

LO: to describe the physical  
geography of earthquakes and  
tsunamis.

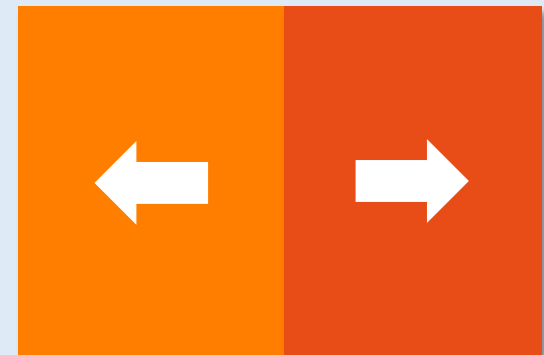
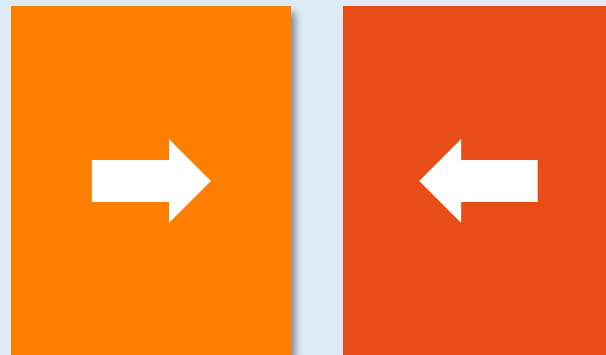
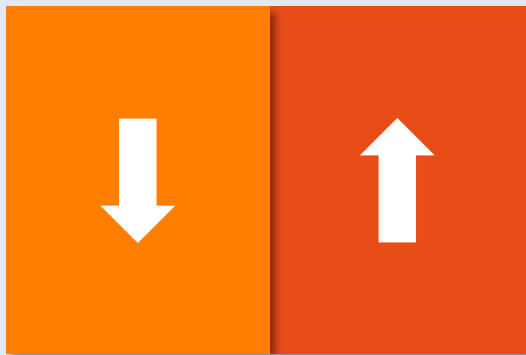
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Recap: What different ways can tectonic plates move?

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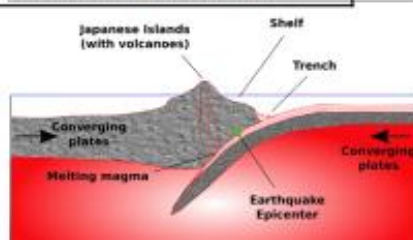
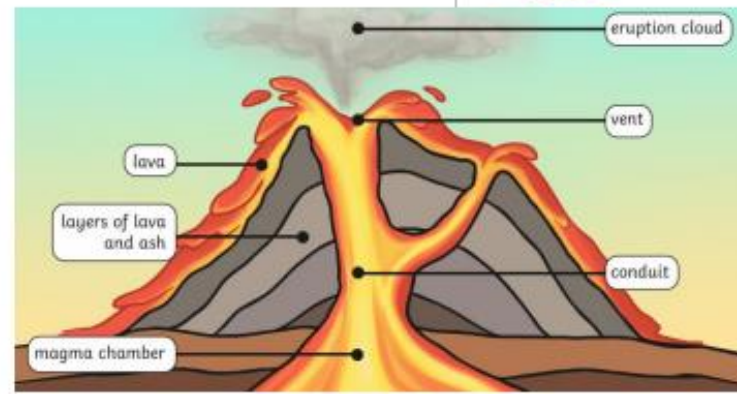
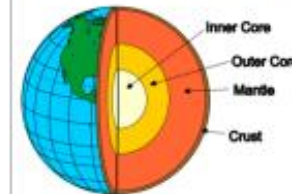


# LO: to describe physical geography of earthquakes and tsunamis.

## Knowledge Organiser Year 4 Geography: Disasters! : Vesuvius – Understand how the Earth's surface moves

### Concept: Physical Geography

Key Vocabulary	Things we already know New vocabulary
Physical geography	natural features of the land
Earth's crust	Is the outer layer of our planet.
Magma	Is the molten rocks under the Earth's surface.
Volcano	Is a vent in the Earth's crust that allows lava, volcanic ash and gases to escape from below the Earth's surface.
Tectonic plates	Are pieces of the crust of the Earth. They are constantly moving and sometimes earthquakes, volcanoes and mountains are found at the plate boundaries.
Earthquake	An earthquake is what happens when two tectonic places move which then causes shock waves to shak the surface of the earth.
Tsunami	Is a large wave caused by an underwater earthquake or volcano.

