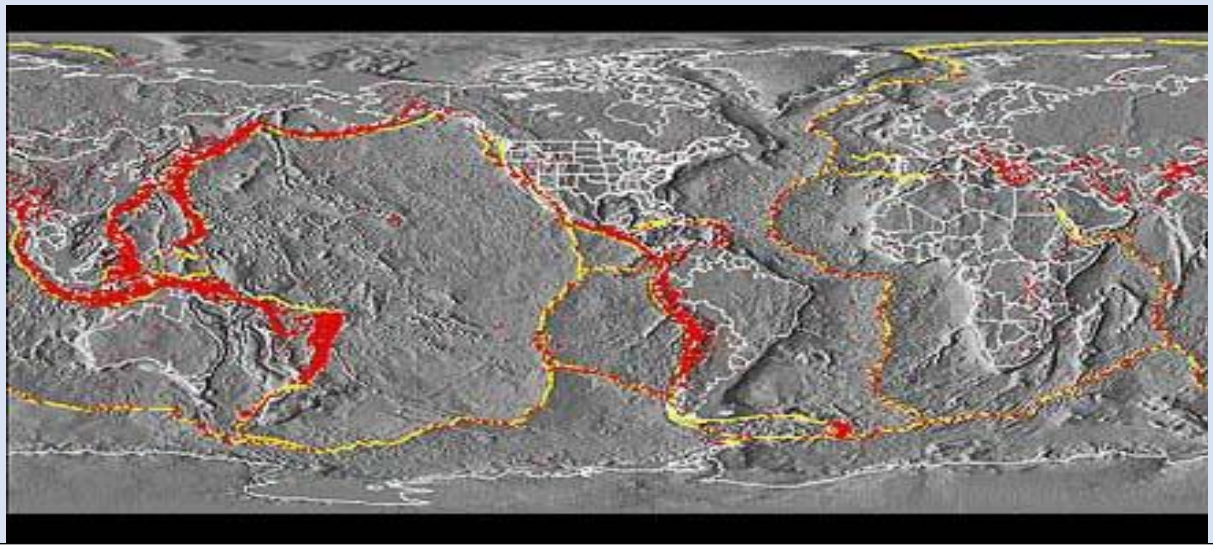
Tectonic Plates

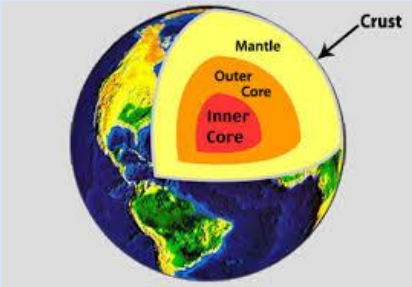
The Earths' crust that we live on is a patchwork of gigantic plates. Imagine a hard-boiled egg. Think of the egg shell as our Earths' crust. Now crack that egg shell. Not too much, just a little. Now you can imagine what the tectonic plates look like.

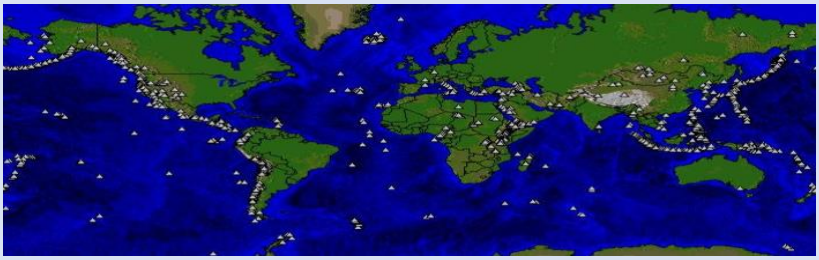
Although the ground we walk on feels solid beneath our feet, the crust of the Earth is fractured like the cracked shell of an egg. It is the pieces of the shell that are called tectonic plates.

There are 12 major plates and they float across a layer of soft molten rock.



This map, which shows 20th-century earthquakes in red, illustrates how they cluster on the edges of the major tectonic plates (outlined in yellow).





There are also lots of minor plates. Almost like the skin of the planet.

They constantly move around the planet, but don't worry, its only centimetres each year. You cannot see it happening.

Or maybe you can?

You could watch it happen if you watched an **earthquake**.

Do They Really Float?

These plates make up the top layer of the Earth called the **crust**. Directly under that layer is the **mantle**. It's a flowing area of solid and molten rock. There is constant heat and radiation given off from the centre of the Earth. That energy is what constantly heats the rocks and melts them. The tectonic plates are **floating** on top of the molten rock and moving around the planet. Think of it as ice floating at the top of your soda. When the continents and plates move it's called continental drift.

You could try making tectonic plates for yourself.

All you need is a polystyrene cup and a bowl of water.

Break up the cup and float the pieces on top of the water. You will have to imagine that the pieces of cup are the tectonic plates and the water is the magma which is in the layer of the Earth called the mantle.

Knowing about tectonic plates will help us understand how volcanoes are formed.

Next Stop –