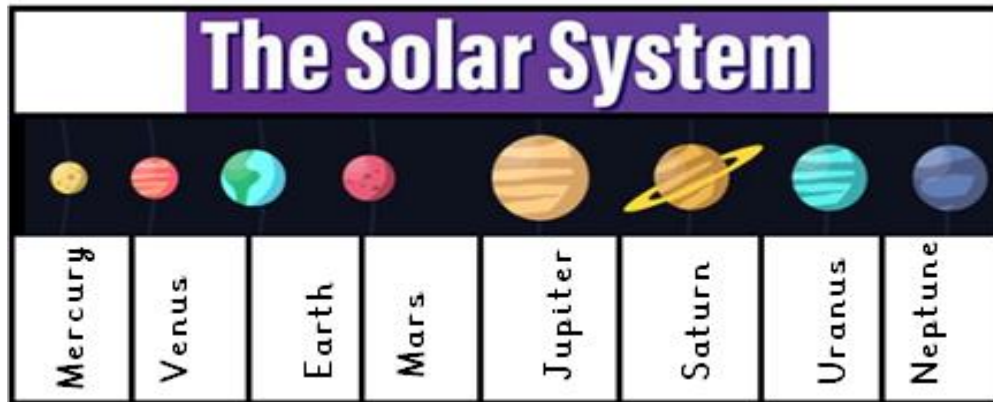


# Our Wonderful World - Science



## Space



The Earth, Sun and Moon are all roughly **spherical** because of their **gravity**.

Their gravitational pull occurs equally from the centre – like the spokes of a bicycle wheel.

**lunar** - "relating to the Moon"

**orbit** - a repeated path that an object takes around another object.

**rotation** - the motion of an object around an internal axis.

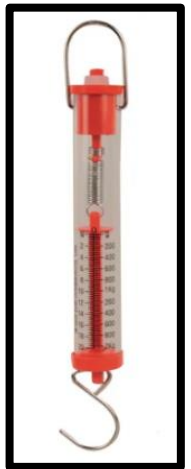
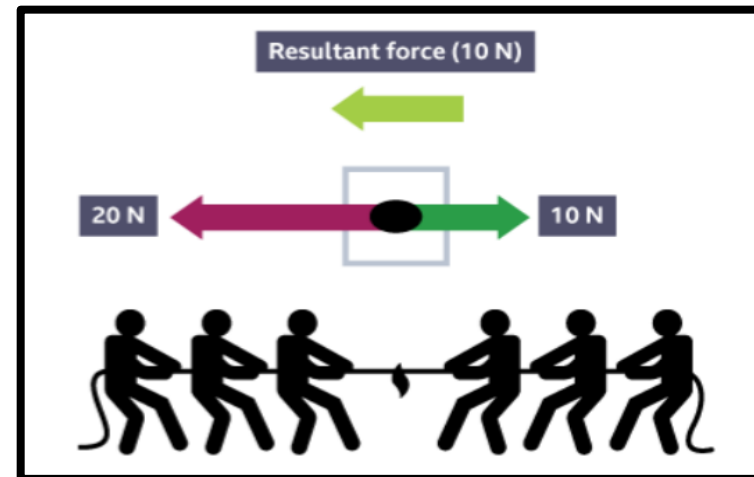
**Solar System** - the solar system consists of the Sun and everything that orbits, or travels around, the Sun.

**spherical** - more or less round, in three dimensions.

Apples and oranges are typically,

## Forces

A **Newton meter** is a piece of equipment that is used to **measure the forces** acting on an object. It is also known as a spring balance or spring scale.



**friction** - a force between two surfaces that are sliding or trying to slide

**gravity** - the force that pulls all objects towards each other.

**mechanisms** - a tool or machine that is used to convert or control motion (movement), or transmit control or power

**resistance** - a force that slows down or opposes another force.

# Our Wonderful World - Geography



Our planet, Earth, is made up of layers—see diagram below.

