

KO: New Zealand experiences earthquakes because it is located on a **plate boundary**.

Prior Learning Task

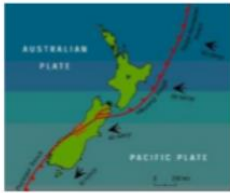
Define the word earthquake.

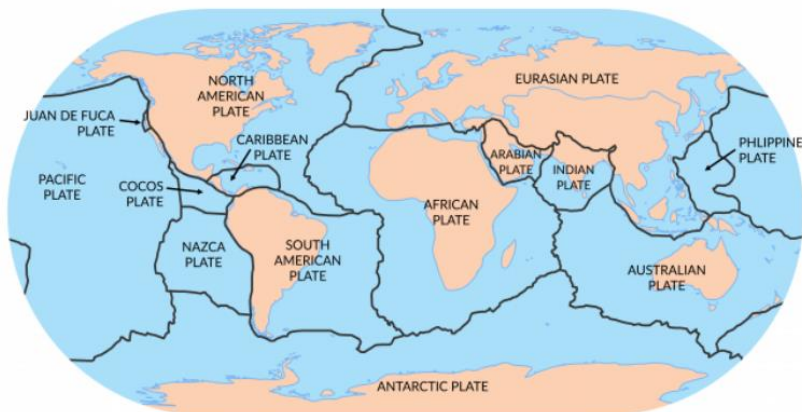
Scientists and geographers believe that the rigid outer shell of earth moves around, this explains why we have mountains, earthquakes and why the shape of some continents look like

Key Vocabulary

- **Tectonic plate**
- Fault line
- Friction
- Plate boundary
- Christchurch




Key Vocabulary	Definition
Tectonic Plates	Huge pieces of the earth's crust and mantle that move around causing earthquakes and volcanoes.

Plate Boundary
A place where two tectonic plates meet. New Zealand is located on a plate boundary.

A plate boundary runs through the South Island

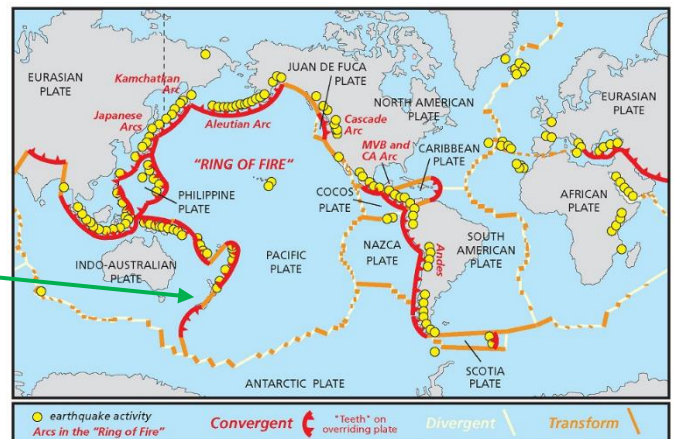


pieces of the same jigsaw puzzle.

Scientists believe there are plates deep under the ground that move around. At the plate boundaries, we can often see mountains or trenches, volcanoes and earthquakes.

Mountain	Volcano	Ocean trench
		

New Zealand is located at a plate boundary. We know from science that when two objects rub together, friction occurs. On such a large scale, this friction can cause earthquakes, which it does in New Zealand.



Watch this video:

<https://video.nationalgeographic.com/video/101-videos/00000144-0a2d-d3cb-a96c-7b2d6cd80000?source=relatedvideo>

