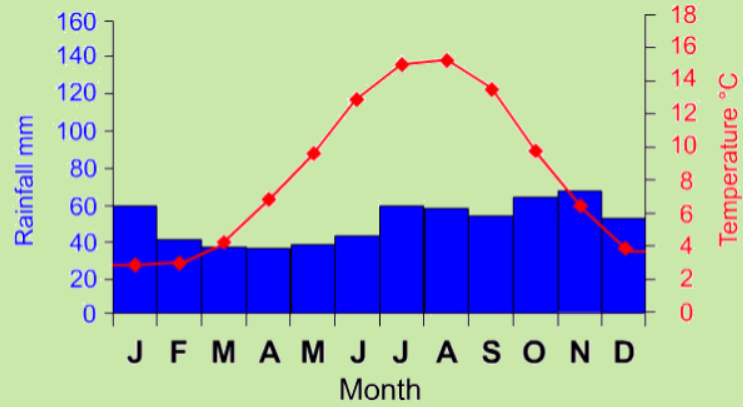




Climate graph of London



Weather

The day to day condition of the atmosphere around us: whether it is raining, hot, snowing, cold or windy. Weather varies from one day to the next.

Climate

The expected weather conditions in an area, and it is based on the recorded weather over a 30-40-year period. Unlike the weather, climate does not vary from day to day.

Air pressure

If air pressure is LOW, it means air is rising
If air pressure is HIGH, it means air is sinking

Factors affecting climate

Latitude

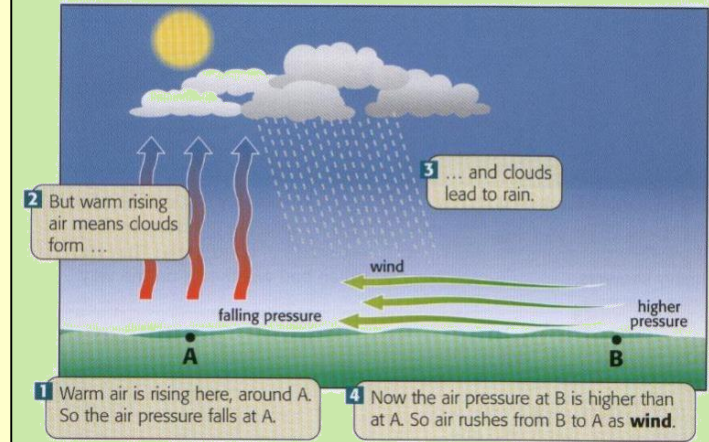
- At the equator the sun's rays are concentrated on a small area (at lower latitudes).
- As we move away from the equator, sunlight is spread over more of the earth's surface – it is less concentrated at higher latitudes.
- More concentrated sunlight makes a place hotter

Altitude

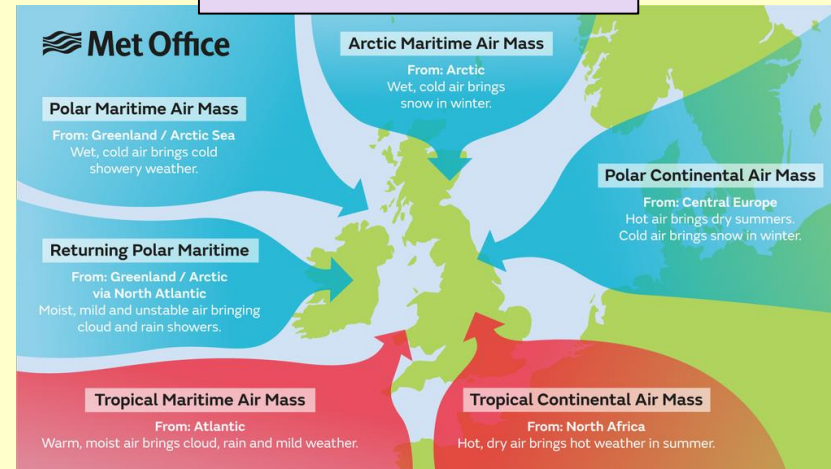
- Temperatures decrease with altitude. There is a 1°C drop in temperature for every increase of 100m in height. This is because the air is less dense in higher altitudes, so it isn't as good as holding heat.

Low pressure weather

Look again at what happens when warm air rises:

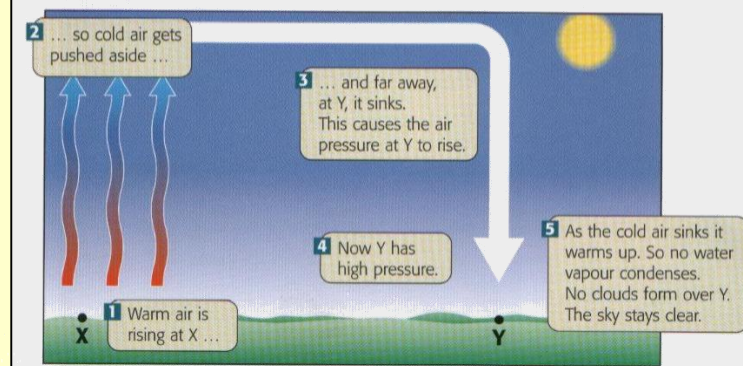


The UK's Air Masses



High pressure weather

When warm air rises in one place, cool air sinks somewhere else – giving high pressure.



Key term	Definition
Weather	The day to day conditions in the atmosphere outside
Temperature	How hot it is!
Precipitation	Rain, sleet, hail and snow.
High pressure	Where the air is heavy and pushing down
Low pressure	Where the air is rising up
Relief rainfall	Rain caused by the relief (height and shape of land) forcing air upwards
Convictional rainfall	Rain caused by air heating, causing air to rise
Frontal rainfall	Rain caused by warm and cold air meeting, forcing warm air upwards
The equator	An imaginary line around the Earth at latitude 0 degrees.
The poles	The most northern and southern points on the planet with latitude 90 degrees
Air mass	A large block of air moving around the planet



Homework 1:

1. Describe the difference between the words weather and climate
2. Describe London’s climate – The months with the highest and lowest rainfall and temperature. The RANGE (difference between the highest and lowest) of rainfall and temperature

Homework 2:

- Learn the key terms from the sheet you were given in class.
- Practice recalling both the definition and key term.
- Get someone to test you
- Write up 4-6 sentences including the key words

Homework 3:

1. Explain how and why the following things affect the temperature
 - Latitude
 - Altitude
 - Polar air masses
2. Describe the likely weather when the UK has high pressure
3. Explain why it rains a lot when the UK has low pressure

	I can...	Tick
What things make up the weather?	Identify the elements that make up the weather	
	Describe the weather using a weather map	
	Explain how hot days can cause low pressure	
	Explain how high and low pressure affect the weather	
What shapes the weather in the UK?	Explain, in three steps, three different causes of rainfall <ul style="list-style-type: none"> • Relief rainfall • Convectonal rainfall • Frontal rainfall 	
	Explain how air masses impact the weather, including weather they come from <ul style="list-style-type: none"> • Polar regions • Equatorial regions • Over water (maritime) • Over land (continental) 	
What is the climate?	Define the word climate	
	Explain three factors which impact the climate of a place <ul style="list-style-type: none"> • Latitude • Altitude • Air masses 	