

Edexcel IAL Geography

Atmosphere and Weather Systems Glossary of Definitions



Air Masses - A body of air which share similar conditions in terms of temperature, humidity and pressure.

Air Pressure - The weight of the atmosphere above a particular point, due to gravity.

Anticyclone - A system of high pressure, causing high temperatures and unseasonably high evaporation rates.

Atmosphere - A layer of gases surrounding the Earth.

Blocking Anticyclone - An anticyclone that disrupts normal weather conditions, causing extreme weather such as heatwaves.

Climate - The average annual weather patterns based on centuries of past weather conditions.

Cold Front - The front of a cold air mass, often travelling from the Poles.

Condensation - The change of state from gas to liquid, for example water vapour in the atmosphere condenses into liquid water as precipitation.

Convective Precipitation - Solar radiation heats the air above the ground, causing it to rise, cool and condense forming precipitation (often as thunderstorms).

Coriolis Effect - A phenomenon where the rotation of the Earth causes air masses to spin - clockwise in the Southern Hemisphere, anti-clockwise in the Northern Hemisphere.

Depression - A system of low pressure with fronts of precipitation caused by low and high pressure air masses meeting.

Drought - An extended period of deficient rainfall relative to the statistical average for the region (UN).

Enhanced Greenhouse Effect - Changes in climate due to more solar radiation being trapped in the atmosphere by greenhouse gases.

Evaporation - The change of state from liquid to gas, for example liquid water to water vapour.

Fog - Water vapour at low altitude that reduces visibility.

Frontal Precipitation - Where air masses of different temperatures meet at a front, one mass will be forced over another, causing precipitation beneath the front.

Humidity - The volume of water vapour in the atmosphere.

Meteorological Drought - When long-term precipitation trends are below average.



Occluded Front - Where a warm front and cold front meet and combine.

Relief Precipitation - Precipitation caused when air masses are forced to rise over high land, determined by the relief/ morphology of the land.

Tropical Cyclones - Low pressure weather systems that bring extreme winds, precipitation and storm surges. Also known as Typhoons and Hurricanes.

Warm Front - The front of a warm air mass, often from the Tropics.

Weather - Day to day changes in the conditions for a particular place.

Wind - Air moving from high pressure to low pressure.

