

## Y8 Golden Thread -

How does geography impact people the environment and the economy?

Which processes have you studied?

## KS3 Geography – Y8: Ecosystems Knowledge Organiser

**Polar** - found near the north and south poles. Only specialised plants and animals survive here.

**Temperate deciduous forest** - found across Europe and in the USA. These trees lose their leaves every year and thrive in mild and wet conditions known as a temperate maritime climate.

**Tropical rainforest** - found near the Equator. The climate is hot and humid and many different species can be found here.

**Hot desert-** arid climates, located 15-30 degrees north and south of the equator, they have different species that adapt to the climate.



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How have you demonstrated the skill to explain?

**Food chain-** A food chain shows how plants and animals get their energy.

**Food webs** - A food web shows how interconnected all of the different organisms are, it shows the connections between producers and consumers in an ecosystem. Positions in a food web and chain-

Producer , Primary consumer , Secondary consumer, Decomposer , Herbivore, Carnivore

## TRF deforestation-

**Soil erosion-** when the rainforest vegetation is cleared, the soil is bare and it stops plants and trees shedding leaves to replace the nutrients in the soil. The soil is no longer fertile, roots of plants and trees are no longer held which means it is easily eroded.

**Loss of biodiversity**- many species of plants and animals will die due to their habitat being destroyed, it reduces the variety of species found in the TRF.

Climate change- the vegetation absorb carbon dioxide, if there are fewer trees and plants due to deforestation then less carbon dioxide is removed from the atmosphere and will further contribute to global warming and therefore climate change.

**Economic development**- the creation of mines, farms and infrastructure, caused by deforestation, leads to money being created and generates income for the country which can be invested in further development or pay off debts.

Managing the TRF- Malaysia is a case study to show sustainable management of the TRF. They educated the public to increase awareness of the value of the TRF, local communities helped in conservation projects, selective logging was in place, ecotourism was promoted to bring money into the local economy and generate jobs, policies put in place whereby the land cannot be changed to protect it and creating national parks to protect biodiversity.



Here are some key words from this topic. Can you add anymore?

Ecosystem	An ecosystem is a natural environment and includes plants and animals that live and interact within that environment.
Adapt	To become adjusted to conditions that make it suitable for living.
Deforestation	The decrease in forest areas that are lost through cutting down trees for other uses such as agriculture, urbanisation or mining.
Sustainability	Meeting the needs of the current generation without compromising the needs of the future generation.

## CEIAG Link: For this topic we can make links to a variety of professions:

Ecologist
Conservationists
Planning officer
Resource management

Arborist Soil Scientist Geoscientist

If you are interested in the above careers, don't forget you can do some research and speak to Mrs Ackroyd.