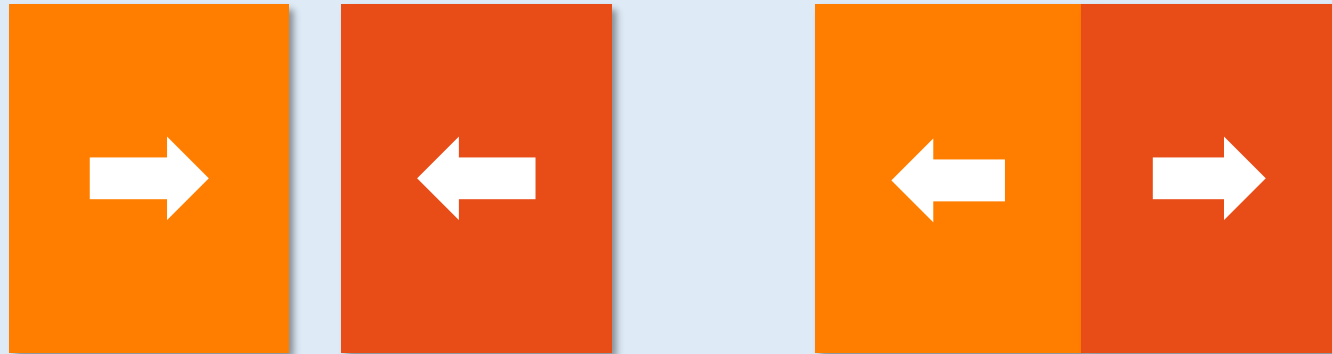


What is an earthquake?

What is a tsunami?

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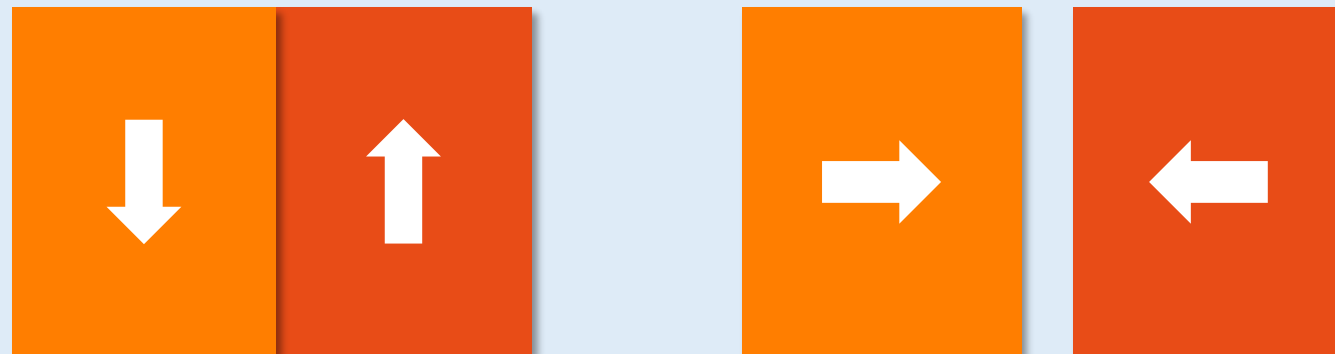
Volcanos can be formed when the plates move together or apart. But what about earthquakes?



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Earthquakes can occur when the tectonic plates rub past each other (creating **friction**) or move towards each other (creating **pressure**).

<https://www.bbc.co.uk/teach/class-clips-video/geography-ks1--ks2-earthquakes/zbr2mfr#:~:text=Most%20earthquakes%20happen%20where%20the%20land%3A%20an%20earthquake.>

