



Year 5 Properties and changes of Materials: Sticky Knowledge Mat



Prior Knowledge- Earth and Space.

To know that the moon orbits the Earth every 28 days and the Earth orbits the sun every 365 days

Describe the Earth and Moon and the sun (including their sizes and the word spherical).

Know information about the specific planets.

Be able to use the idea of the Earth's rotation to explain day and night and a rotation takes 24 hours.

Know about and explain the movement of the Moon relative to the Earth.

Important facts about Materials

Irreversible changes cannot be undone. For example, when vinegar and bicarbonate of soda are mixed or a material is burnt.

Reversible changes, like melting, freezing and dissolving, can be changed back again.

Some mixtures can be separated by methods like filtering, sieving and evaporating.

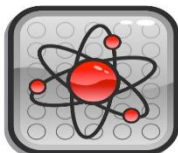
Mixing certain substances can cause an irreversible change

Materials have different properties such as conductivity and transparency etc which make them suitable or unsuitable for purpose.

Materials can be compared and grouped together based on their properties.

Exciting websites

RSC- Royal Society of Chemistry
BBC Bitesize and
Terrific Scientific
Explorify



Subject Specific Vocabulary

solution

A liquid in which a solid substance has been dissolved

evaporation

Substance in a liquid state changing to a gaseous state

filtering

To pass through a device which is designed to remove certain particles contained in it.

properties

Characteristics of different materials that make them suitable for purpose.

separate

To break into parts or to keep apart.

dissolve

Breaking down of a material in to tiny particles to make a solution

sieving

To separate a powder or a liquid by passing it through a sieve

mixing

Combining substances that do not dissolve

reversible

Materials can be changed temporarily and returned to their original state.

irreversible

Materials are changed permanently and a new substance is made.

