

Can I identify 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 (including day and night)?

Can I understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region within South America?

Can I describe and understand key aspects of:

physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle?

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?

Can I use maps to locate areas studied?

Can I use 8 compass points and symbols and keys to describe locations?

Can I draw and label maps accurately?