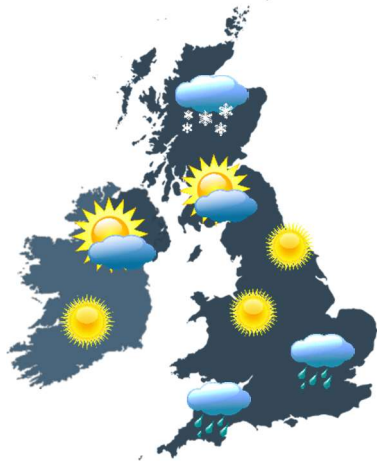


Climate



Weather Forecasts

Most of us are interested in what the weather will be like. A forecast tells us what it might be like in the next few hours or weeks.

Weather forecasts can be made by aircraft, weather balloons, satellites, ships and land stations. They all send information back to a weather centre, such as the Met Office and fed into powerful computers.









Human Influences

Acid Rain – Wind carrying nitrogen and sulphur pollution can fall to the ground as rain, killing trees and poisoning lakes.

Ozone Hole – Over winter, dangerous gases build up in the air over Antarctica. When the gases react with sunlight, they can destroy parts of the ozone layer which protects the Earth from harmful sun rays.

Smog – Fumes from traffic and industry create a thick, yellow fog causing breathing difficulties.

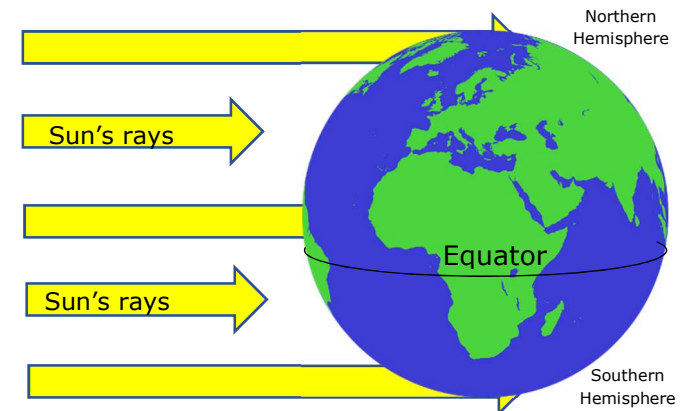
Global Warming – Carbon dioxide from pollution has increased over many years which traps heat from the sun making global temperatures rise.

The 5 Climate Types	
Desert 	Rocky or sandy surfaces in desert climates hold very little water and evaporate the little rainfall they receive. Towns/villages tend to develop near to a river or an oasis.
Tropical 	Hot and humid weather causes plenty of rainfall. Rainforests develop and are home to a diverse range of animals and birds. People live in cities and towns by rainforests and many natives live inside.
Polar 	Temperatures below 0°C causes snow and ice to form. Climates are dry with very little rainfall. It is harder to live in these extreme environments.
Temperate and Continental 	Temperate and continental climates (like that in the U.K.) have warm summers and cold winters. These climates make growing crops and living easier.
Extreme Weather	
Flooding 	Heavy rain or high tides can cause serious floods. Water rises and has nowhere to go and so builds up. This can destroy crops or whole villages and towns.
Wildfires 	Fires often start in hot, dry climates. Sometimes this can be purposefully or accidentally done by humans. They can also occur naturally, destroying large areas of land and sometimes people's homes.
Hurricanes 	A hurricane is a large spinning storm that forms over the Atlantic Ocean and north-eastern Pacific Ocean. They have winds of at least 74 miles per hour.
Drought 	Droughts are water shortages due to a lack of rain, surface water or ground water. A drought can last for months or years and cause crops to fail and drinking water to become harder to find.

Key Vocabulary	
latitude	Distance north to south of the Earth's equator.
longitude	Distance east to west of the Earth's surface.
climate	the pattern of weather over a number of years
equator	an imaginary line through Earth separating the northern and southern hemispheres
tropical	Hot and humid environment.
precipitation	Falling products of condensation in the atmosphere.
hail	hard, frozen rain which fall in showers
humid	high level of water vapour in the atmosphere
micro-climate	local set of weather conditions (mountain/valley/village)
low-pressure	Where wind circulates inwards and upwards rapidly causing clouds and precipitation to form.
high-pressure	Wind circulated clockwise causing clear sunny weather.
temperature	the degree of heat measured in Celsius

Hot and Cold Climates

At the equator, the sun rises high in the sky and the sun's rays fall straight on the Earth to heat it up. At the poles, the sun is always low in the sky meaning the air never gets warm.



In the U.K. there are 4 seasons: *spring, summer, autumn and winter*. Other parts of the world have different patterns of seasons which affect how people live and the crops they can grow.

