

Weather: Day to day changes in weather conditions in a particular area.

Climate: Long-term pattern of weather conditions in a large area based on an average of 30 years.

Effects of Weather

Social	Impacts on people and their day to day lives - includes health and homelessness
Economic	Damage to houses, agriculture and business - can be discussed as any financial cost in £
Environmental	Damage to the physical environment and natural ecosystems

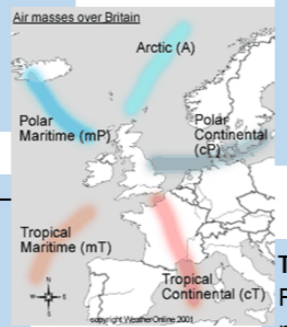
Air masses in the UK

Polar maritime (Pm) – Forms over the North Atlantic Ocean which means it is cool and damp. Usually produces showery weather and sunny spells.

Polar continental (Pc) – Forms over continental Europe. It brings warm, dry, sunny weather in summer. In winter, it is likely to result in cold, crisp, bright but frosty weather.

Tropical maritime (Tm) – Forms over the Atlantic ocean close to the Equator so it is warm and moist. This will produce dull and drizzly, overcast weather.

Tropical continental (Tc) Formed in North Africa. It produced very hot, dry conditions in the UK -



Temperature - cool temperatures ranging between 5oC and 18oC between January and July.

Temperate seasonal weather changes - temperature and rainfall totals tend to alter gradually, and extremes are rare.

Western - this type of climate is found on the western sides of continents facing the ocean.

What is an Anticyclone?

High pressure weather system which typically has clear cloudless skies, low wind speeds and little rainfall.

In summer = high temperatures and heatwave conditions

In winter = low temperatures, frost, fog

Summer Health Hazards

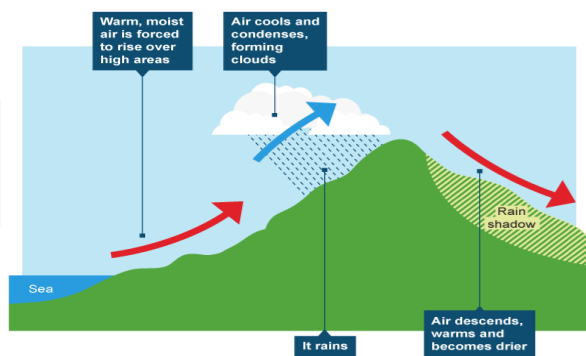
- Smog and Air Pollution
- High Pollen Levels
- High UV levels
- Dehydration and Heatstroke

Winter Health Hazards

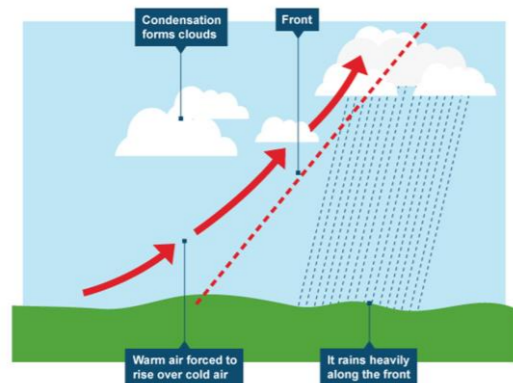
- Winter Smog
- Low temperatures
- Icy conditions and slippery surfaces