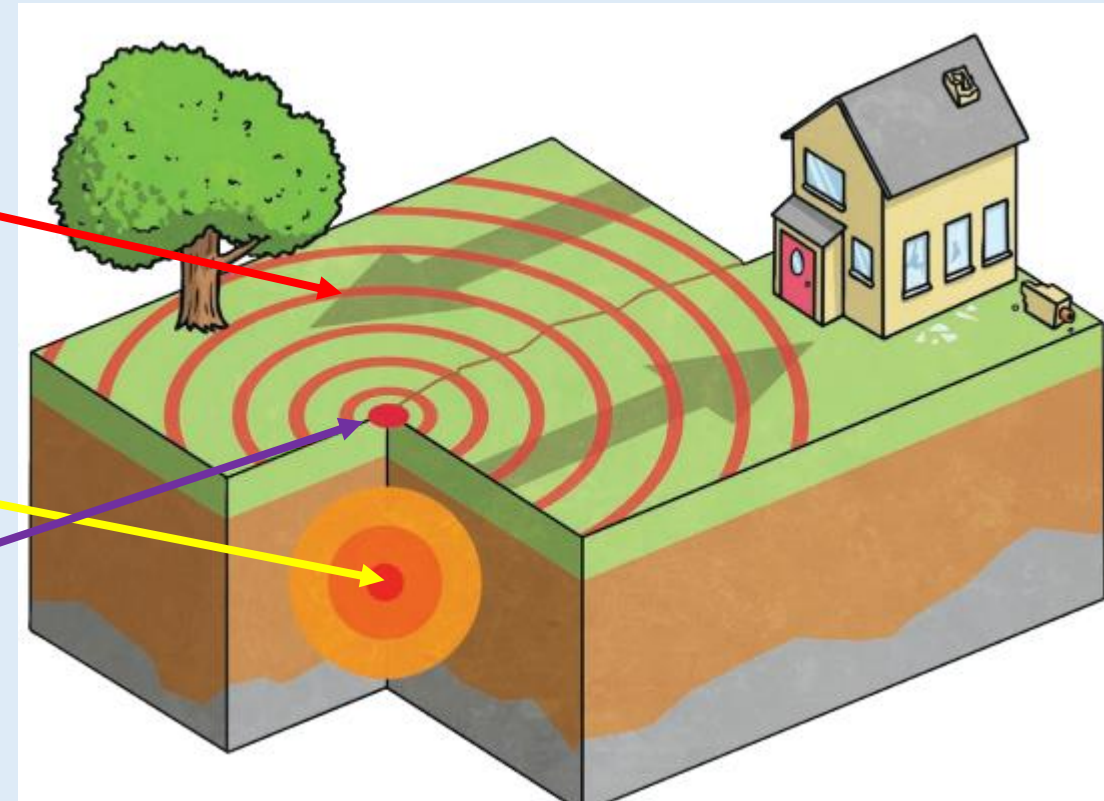


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This release of friction or pressure can create **seismic waves**.

The point where these originate below the crust is called the **focus**.

The point directly above the focus, on the crust is called the **epicentre**.

