



### What I might already know:

The Earth is made up of different layers

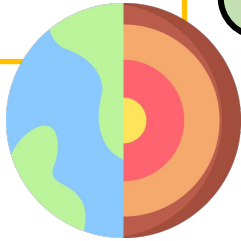
Mountains are created through the movement of tectonic plates

### Key Vocabulary:

Volcano, Earthquake, tectonic plates, core, mantle, crust, eruption, Pacific, Ring of Fire,

### What we will be learning:

The Earth has an outer solid **crust**, a highly viscous **mantle**, a liquid **outer core**, and a solid **inner core**.



What lies beneath the surface of the Earth?

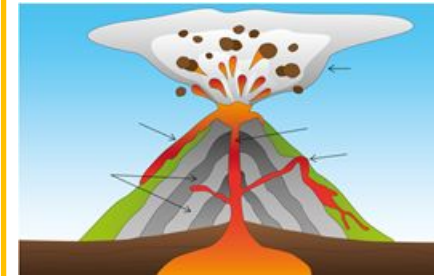
What is the structure of a volcano?

**magma chamber** - this is where the molten rock is stored beneath the ground

**central vent** - this is the channel where the magma travels to reach the Earth's surface

**side vent** - some magma may escape through the side of the volcano, particularly if the main vent becomes blocked

**crater** - this is found at the top of the volcano, where the magma erupts from



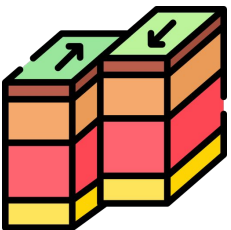
What is an earthquake?



An earthquake is the shaking and vibration of the **Earth's crust** due to movement of the Earth's **tectonic plates**.

The Earth's tectonic plates move in different ways; some slide past each other causing **friction** to build up or they move towards each other causing a build up of **pressure**. When these forces are released, they produce a violent jolt, which shakes the land.

What happens when the Earth's plates meet?



The Earth's crust is made up of **tectonic plates**.

The plates **move** as the hot mantle flows beneath them.

The movement of the plates **causes** earthquakes and leads to volcanoes erupting.

Where do earthquakes happen?



Earthquakes usually happen on the edge of **tectonic plates**. Over 80% of the large earthquakes occur around the edges of the Pacific Ocean. This area is known as '**The Ring of Fire**'.