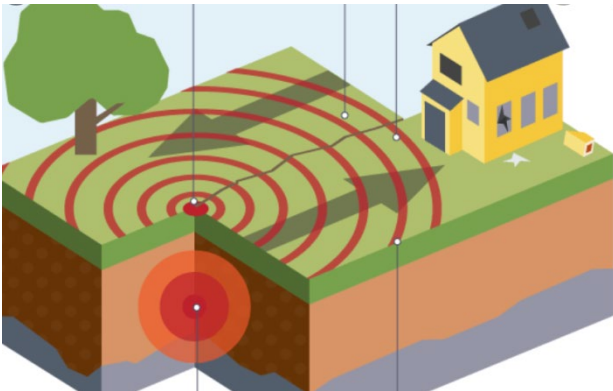


Earthquake

How is an Earthquake formed? The Earth's crust and the top of the mantle have about twenty tectonic plates, which are like jigsaw pieces covering the Earth. These plates are always moving and bumping into each other. The edges of the plates are called 'plate boundaries', which are made up of faults. These faults are where most of the world's earthquakes occur. As the plates move, the edges get stuck because they are not smooth, but the rest of the plate keeps moving. When the force is too much, it slips and bumps and that causes an earthquake. A bit like when you pull something which gets caught, you pull it some more until it comes free with a big force. Complete the following experiment to find out more about how an Earthquake occurs.

Key vocabulary:

- * Tectonic plates
- * Mantle
- * Plate boundaries
- * Earth's crust



What you will need:

- * Soil
- * Tray
- * Two cloths
- * Block or plastic houses from a board game

Method:

1. Lay the strips of cloth beside each other inside the tray. Make sure each cloth is long enough to have some hanging over the sides of the tray. The strips of cloth need to be almost touching with no space between them. The cloth represents two different plates.
2. Place a layer of soil on top of the cloth strips inside the tray. This represents the Earth's crust.
3. Put the houses on top of the soil. Make sure you have some houses near or on top of where the strips of cloth almost meet.
4. At the same time, pull one of the overhanging cloth strips towards you and the other away. The 'fault line' will be shown and the effects on the Earth's crust and the houses will be similar to a real earthquake.