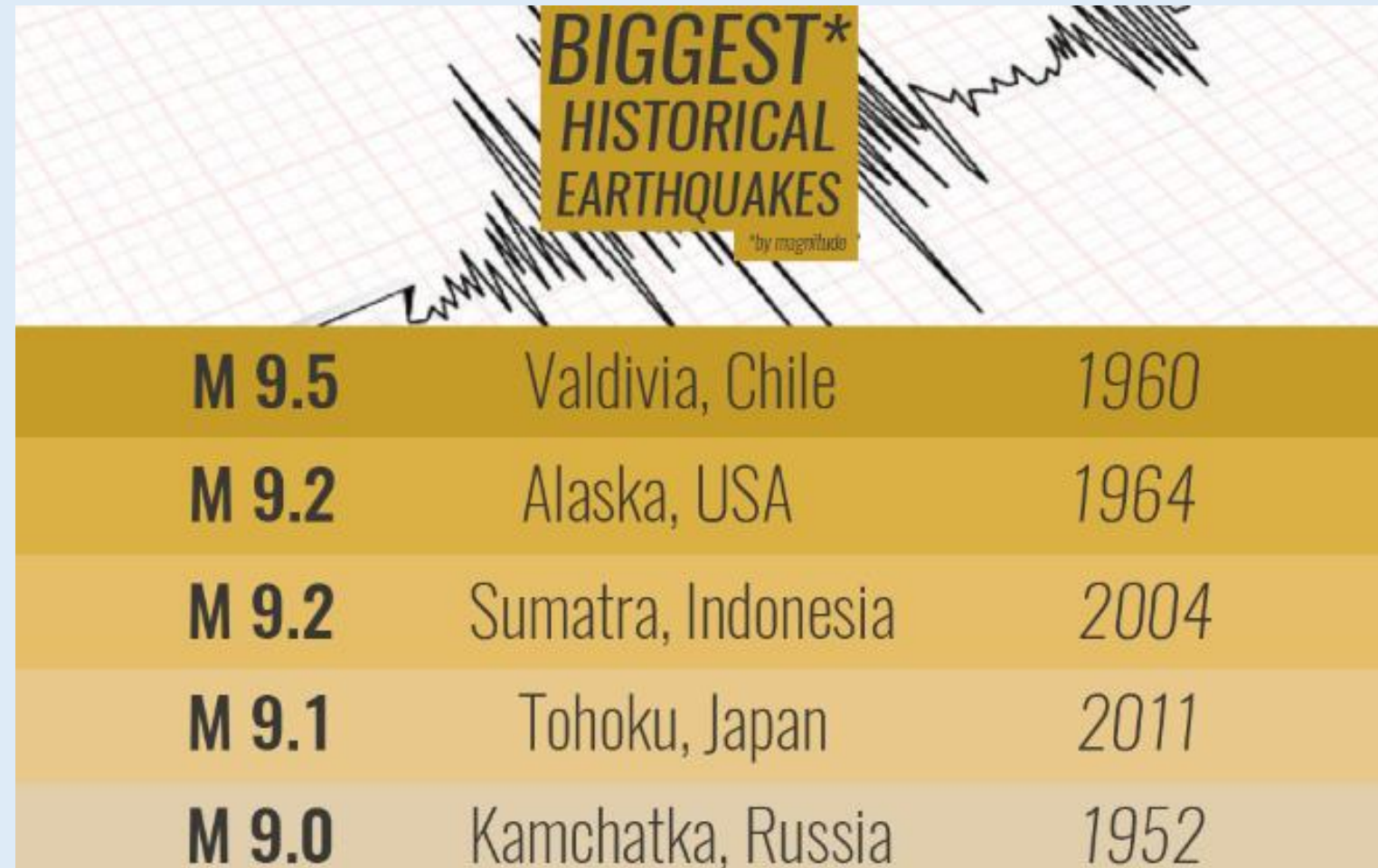


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Earthquakes are measured using a seismometer.

The measurement is called a magnitude.

This is on the Richter Scale.



