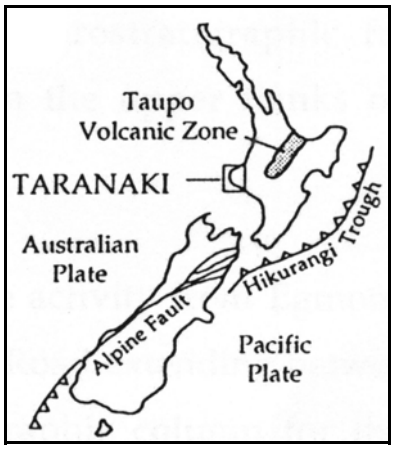
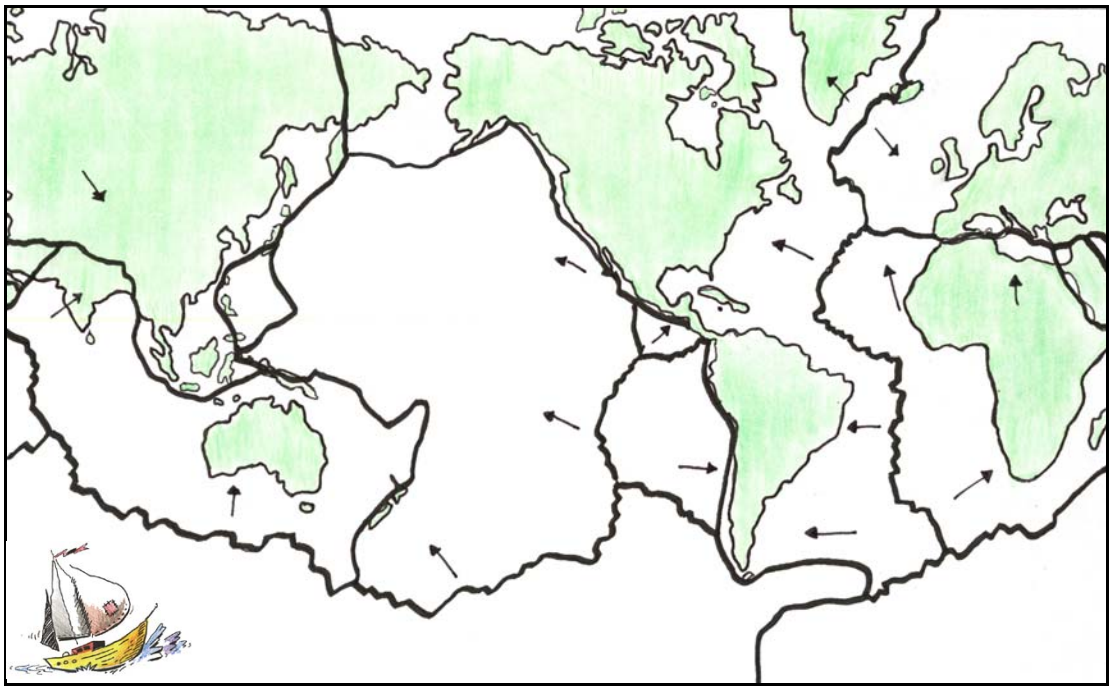
Great plates !

The earth's crust, a solid layer of rock, has been moving for 4.5 billion years. No wonder it's cracked.

It's broken into about a dozen massive plates and several smaller ones. Together they form a cracked shell right around the earth. These edges are the **weak parts** in the earth's crust. Most volcanoes on land are found along these edges.

When the great **tectonic plates** move, the rocks on the earth's surface move too. We get an earthquake. Volcanoes happen when the plates collide, pull apart and cause **magma** to rise to the surface.





Volcanoes also happen over hotspots and where one plate dives under another causing **magma** to rise to the surface.

Most underwater volcanoes are found where plates are spreading out from their middles. Most of the volcanic activity on planet earth is in these sites.

New Zealand sits on **The Ring of Fire**. It's a great arc of volcanoes that circles the whole Pacific Ocean.

The Ring of Fire marks the edge of a huge plate of rock called the **Pacific Plate**. This plate is the bed of the Pacific Ocean.

Magma is molten rock from inside the earth's crust or mantle.
Lava is this magma reaching the surface in an eruption.

Mark these features on the map

- The Ring of Fire
- Six large cities in the world **that are more likely** to experience earthquakes or volcanic activity.
- Three places in New Zealand that are **more likely** to experience volcanic activity or earthquakes.

Are all volcanoes mountains? Find out!