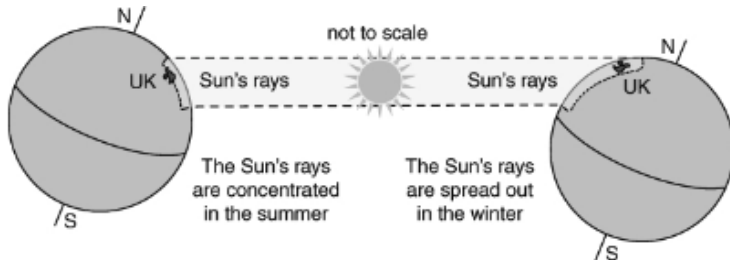


Earth and Space

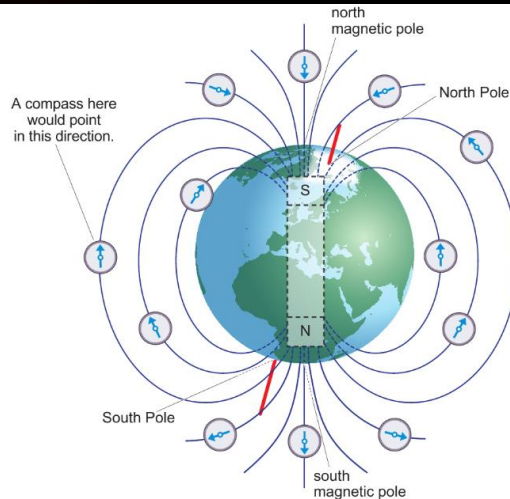


The mass of something is the amount of substance or 'matter'
 Weight is the force of gravity pulling on a mass. It is a force.
 Gravity is the force of attraction between two masses.
 You can calculate the weight of an object using this formula:
 $weight (N) = mass (kg) \times gravitational\ field\ strength (N/Kg)$

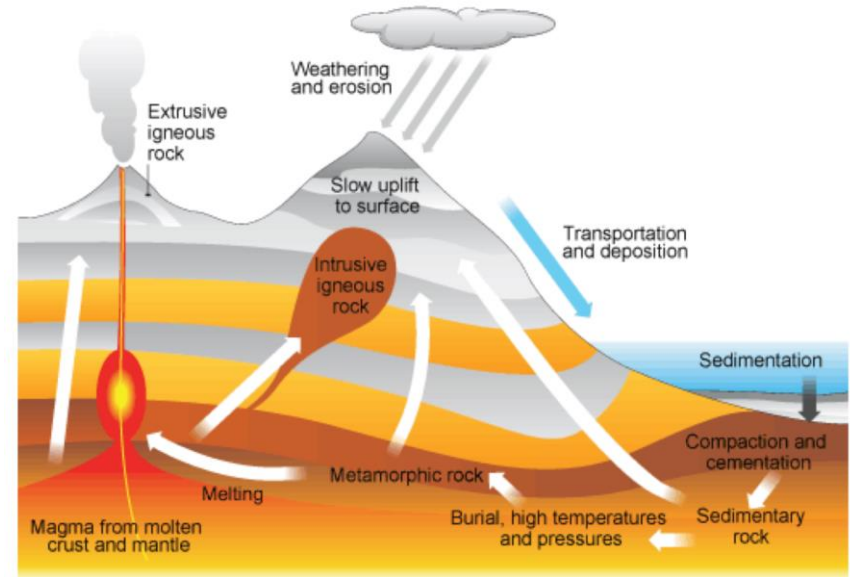


The Solar System is made up of:

- Planets
- The Sun
- Asteroids
- Comets
- Gas and dust clouds
- Satellites



The Rock Cycle



Chemical weathering happens when acidic rain water reacts with minerals in the rock.

Physical weathering happens because of temperature changes. The minerals in a rock expand if the rock gets hot, and contract if it cools. These changes in size can produce strong forces. If the rock is heated and cooled over and over again, the forces can make cracks in the rock. This is called **onion-skin weathering**.

Physical weathering can also happen if water gets into a crack. Water expands when it turns into ice, and makes the crack wider. This is called **freeze-thaw action**.

Biological weathering is when rocks are broken up or worn away by plants and animals. For example, plant roots can grow into cracks in rocks and make the cracks bigger.

Vocabulary:

Cement - A building material made using limestone and other materials. It also means 'to stick things together'

Granite - A type of igneous rock with large crystals

Interlocking - When crystals fit together with no gaps between them.

Limestone - A sedimentary rock made from the shells of dead sea creatures. It consists mainly of calcium carbonate

Permeable - Permeable rocks let water soak through them.

Quartz - The mineral that forms the grains in sandstone.

Sandstone - A sedimentary rock made out of grains of quartz.

Igneous - Rock made from interlocking crystals that are not in layers. Formed when magma or lava cooled down and solidified

Metamorphic - A rock formed from interlocking crystals that are often lined up in layers. It is formed when existing rocks are heated or compressed.

Marble - A metamorphic rock formed from limestone.

Mudstone - A sedimentary rock made of tiny particles

Sedimentary rock - A rock formed from grains stuck together. The grains are often rounded.

Elliptical - oval-shaped

Hemisphere - Half of a sphere – the shape you would get if you cut a solid ball in half

Attract - Two things pulling towards each other.

Repel - Push away.

Gravitational field - The space around the Earth where the Earth's gravity affects things.

Weight - The amount of force with which gravity pulls things. It is measured in newtons (N). Your weight would change if you went into space or to another planet

Constellation - A pattern of stars.

Light year - The distance that light travels in one year.

Videos



Quizzes

