

Year 6 Geography: Climate and Extreme Weather

Climate

Climate means the usual condition of the temperature, humidity, atmospheric pressure, wind, rainfall, and other weather in an area of the Earth's surface for a long time. The climate of a place does not change day by day, unlike the weather in a location.

Climate - the conditions that you expect to get in an area.

Weather - the conditions that you actually get in an area.

Climate	Physical Features
Polar climates	<ul style="list-style-type: none"> extremely cold winters temperatures barely above freezing in the summer months polar ice caps are found in polar climates.
Equatorial climates	<ul style="list-style-type: none"> hot and wet rainforests can be found here plants and animals thrive in these climates
Desert climates	<ul style="list-style-type: none"> extremely dry places few plants and animals high temperatures during the day

Key Vocabulary

temperatures: how hot or cold a place is
weather: the conditions in a place at a particular time
polar: at the North or South Pole
tropical: in the tropics of Cancer and Capricorn
extremely: very
climate: the expected weather in a place
equatorial: near the equator
vast: huge
thrive: to grow or develop very well

Extreme Weather

Here are some types of extreme weather:

Sunny	Rain	Snow	Windy
			
			
Heatwave	Flood	Blizzard	Storm
			
Drought	Monsoon		Hurricane
			
			Tornado

Key Vocabulary

heatwave: a long period of extremely hot weather
drought: a lack of water due to hot weather
flood: a large amount of water covering places that are usually dry
monsoon: seasonal heavy rain in the continent of Asia
blizzard: heavy snow, usually with wind
gale/storm: strong winds
cyclone/hurricane: very strong winds in a circular pattern
tornado/twister: a large column of rotating air

Tundra Biome

The tundra biome is a cold and treeless area where harsh conditions make it hard for plants and animals to survive. Tundra comes from the Finnish word "tunturia", which means a barren land.

The ground is permanently frozen 10 inches to 3 feet down so that trees can't grow there. The bare and sometimes rocky ground can only support low growing plants like mosses, heaths, and lichen. In the winter it is cold and dark and in the summer, when the snow and the top layer of permafrost melt, it is very soggy and the tundra is covered with marshes, lakes, bogs and streams that breed thousands of insects and attract many migrating birds.

The main seasons are winter and summer. Spring and fall are only short periods between winter and summer. The tundra is the world's coldest and driest biomes. The average annual temperature is -18° F (-28° C).



Key Vocabulary

- permafrost:** soil that is permanently frozen
- ecosystems:** all the conditions, plants and animals that exist in a particular area
- hibernate:** lie dormant (asleep) through winter
- migrate:** travel to another area
- clusters:** groups

Taiga Biome

The taiga is the biome of the needleleaf forest. Living in the taiga is cold and lonely. Coldness and food shortages make things very difficult, mostly in the winter. Some of the animals in the taiga hibernate in the winter, some fly south if they can, while some just cooperate with the environment, which is very difficult.

Taiga is the Russian word for forest and is the largest biome in the world. It stretches over Eurasia and North America. The taiga is located near the top of the world, just below the tundra biome. The winters in the taiga are very cold with only snowfall. The summers are warm, rainy, and humid. A lot of coniferous trees grow in the taiga. The taiga is also known as the boreal forest.



Key Vocabulary

- terrestrial:** on land
- situated:** positioned
- favourable:** helpful
- uninhabited:** not lived in by people
- nutrients:** substances that help living things grow

Deciduous Forest Biome

Deciduous forests can be found in the eastern half of North America, and the middle of Europe. There are many deciduous forests in Asia. Some of the major areas that they are in are southwest Russia, Japan, and eastern China. South America has two big areas of deciduous forests in southern Chile and Middle East coast of Paraguay. There are deciduous forests located in New Zealand, and south eastern Australia also.

The average annual temperature in a deciduous forest is 50° F. The average rainfall is 30 to 60 inches a year.

The deciduous forest has four distinct seasons, spring, summer, autumn, and winter. In the autumn the leaves change colour. During the winter months the trees lose their leaves. The animals adapt to the climate by hibernating in the winter and living off the land in the other three seasons.



Key Vocabulary

- temperate:** neither very hot or cold
- deciduous:** losing its leaves in autumn
- shrubs:** small bushes near the floor of a rainforest
- timber:** wood from trees
- emissions:** things, such as gases, released into the atmosphere