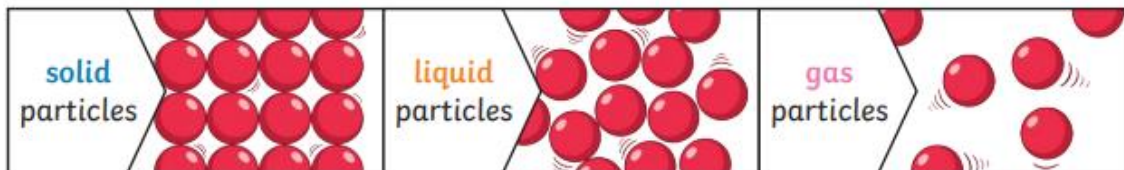


Knowledge Organiser Year 5 Science: Properties and changes of materials

Key Vocabulary

solid	One of the three states of matter. Solid particles are very close together, meaning solids, such as wood or glass hold their shape.
liquid	Particles are more loosely packed than solids and can move around each other. This state of matter can flow and take the shape of their container e.g. milk is a liquid.
gas	Gas particles are further apart than solid or liquids and they are free to move around. Oxygen is a gas.
transparent	A material which lets light through e.g. glass
translucent	A material which allows some light through
opaque	A material which does not let light through
flexible	How a material bends, stretches
conductor	Electricity can easily travel through
insulator	Does not allow heat or electricity to travel through

Changes of state: Materials can change into solids, liquids and gases when heated or cooled.



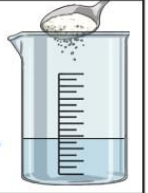
Concept: Chemistry

Key knowledge: materials are the substance that something is made out of. Different materials are used for particular jobs based on their properties: electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, transparency

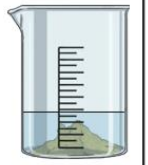
Dissolving

A solution is made when **solid** particles are mixed with **liquid** particles. **Materials** that will dissolve are known as soluble. **Materials** that won't dissolve are known as insoluble. A suspension is when the particles don't dissolve.

Sugar is a soluble **material**.



Sand is an insoluble **material**.



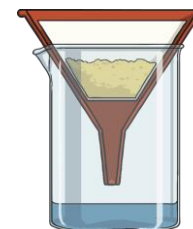
Irreversible changes results in a new product being made e.g. burning wood, mixing vinegar and milk.

Reversible changes (such as mixing and dissolving liquids and solids together) can be reversed by **separating** materials using these methods ...

sieve



filter



evaporate

