

# AQA Geography GCSE

## The Challenge of Natural Hazards Glossary of Definitions

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## Glossary of Definitions - The Challenge of Natural Hazards

**Adaptation** - Responding to climate change by coming up with ways to live and cope with the effects.

**Atmospheric circulation** - The general movements of air around the Earth due to pressure and temperature.

**Atmospheric hazard** - Hazards caused by the weather and processes in the atmosphere.

**Carbon Capture and Storage (CCS)** - The process of capturing carbon dioxide that would normally be emitted into the atmosphere and storing it underground in reservoirs.

**Climate change** - A distinct change in global or regional patterns of climate, such as changes in temperature or precipitation patterns.

**Conservative plate margin** - A plate margin where two plates are moving alongside each other.

**Constructive plate margin** - A plate margin where two plates are moving away from each other.

**Continental crust** - The thicker, less dense crust that makes up the continents.

**Convection current** - The movement of a fluid caused by a difference in temperature or density.

**Coriolis Effect** - The effect of the Earth's rotation on wind movements.

**Cyclone** - A tropical storm that hits Oceania or Madagascar.

**Destructive plate margin** - A plate margin where two plates are moving towards each other.

**Eccentricity** - The changing of the orbit of the Earth around the Sun from a circular shape to an ellipse.

**Eye** - An area of a tropical storm with extremely low pressure and calm conditions.

**Eyewall** - An area of a tropical storm with the most intense, powerful winds and torrential rain.

**Ferrel Cell** - At around 60° either side of the equator, moist air rises, and travels to lower latitudes at around 30° where it sinks, along with air travelling from the equator.

**Fossil fuels** - Fuels made up of the remains of organic material, such as oil, coal and gas.

**Geological hazard** - A hazard caused by processes on the land.

**Greenhouse Gases** - Gases in the Earth's atmosphere that trap energy in the Earth's system and contribute to the greenhouse effect (carbon dioxide, methane, water vapour and nitrous oxides).

**Hadley Cell** - At the equator, hot moist air rises, moves to higher latitudes (30°) and sinks.



**Hazard risk** - The probability that a natural hazard will negatively affect a population.

**Hotspot** - An area where unusually hot magma breaks through the middle of a plate and travels up to the surface, creating a volcano.

**Hurricane** - A tropical storm that hits the USA, Latin America or the Caribbean.

**Hydrological hazard** - A hazard caused by the movement of water on the land.

**Ice core** - A cylinder of ice extracted from an ice sheet or glacier, which is used to analyse past environmental conditions.

**Immediate responses** - Actions taken as soon as the hazard happens and in its immediate aftermath (hours, days, and potentially a week or so after the event).

**Long-term responses** - Actions taken after the immediate responses when the effects of the hazard have been minimised (weeks, months, and years after the event).

**Magma** - Molten rock found beneath the Earth's surface.

**Mantle** - The area underneath the crust which contains magma.

**Marine sediment core** - A cylinder of ocean sediments removed from the ocean floor, which is used to analyse past environmental conditions.

**Milankovitch Cycles** - The cyclical variations in the Earth's orbit around the Sun.

**Mitigation** - Reducing the causes of climate change, so that climate change slows or even stops.

**Monitoring** - Detecting and recording physical changes and warning signs of a hazard.

**Natural hazard** - A naturally occurring event that is a threat to a population.

**Obliquity (or axial tilt)** - The tilt of the Earth's axis, which changes from 21.5° and 24.5°.

**Oceanic crust** - The thinner, denser crust that makes up the ocean floor.

**Planning** - Having systems in place, such as evacuation routes, so that if a hazardous event does occur, the population is prepared in advance.

**Plate margin** - The point at which two plates meet.

**Polar Cell** - At 60° north or south of the equator, moist air rises, and travels to the poles (90°), where it sinks.

**Precession** - The 'wobble' of the Earth's axis.

**Prediction** - Using monitoring as well as historical trends and computer-based modelling to predict when a hazardous event may occur.



**Pressure belt** - A region of the Earth which is generally under the same pressure.

**Primary effects** - The effects that are directly caused by the hazard itself.

**Protection** - Increasing the resistance of a population to natural hazards by physically designing things that will withstand natural hazards.

**Quaternary Period** - The geological time period that started 2.6 million years ago and extends into the present.

**Secondary effects** - The effects that are a result of the primary effects.

**Storm surge** - A rise in sea level caused when a tropical storm pushes a large amount of sea water onto the shore.

**Subduction** - A process that occurs at a destructive plate margin when a plate is pushed below another plate, forcing it to sink into the mantle.

**Tectonic hazard** - A natural hazard caused by the physical processes and movements of tectonic plates.

**Tectonic plates** - Large slabs of the Earth's crust that sit and move on top of the liquid mantle.

**The Enhanced Greenhouse Effect** - A process where the Earth's surface is heated by the greenhouse effect at a higher rate due to increased greenhouse gas emissions from human activities.

**The Greenhouse Effect** - A natural process where greenhouse gases trap the energy from the Sun inside the Earth's atmosphere, warming the Earth's surface.

**Tropical storm** - A very large, spinning storm with high winds and torrential rain that forms in the tropics.

**Tsunami** - A large wave caused by a large amount of water being displaced when plates move.

**Typhoon** - A tropical storm that hits India, Japan or the Philippines.

