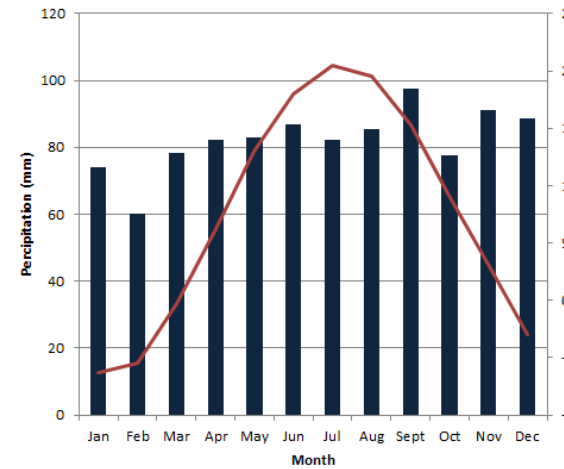


Weather & Climate KS3 GEOGRAPHY

Key Vocabulary:

- Weather** - The state of the atmosphere at a particular place and time e.g. temperature, humidity, wind direction and velocity, and other meteorological variables.
- Climate** - The average weather conditions that prevail in a particular region over a long period of time, usually 30 years or more.
- Temperature** - The degree of hotness or coldness of an environment.
- Humidity** - The amount of water vapor in the air.
- Precipitation** - Any form of water, such as rain, snow, sleet or hail, that falls from the atmosphere and reaches the ground.
- Wind** - Moving air relative to the surface of the Earth.
- Tropical revolving storms (TRS)** - large scale, intense low-pressure weather systems with heavy rain and strong winds that spiral around the centre.
- Barometer** - An instrument used to measure atmospheric pressure.
- Thermometer** - An instrument used to measure temperature.
- Anemometer** - An instrument used to measure wind speed.

London Climate Graph

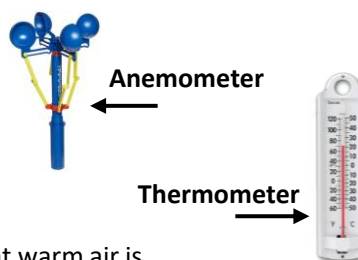


A climate graph is a line graph that shows temperature in °C, and a bar graph showing rainfall in millimetres for every month of the year.

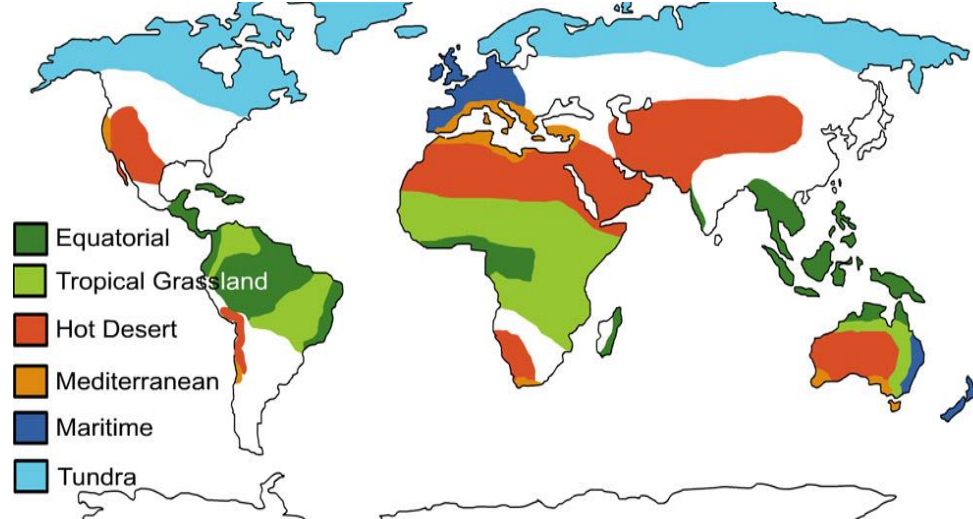
- Types of extreme weather events**
- Tropical revolving storms (hurricanes)
 - Tornados
 - Drought
 - Heatwave
 - Flooding
 - Extreme cold

Impacts of weather events can be split into:

- Social** – Effects people, communities & day to day lives.
- Economic** – Effects the economy, businesses & income.
- Environmental** – Effects the natural environment, habitats & animals.



Climate zones around the world

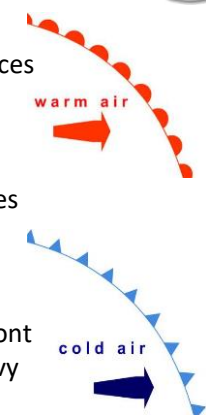


Weather fronts

A **warm front** means that warm air is coming. At a warm front, warm air is rising over cold air. This usually produces clouds and rain.

A **cold front** means that cold air is coming. At a cold front, cold air pushes under the warm air. This produces strong winds and heavy rain.


An **occluded front** is when the cold front catches up to the warm, bringing heavy rain.



Key Concepts:

- The difference between weather and climate.
- The factors that influence weather, such as temperature, humidity, wind, pressure and precipitation, using the UK as an example.
- Understanding & interpreting climate graphs & synoptic charts.
- Investigating weather conditions using a variety of instruments.
- The different types of rainfall & how they affect the UK.
- The effect of human activities on climate, such as burning fossil fuels, deforestation, and land use changes.
- The role of the greenhouse effect and the build-up of greenhouse gases in the atmosphere in causing global warming.
- The impact of climate change on the environment, such as rising sea levels, changing precipitation patterns, and increased frequency of extreme weather events.
- Extreme weather events & their impact on people & the environment.
- Investigation of microclimates.

Factors affecting UK climate

<u>Altitude</u>	<u>Latitude</u>	<u>Distance from the sea/ large lakes</u>
		
<u>Earth's wind direction</u>	<u>Mountain regions/rainfall</u>	<u>Ocean currents</u>