Types of Rainfall

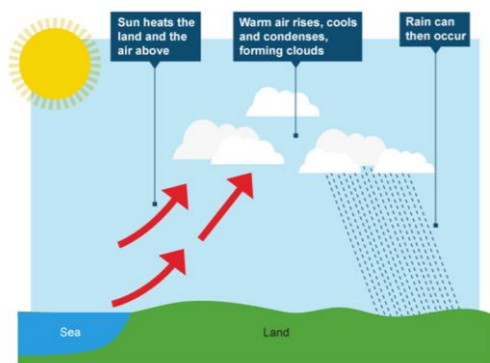
Relief Rainfall



Frontal Rainfall

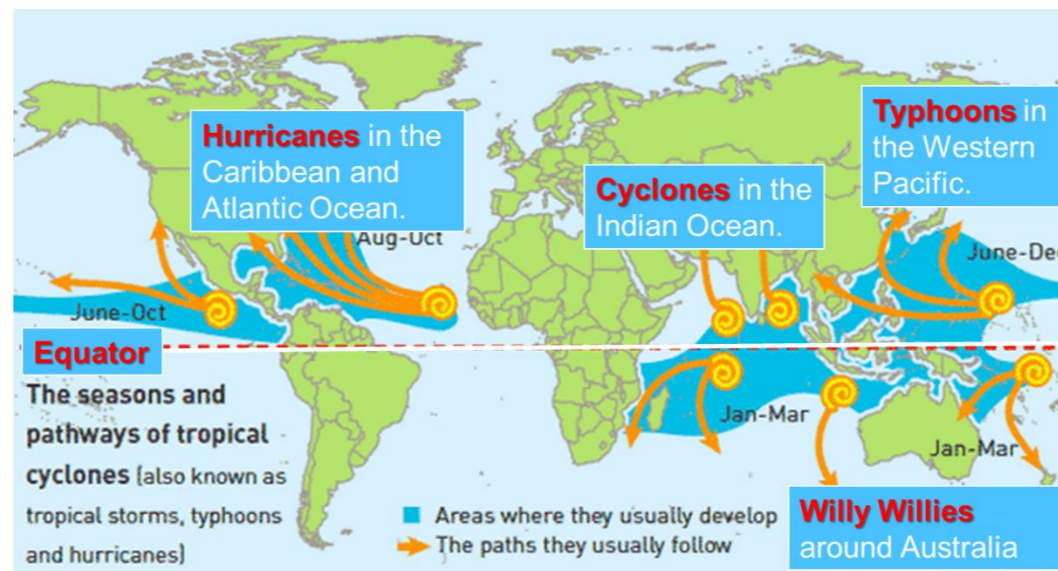


Convective Rainfall



Tropical storms

A large intense low pressure system (usually less than 950mb) Can be up to 800km in diameter



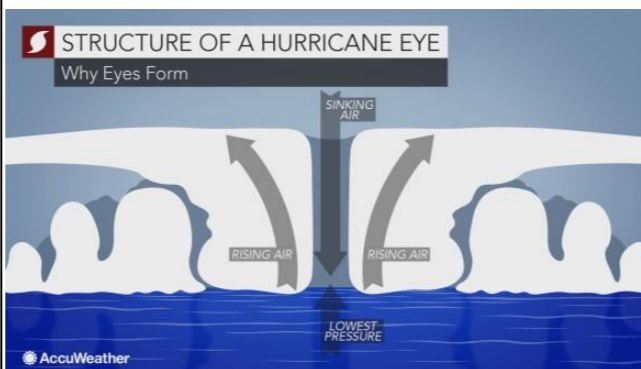
Effects of Tropical Storms

Tropical storms can have devastating effects on people and property.

The strong winds can tear off roofs, overturn cars and make large objects fly.

Torrential rain can lead to flooding and death by drowning.

Strong winds and low pressure may cause the sea level to rise by several metres to form a destructive storm surge.

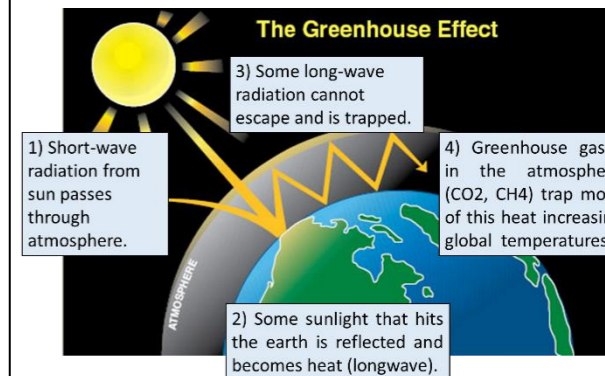


Significant Tropical Storms

Typhoon Haiyan, 2013
Hurricane Katrina, 2005

Hurricane Sandy, 2012
Hurricane Charley, Ivan and Fran, 2004

The Greenhouse Effect



Effects of Climate Change

- Rising sea levels
- Shrinking sea ice and retreating glaciers
- Changing rainfall patterns
- Coral bleaching
- Failure of crops
- Increased coastal flooding
- Migration and overcrowding

Managing the impacts of climate change

Mitigation-Reduce or prevent the effects of something from happening.

- Alternative energy
- Carbon capture and storage
- Planting trees
- International agreements

Adaptation-Help people live with the effects of climate change, by limiting the negative effects.

- Changing agriculture (types of farming)
- Water supplies-reducing demand and increasing supply
- Reducing the risk of sea level rise