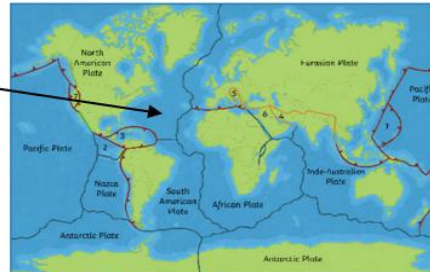
The outer crust is like a jigsaw puzzle, lots of individual pieces fitting together but able to move. These are called tectonic plates.

The movement of these plates cause a range of natural disasters.

Natural disasters are events caused by nature, such as floods, tsunamis, volcanic eruptions, tornadoes and earth quakes.

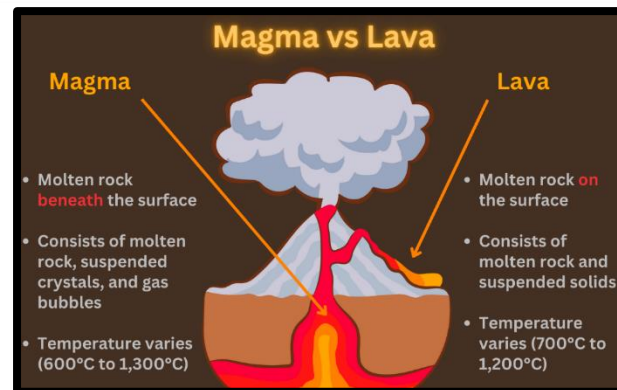
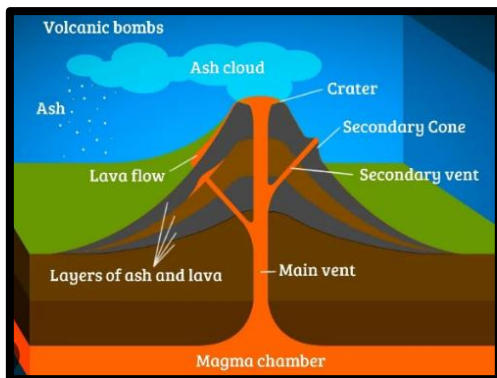
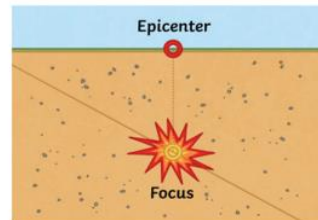
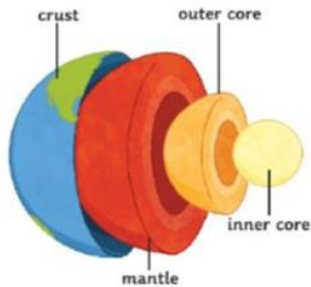
These events can cause great financial hardship in the communities they occur in. They can also result in loss of life,

Most tectonic activity is along plate margins and on the edge of continents. Some volcanoes form over hotspots in the mantle eg. Hawaii.



## What Is an Earthquake?

When the plates jerk past each other they send out shock waves from the focus. The epicentre is directly above the focus on the earth's surface.



**aftershock** - minor tremors usually after the main shock of an earthquake  
**ash cloud** - a cloud of ash formed by volcanic explosions

**dormant** - volcanoes that have not erupted for a long time but are expected to erupt in the future.

**eruption** - an act or instance of erupting

**foreshock** - minor tremors usually before the main shock of an earthquake

**lava** - molten rock that breaks through the earth's surface.

**magma** - hot fluid or semi-fluid material below or within the Earth's crust

**molten rock** - liquid rock at extremely high temperature.

**Moment Magnitude Scale (MMS)** - a way to measure large earthquakes.

**natural disaster** - a natural event that causes great damage or loss of life.

**tectonic plates** - outer layer of the Earth is called the crust and it is broken into large pieces