Walk On Water

St. Paul's C of E VA Primary and Nursery School

Knowledge Organisers

With God ALL THINGS ARE possible MATTHEW 19:26

Geography | Year 6 | Biomes and Climate Zones

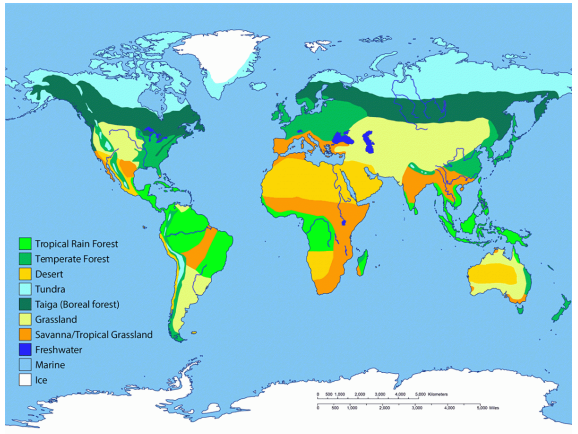
Key Information

- ◊ Biomes are a way to categories the Earth's surfaces based on climate patterns, soil types and the animals and plants that inhabit an area. There are both terrestrial and aquatic.
- ◊ There are ten biomes and seven zones of expected climate.

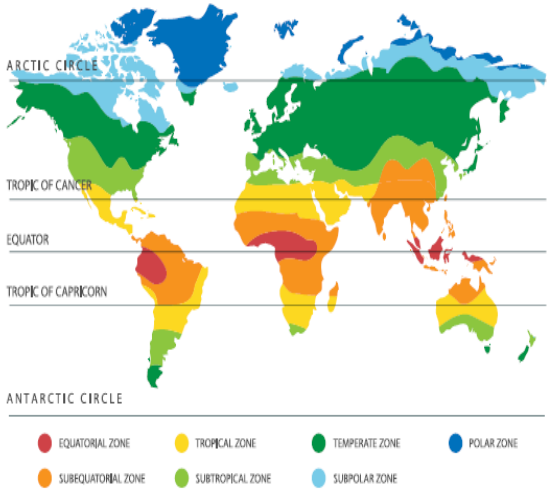
Key Vocabulary

Categorise	The put into groups/categories.
Inhabit	To live in.
Terrestrial	On land.
Aquatic	In water.
Climate	The average expected weather in a place.
Equatorial	At the equator.
Sub-equatorial	Close to the equator.
Precipitation	Rian, snow, sleet or hail.
Temperate	Neither very hot or cold.
Deciduous	Losing its leaves in autumn.
Emissions	Gases released into the atmosphere.
Ecosystems	All the conditions and living things in a
Hibernate	Lie dormant (asleep).
Permafrost	Soil that is permanently frozen.
Migrate	Travel to another area.
Uninhabited	Not lived in by people.
Favourable	Helpful.
Expanses	Large areas.
Saline	Salty.
Photosynthesis	The way green plants make their food from sun-light.
Latitude	The distance of a place from the equator.

Location of Earth's Biomes



Location of Earth's Climate Zones

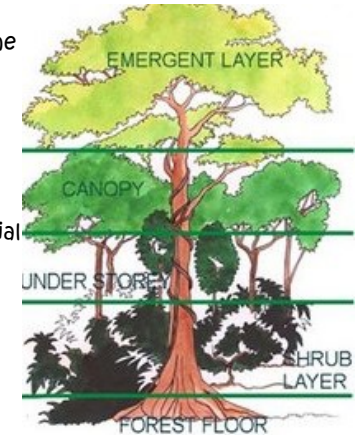


Tropical Rainforest Biome

The five largest rainforests are located in these countries:

Brazil,
Democratic Republic of the Congo,
Indonesia,
Peru,
Colombia

They occur in the equatorial and sub-equatorial climate zones in the tropics. They are hot, wet places with high precipitation levels (up to 10m annual rainfall).



Temperate Deciduous Forest Biome

These are forests dominated by trees that lose their leaves. Found in areas with warm, moist summers and cool winters. Most are located in eastern US, Canada, Europe, China, Japan and parts of Russia.



Human Processes

Temperate forests provide entertainment and resources: food, timber and oxygen.

A threat to this biome is acid rain caused by pollution and vehicle emissions. The Woodland Trust are working to protect this biome in the UK.

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Geography

Year 6

Landscapes, Weathering and Erosion (Rivers, Mountains and Coasts)

Desert Biome

An ecosystem that forms due to low levels of rainfall with plant and animal life that had adapted to surviving there. It covers 20% of the Earth and can be found in each continent (not Europe).



Physical Features:

Daytime temperatures can be high.
At night, they can be very low.
Dust storms occur due to winds.
Driest deserts receive 1cm of rain every 5-20 years.
Antarctica has cold deserts.

Taiga Biome

These are also known as **coniferous** or **boreal forests.** Taiga means 'lands of little sticks' and are popular tourist attractions for cyclists, hikers and canoeists.



Physical Features:

Short, wet summers and long, cold winters.
Moderate precipitation with snow in winter and rain in summer.

Ice Biome

Also known as the polar ice caps. A body of ice in a high latitude region of the Earth. This biome contains the majority of the fresh water supply on Earth.



Physical Features:

They form the coldest place on Earth with average temperatures below 0°C (even in Summer).
Due to the permafrost, no vegetation can grow other than microscopic organs.

Tundra Biome

A cold and treeless area where harsh conditions make it hard for living things to survive. It forms 20% of the Earth's surface. These can be **arctic** and **alpine**.

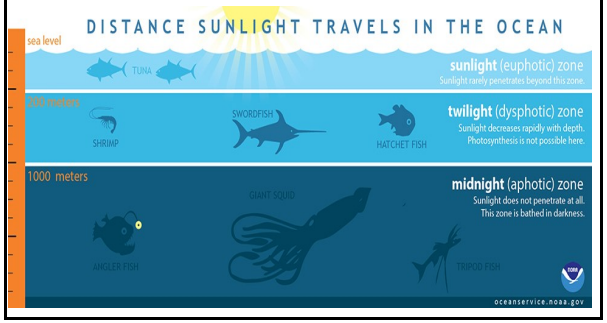


Consisting of grassy, flat plains, it cannot support trees due to its cold climate and harsh conditions. Winter temperatures are typically below –34°C and Summer temperatures range from 3°-12°C.

Marine Biome

The largest biome in the world covering 70% of the Earth's surface. Marine regions are saline and contain millions of plant and animal species.

The amount of light in the marine biomes gives it three zones:



Grassland Biome

Wide expanses of land filled with low-growing plants such as grasses and wildflowers. This forms approximately 25% of the Earth's landscape.

Physical Features:

Fertile soil makes it good farm-land.
Cold winters and dry, hot summers.



Savanna Biome

A Savannah is a rolling grassland scattered with shrubs and sporadic trees. Tourism is popular especially in the **Serengeti National Park** in Tanzania.

Physical Features:

Remains warm all year round but is not suitable for farming. It is suitable for herbivores due to the abundant food supply.



Freshwater Biome

An ecosystem made up of a body of freshwater (containing less than 1% salt). Some consist of moving bodies of water and contain many species of fish.

Physical Features:

Over 99% of all freshwater in the world is in the form of ice.
Three groups are: lakes/ponds, streams/rivers and wetlands.

