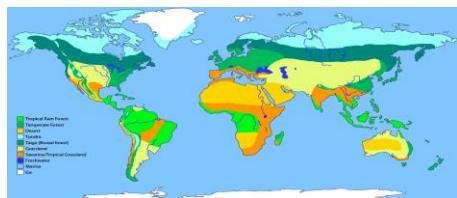## EARTH'S BIOMES

A biome is a **large geographical area of distinctive plant and animal groups**, which are adapted to that particular environment

Key words
Biotic = A living organism (part of the ecosystem)
Abiotic = A non-living part of the ecosystem.
Biodiversity = A large variety of different plant and animal species

SOUTH AMERICA

S. America has **12 countries** and 2 dependencies. It has the Atlantic Ocean to the east and Pacific Ocean to the West.

The largest biome in South America is **Tropical Rainforest.** This is due to the climate being mainly warm (25 degrees Celsius +) and wet (>1500mm rain)

AMAZON RAINFOREST DEFORESTATION

CAUSES

Logging	Population Growth
• Most widely reported cause of destructions to biodiversity. • Timber is harvested to create commercial items such as furniture and paper.	• Brazilin government offer money to poor residents of overcrowded cities to move to the rainforest. • Land is cleared for use as farmland.
Farming	**Road Building**
• Land used for commercial cattle farming. • Land used for commercial palm oil plantations. • Large scale 'slash and burn' of land for cattle and palm oil. • Increases carbon emission.	• Roads are needed to bring supplies and provide access to new mining areas, settlements and energy projects. • In Brazil, logging companies use an extensive network of roads for heavy machinery and to transport wood.

EFFECTS

Economic benefits	Environmental problems
- Brazil **economy** is being **improved** by the trading of hardwood, tropical fruits and expensive minerals. - Deforestation is **creating jobs** in an area which has problems with unemployment.	- The Amazon Rainforest is the **world's largest carbon sink**. - Loss of biodiversity and **risk of extinction** to some species. - Will contribute to **climate change** and extreme weather events.

SOLUTIONS

Managing the rainforest

- **Ecotourism** – creates jobs without large scale deforestation
- **Agroforestry** – Small scale farming which works with the rainforest
- **Selective logging** – ensures that only certain trees are chopped down – not all
- **Forest reserve** – creates a designated area that is protected by the government

MATHS SKILLS

WRTIING ABOUT DATA:

Positive correlation
An increase in one set of data leads to an increase in another set of data. *E.g. There is a positive correlation between an increase in GDP and the number of doctors per person.*

Negative correlation
An increase in one set of data leads to a decrease in another set of data. E.g. There is a negative correlation between an increase in GDP and infant mortality.

CALCULATE:
MEAN (average)
Add up all the values, then divide by how many values there are

RANGE
Take the smallest value away from the largest value

MODE
Find the value that appears the most

MEDIAN
Order the values from smallest to largest, then find the value that is in the middle of the list

ENGLISH SKILLS

Connectives	Opinion phrases	Geographical key words
therefore	in my opinion	social
moreover	in conclusion	economic
nevertheless	conclusively	environmental
on the other hand	overall	political
because	clearly	local
this means that	to a large extent	global
this suggests	to a small extent	national
whereas	arguably	international
however	undoubtedly	north/south/east/west
likewise	the evidence suggests	impact/effect
nonetheless	in summary	response
seemingly	ultimately	immediate
despite this	finally	long-term
so	for this reason	sustainable

CATHOLIC SOCIAL TEACHINGS

In this topic, we will learn about how important and fragile different ecosystems are, and how we are responsible for looking after the planet. We will think about how we can show **stewardship** of the Earth.

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