

Spring | Geography | Year 11 Living with Natural Hazards

Tectonic hazards

Tectonic plate

A rigid segment of the Earth's crust which can 'float' across the heavier, semi molten rock below. Continental plates are less dense, but thicker than oceanic plates.

Plate margin

The margin or boundary between two tectonic plates.

Conservative plate margin

Tectonic plate margin where two tectonic plates slide past each other.

Constructive plate margin

Tectonic plate margin where rising magma adds new material to plates that are diverging or moving apart.

Destructive plate margin

Tectonic plate margin where two plates are converging or coming together and oceanic plate is subducted. It can be associated with violent earthquakes and explosive volcanoes.

Tectonic hazard

A natural hazard caused by movement of tectonic plates (including volcanoes and earthquakes).

Earthquake

A sudden or violent movement within the Earth's crust followed by a series of shocks.

Volcano

An opening in the Earth's crust from which lava, ash and gases erupt.

Weather hazards

Extreme weather

This is when a weather event is significantly different from the average or usual weather pattern, and is especially severe or unseasonal. This may take place over one day or a period of time. A severe snow blizzard or heat wave are two examples of extreme weather in the UK.

Tropical storm (hurricane, cyclone, typhoon)

An area of low pressure with winds moving in a spiral around the calm central point called the eye of the storm.

Winds are powerful and rainfall is heavy.

Global atmospheric circulation

The worldwide system of winds, which transports heat from tropical to polar latitudes. In each hemisphere, air also circulates through the entire depth of the troposphere which extends up to 15 km.

Tectonic and weather hazards

Primary effects

The initial impact of a natural event on people and property, caused directly by it, for instance the ground buildings collapsing following an earthquake.

Secondary effects

The after-effects that occur as indirect impacts of a natural event, sometimes on a longer timescale, for instance fires due to ruptured gas mains resulting from the ground shaking.

Economic impact

The effect of an event on the wealth of an area or community.

Environmental impact

The effect of an event on the landscape and ecology of the surrounding area.

Social impact

The effect of an event on the lives of people or community.

Management strategies

Techniques of controlling, responding to, or dealing with an event.

Planning

Actions taken to enable communities to respond to, and recover from, natural disasters, through measures such as emergency evacuation plans, information management, communications and warning systems.

Prediction

Attempts to forecast when and where a natural hazard will strike, based on current knowledge. This can be done to some extent for volcanic eruptions (and tropical

storms), but less reliably for earthquakes.

Monitoring

Recording physical changes, such as earthquake tremors around a volcano, tracking a tropical storm to help forecast when and where a natural hazard might strike.

Protection

Actions taken before a hazard strikes to reduce its impact, such as educating people or improving building design.

Immediate responses

The reaction of people as the disaster happens and in the immediate aftermath.

Long-term responses

Later reactions that occur in the weeks, months and years after the event.

Climate change

Quaternary period

The period of geological time from about 2.6 million years ago to the present. It is characterized by the appearance and development of humans and includes the Pleistocene and Holocene Epochs.

Orbital changes

Changes in the pathway of the Earth around the Sun.

Climate change

A long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature.

Adaptation

Actions taken to adjust to natural events such as climate change, to reduce potential damage, limit the impacts, take advantage of opportunities, or cope with the consequences.

Mitigation

Action taken to reduce or eliminate the long-term risk to human life and property from natural hazards, such as building earthquake-proof buildings or making international agreements about carbon reduction targets.

Tier 2 Vocabulary

Tier 3 Vocabulary