

Exploring Earthquakes: A Geography Challenge

Learning objective: To understand the causes, measurement, and effects of earthquakes using geographical vocabulary.

Read each flashcard carefully. Use the front side to test your knowledge of how our planet moves and changes. When you are ready, challenge yourself with the deeper thinking questions at the end.

What are tectonic plates?

Massive, irregular slabs of solid rock that make up the Earth's outer shell, constantly moving slowly over the mantle.

What is the Earth's crust?

The thin, outermost layer of the Earth where we live, which is broken into many different tectonic plates.

What is a fault line?

A crack or fracture in the Earth's crust where tectonic plates meet and slide past or against each other.

What are seismic waves?

Vibrations caused by the sudden release of energy in the Earth's crust, which travel outwards from the earthquake's focus.

Define the 'epicentre'.

The point on the Earth's surface directly above where an earthquake begins deep underground.

What is a seismograph?

A scientific instrument used to detect and record the intensity, direction, and duration of earthquake vibrations.

Explain the Richter scale.

A numerical scale used to measure the magnitude or 'strength' of an earthquake based on the energy released.

What is a tremor?

A smaller, often minor shaking or vibration of the ground, sometimes occurring before or after a major earthquake.

What does 'magnitude' mean in geography?

A measurement of the total energy released at the source of an earthquake.

What happens at a destructive plate boundary?

Two tectonic plates collide, often causing one to slide beneath the other, which can result in powerful earthquakes.

Describe the 'Ring of Fire'.

A major area in the basin of the Pacific Ocean where a large number of earthquakes and volcanic eruptions occur.

What is the lithosphere?

The rigid outer part of the Earth, consisting of the crust and the upper mantle.