

Year 5 Merlins

Science

Autumn 2

Materials

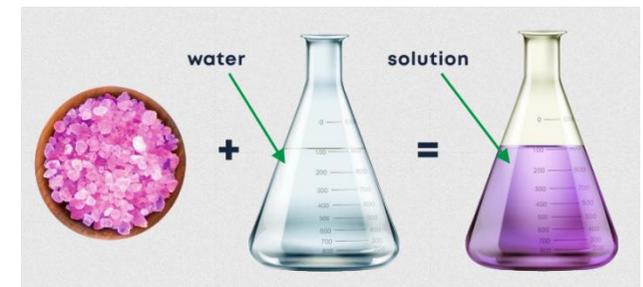
Properties of materials.

Different materials have different **properties**, and this is what makes them useful for different **purposes**.
 Glass is good for windows, as it can be **transparent** (completely see through) or **translucent** (slightly clouded).
 Copper is good for electrical wires because it is a good **conductor**.
 Aluminium is good for cutlery because it is **strong** and **non-porous**. However, it also **conducts** heat when used for very hot foods.

Key Vocabulary	Definition
conductive	Having the property of conducting (allowing a flow of) something (especially heat or electricity).
density	The degree of compactness of a substance.
insulator	A substance which does not readily allow the passage of heat or sound.
opaque	Not able to be seen through; not transparent.
properties	An attribute, quality, or characteristic of something.
soluble	(Of a substance) able to be dissolved, especially in water.
thermal	Relating to heat.
transfer	Move from one place to another.
translucent	(Of a substance) allowing light, but not detailed shapes, to pass through; semi-transparent.
transparent	(Of a material or article) allowing light to pass through so that objects behind can be distinctly seen.
variable	Any factor that can be controlled, changed, or measured in an experiment.
viscosity	The state of being thick, sticky, and semi-fluid in consistency, due to internal friction.
volume	The amount of space that a substance or object occupies, or that is enclosed within a container.

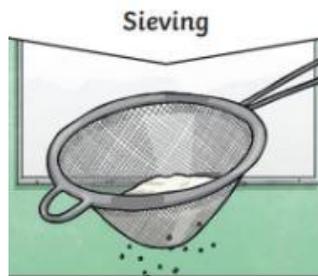
Solutions

A solution is a mixture of two or more substances that stays evenly mixed. Substances that are combined to form a solution do not change into new substances.



Reversible Changes

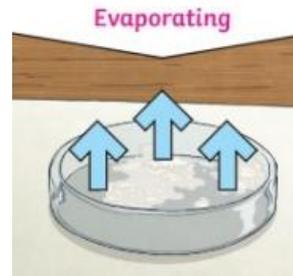
Reversible changes, such as mixing and dissolving solids and liquids together, can be reversed by;



Smaller particles fall through, separating from larger ones.



Solid particles get caught in the filter, liquid passes through.



Liquid changes to a gas, leaving solid particles behind.

How to reverse a reaction

