

# Year 8— Topic 5— What is the importance of Biomes and what are their

## What is an Ecosystem?

An ecosystem is a system in which organisms interact with each other and with their environment.



## Distribution of Tropical Rainforests

Tropical rainforests are centred along the Equator between the Tropic of Cancer and Capricorn 10° N and 10°S. Rainforests can be found in South America, central Africa and South-East Asia. The Amazon is the world's largest rainforest and takes up the majority of northern South America, encompassing countries such as Brazil and Peru.

## Climate of Tropical Rainforests

- Evening temperatures rarely fall below 22°C
- Due to the presence of clouds, temperatures rarely rise above 32°C
- Most afternoons have heavy showers
- At night with no clouds insulating temperature drops

## Layers of the Rainforest

Emergent	Highest layer with tree reaching 50 metres.
Canopy	Most life is found here as it receives 70% of the sunlight.
U-Canopy	Consists of trees that reach 20 metres high.
Shrub Layer	Lowest layer with small trees that have adapted to living in the shade.

## Effects of Human Activity on the Rainforest

Logging	Agriculture
•Trees are being cut down for items such as furniture and paper. •Has lead to violent confrontation between indigenous tribes and logging companies.	•Large scale 'slash and burn' of land for ranches and palm oil. •Increase in palm oil is making the soil infertile.
Mineral Extraction	Tourism
•Precious metals are found in the rainforest. •Indigenous people are becoming displaced from their land due to roads being built to transport products.	•Mass tourism is resulting in the building of hotels in extremely vulnerable areas. •Lead to negative relationship between the government and indigenous tribes •Tourism has effected wildlife (apes) by exposing them to human diseases.

## Desert Locations

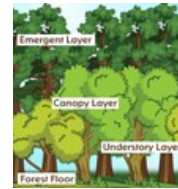
Deserts are found 30 degrees North and South of the equator. They are mainly found in Africa, Asia and South America.



## Climate in the Deserts

The desert is a land of extremes; extreme heat and extreme dryness; sudden flash floods and cold nights. A desert usually has less than 250mm of precipitation per year. However some deserts can go years without any precipitation.

## Adaptations to the Deserts



Camels	Store water, long eyelashes, large feet.
Tap water	To gather water from dep under ground.
Small leaves	To reduce transpiration (Water being evaporated from the leaves)
Waxy skin	To protect against the heat.

## Human adaptations in the Desert

Long, loose-fitting clothes that allow the air to circulate around the body. This prevents sweat from evaporating too quickly and slows down the rate of dehydration.

A head cloth to keep out the desert heat, cold, wind and sand.

A scarf to protect your neck from sunburn in the intense sunshine.

Some warm layers mad from the wool of animals to wrap around to keep warm

## Effects of Human Activity on the Desert

Logging	Tourism
•Trees are being cut down for fuel. •Has lead to violent confrontation between indigenous tribes and logging companies.	•Mass tourism is resulting in the building of hotels in extremely vulnerable areas. •Off-roading activities are very popular •Tourists are using a lot of the water supplies •Lead to negative relationship between the government and indigenous tribes •Tourism has effected wildlife by exposing them to