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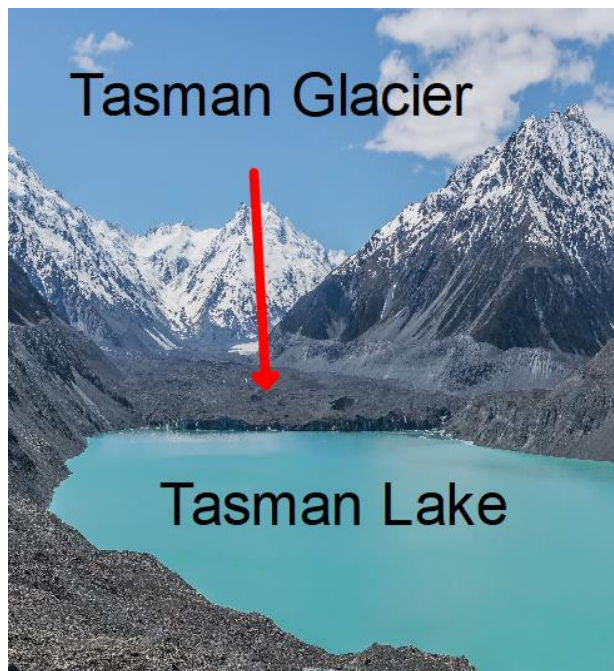
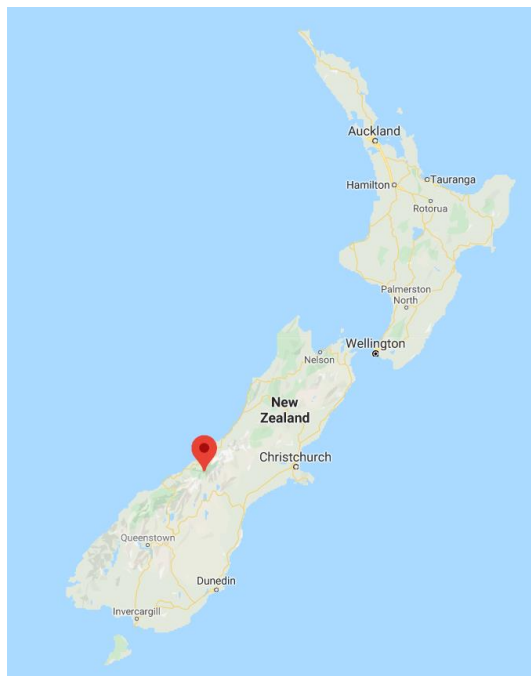
In 2011 an earthquake occurred on New Zealand's South Island near to the city of Christchurch. Much destruction was caused and 185 people were killed.

Many people died when Canterbury Television building collapsed and caught fire. More than 6,000 people had minor injuries.

Read this article about the 2011 Christchurch earthquake:

<https://nzhistory.govt.nz/page/christchurch-earthquake-kills-185>

120 miles away, the Tasman Glacier dropped 300 million tonnes of ice into Tasman Lake causing tsunami waves over



3m high to hit tour boats.

Ways to reduce the impact of earthquakes:

1. Construct buildings that can withstand the force of an earthquake. Buildings in earthquake-prone areas need to be built on roller foundations, which allow them to move but not collapse during an earthquake.

2. Have earthquake drills in areas that are prone to earthquakes. This can help reduce deaths and injuries during earthquakes.



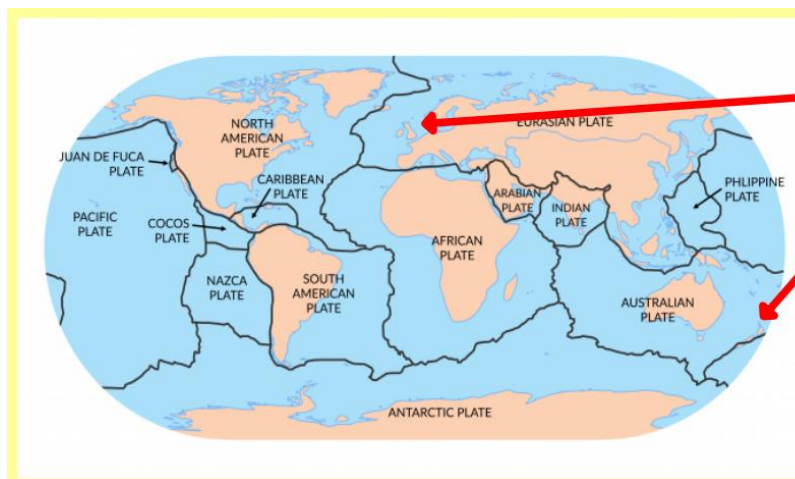
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New Zealand is also known for its geothermal activity.

The geothermal activity is mainly concentrated near Taupo and Rotorua on the North Island.

### Independent Task

1. Why does New Zealand experience earthquakes?
2. Describe the earthquake in 2011.
3. How can people in New Zealand reduce the impact of earthquakes?



United Kingdom

New Zealand

Step for depth: Why do we rarely, if ever experience earthquakes in the UK?