

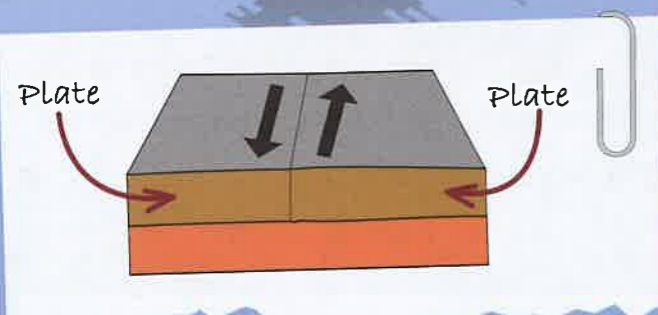
Earthquakes

Earthquakes are when the ground starts shaking. They may only last for less than a minute, but can cause lots of damage and kill people.

*Have you ever experienced an earthquake?
What did it feel like and was anything damaged?*

How do earthquakes happen?

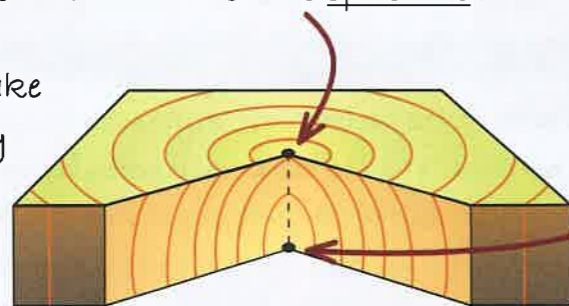
Look back at page 29 to read up on **tectonic plates** which cause earthquakes.



Tectonic plates are constantly moving — often forcing themselves past each other, and sometimes getting stuck. When they get stuck, pressure builds up. Eventually, something will have to give way. When it does, the pressure is released in waves of energy which feel like shaking.

The place on the ground that is directly above where the earthquake starts is called the epicentre.

You feel an earthquake less the further away you are from the epicentre.



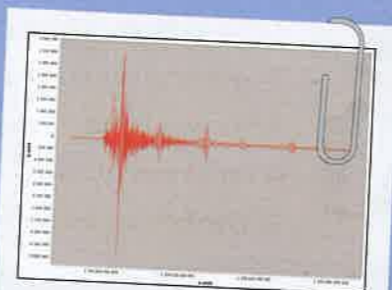
The exact place underground where an earthquake happens is called the focus.

There will often be smaller earthquakes after the first one, called aftershocks.

Shake, rattle and roll

A machine called a seismometer can record the Earth's shaking. The strength of the shaking is measured on the Richter scale.

On the Richter scale, each number means ten times the number before it, so an earthquake measuring 4 is ten times worse than one measuring 3.



Seismometer recording

Shaking and breaking

It's not the shaking that kills people, it's what the shaking causes...

COLLAPSED BUILDINGS

Buildings can trap and kill people as they fall down during an earthquake. Many people will be left homeless.



ROADS DESTROYED

Earthquakes cause roads and bridges to collapse, which means that the emergency services can't get through to help rescue trapped and injured people.

LANDSLIDES



Mud and rocks can be loosened from the sides of hills. They then flow downwards and bury houses and people. This is called a landslide.



DISEASE

Earthquakes can destroy power lines and water supplies, so people have no clean, safe water to drink. Under these conditions, diseases spread very quickly.

TSUNAMIS

If an earthquake happens at sea, giant waves called tsunamis are formed. When these waves hit land, they cause massive flooding and destroy everything for miles.

Staying alive

Earthquakes can't be predicted accurately. In countries that get many earthquakes, lives can be saved by spending lots of money on strong, earthquake-proof buildings, roads and bridges. Following earthquake action plans can also save lives.

What happens if countries can't afford to make buildings etc. stronger?

Earthquake action plan:

- Have canned food, bottled water, dust masks and torches ready.
- Take cover under a table away from windows and things that might fall.
- If you are outside, stay away from trees, buildings and power lines.

Earthquakes are happening all the time

Over a million earthquakes happen every year all over the world, but many are so small that we just don't notice them. Even the UK has about 200 earthquakes every year.