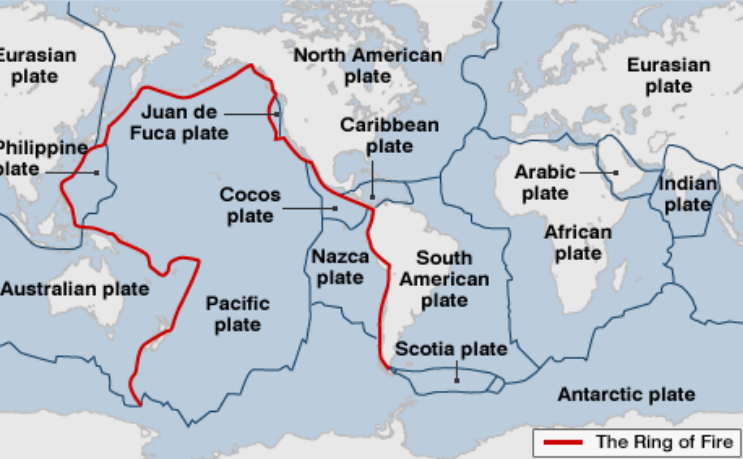


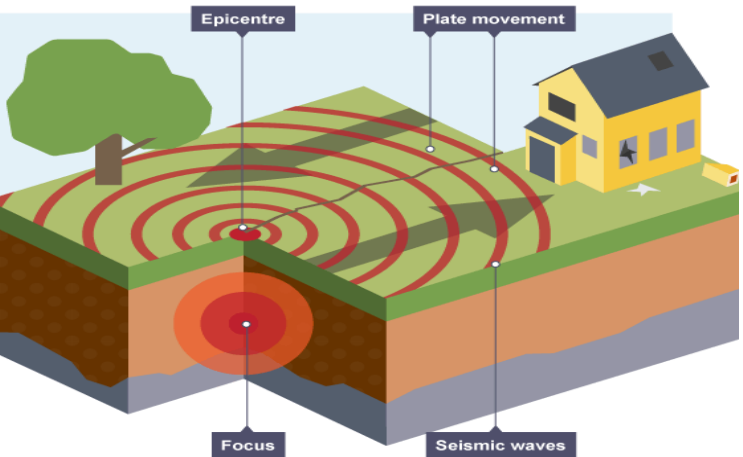
How do humans adapt to living in an earthquake zone?

Tectonic plates

The Pacific Ring of Fire



Plates can collide, separate or grind against each other. The movement between two plates can trigger an earthquake. 80-90% of earthquakes occur along the 'Ring of Fire'.



Earthquake features diagram

Earthquake effects

landslides and avalanches

fires

fissures

tsunamis

damage to buildings, bridges, railways, roads and dams

Tohoku earthquake, Sendai, Japan

March 11th 2011

9.0 on the Richter scale

Strongest earthquake in Japan's recorded history

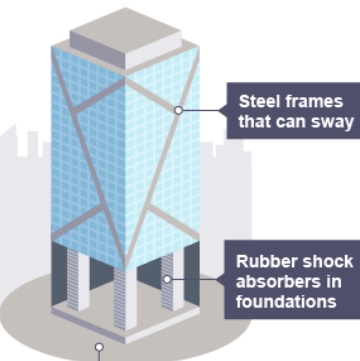
Tsunami waves up to 40m high

Over 15,500 deaths

Over 450,000 homeless

Adaptations made following Sendai earthquake and tsunami

Tremor-resistant buildings



Open outside areas for people to assemble



Key Vocabulary

tectonic plates	large pieces of the Earth's crust that are constantly moving.
fault line	a long crack in the surface of the Earth. Earthquakes usually occur along these.
focus	the point where an earthquake starts. This may be many kilometres deep.
epicentre	the point on the Earth's surface vertically above the focus of an earthquake.
seismic waves	waves of energy (vibrations) that travel within the Earth or along its surface as a result of an earthquake.
tremors	like an earthquake but with smaller magnitude - causing vibrations of the Earth's surface.
seismograph	an instrument used to measure and record details of an earthquake, such as force and duration.
Richter scale	the numerical scale for measuring the strength of an earthquake.
tsunami Japanese word - 'harbour wave'.	a large wave caused by movements in the Earth's crust, which move ocean water.