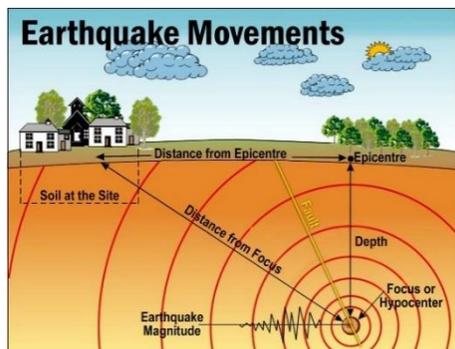


### Year 3 - Earthquakes

#### Key Facts

Earth's plates move and cause shaking and vibrations.



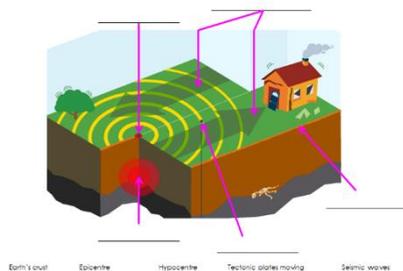
Earthquakes happen on plate boundaries.

They happen when tension is released inside the crust.

Plates move and sometimes get stuck. This forms pressure and earthquakes happen when it is released.

Scientists use the different speeds of seismic waves to locate the epicentre (the point on the surface directly above where the earthquake originated) of earthquakes.

Label the diagram showing a cross-section of an earthquake using the labels given below.



The most powerful earthquake ever recorded on Earth was in Valdivia, Chile. Occurring in 1960, it had a magnitude of 9.5.

#### By the end of the topic you will learn:

I can

- locate and name countries in the Northern and Southern Hemispheres using an atlas.
- locate and name countries in Europe on a map and globe.
- locate where earthquakes are likely to take place - Japan/Mexico.
- describe how earthquakes are created.
- describe using correct geographical language the features of earthquakes and tsunamis (how they happen, the damage caused, Richter Scale).
- explain how earthquakes are measured.
- describe the key features of earthquakes using correct geographical terms and why they happen.
- complete a case study of an earthquake in Mexico (1985) and the tsunami in Japan (2011).

#### Key Vocabulary

Earthquake	A sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action
Tectonic plate	Earth's outer layer is made up of large, moving pieces called plates. All of Earth's land and water sit on these plates. The plates are made of solid rock
Epicentre	Part of the earth's surface directly above the focus of an earthquake
Seismic waves	A wave that travels through the Earth.
Plate boundary	Where two tectonic plates meet
Richter scale	A scale to measure the magnitude of an earthquake
Tsunamis	A series of waves of water caused by the movement of tectonic plates below the surface
Outer Core	A 2000km thick liquid made up largely of iron and nickel.
Inner Core	A dense solid of extreme temperature (5,500°C) made up of iron and nickel.
Mantle	Semi-molten rock, moving beneath the earth's crust. It is the movement (convection currents) in the mantle which cause tectonic plates to move
Crust	The rocky outer layer of the earth, made up of oceanic and continental crust.
Fault lines	Earthquakes are formed along fault lines. This is an area of stress in the Earth. At fault lines the rocks are sliding past each other and will eventually cause a crack in the Earth's surface.

- write a diary entry about how children stay safe in school during an earthquake.