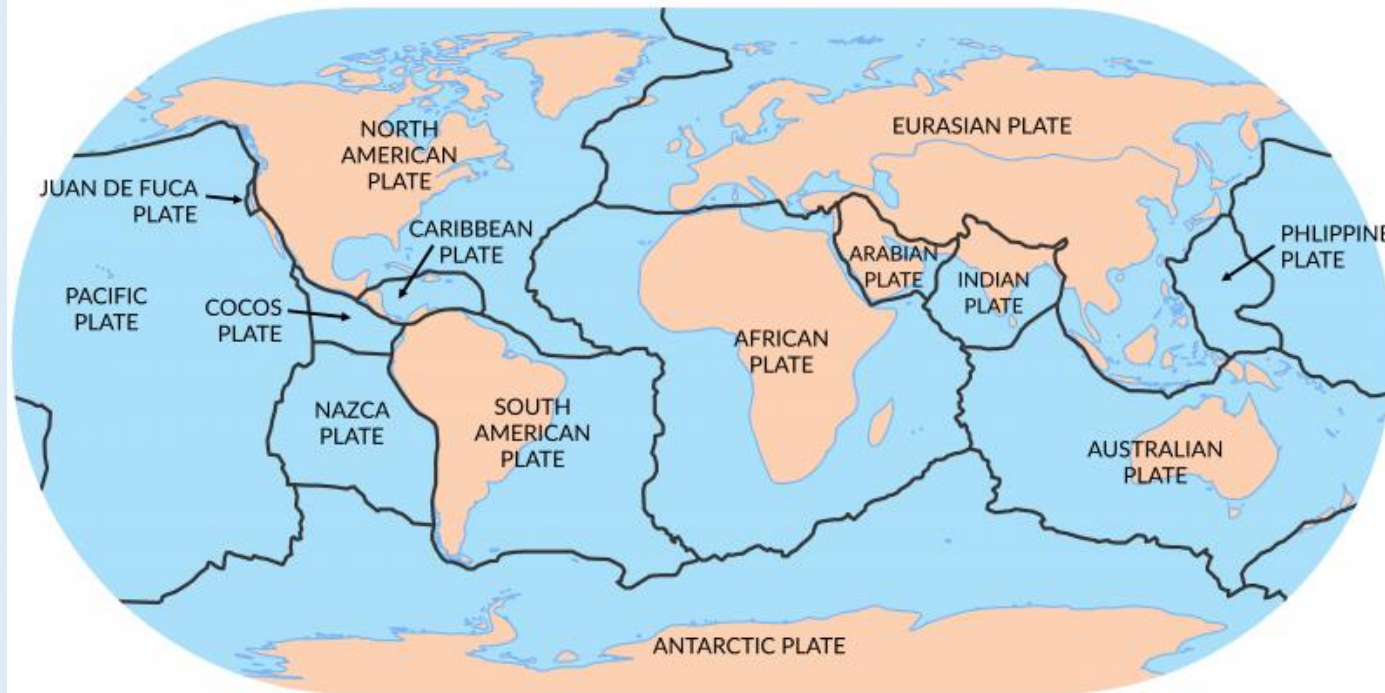
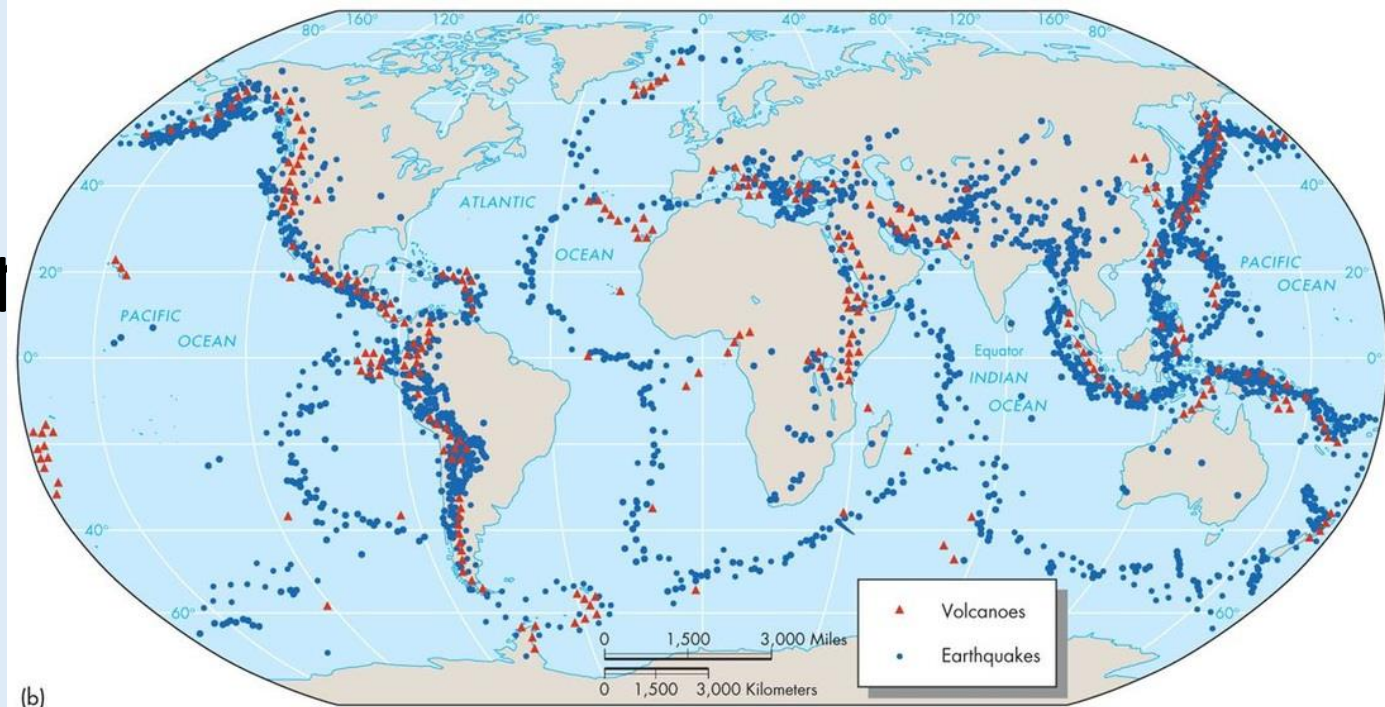
**BIGGEST\***  
**HISTORICAL**  
**EARTHQUAKES**  
\*by magnitude

<b>M 9.5</b>	Valdivia, Chile	1960
<b>M 9.2</b>	Alaska, USA	1964
<b>M 9.2</b>	Sumatra, Indonesia	2004
<b>M 9.1</b>	Tohoku, Japan	2011
<b>M 9.0</b>	Kamchatka, Russia	1952



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Although small earthquakes occur daily all over the world, the majority of large earthquakes occur on the plate boundaries.



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Tsunamis- these occur when the earthquakes occur or volcanos erupt below the water.

Large waves are created by the energy released and the waves begin to move away from the epicentre.

As the water gets shallower, the waves grow higher.

