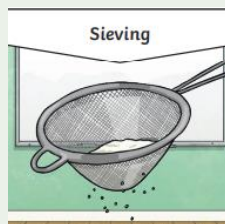


Vocabulary

matter	Any solid, liquid or gas that exists in the universe
particle	A very small piece of matter
properties	A quality in a substance or material, especially one that means it can be used in a particular way.
chemistry	the study of the structure of substances
physics	branch of science concerned with the nature and properties of matter and energy
thermal	relating to or caused by heat or by changes in temperature
conductivity	a measure of the ability of a substance to conduct heat or electricity
insulation	is a thick layer of a substance that keeps something warm, especially a building, or cold
dissolvable	If a substance dissolves in liquid or if you dissolve it, it becomes mixed with the liquid and disappears.
Insoluble	If a substance is insoluble , it does not dissolve in a liquid.
Saturation point	the point at which no more can be absorbed or dissolved
Filtering	To filter a substance means to pass it through a device which is designed to remove certain particles contained in it.

Key Knowledge

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



Smaller materials are able to fall through the holes in the sieve, separating them from larger particles.



The solid particles will get caught in the filter paper but the liquid will be able to get through.



The liquid changes into a gas, leaving the solid particles behind.

Irreversible changes often result in a new product being made from the old materials (reactants). For example, burning wood produces ash. Mixing vinegar and milk produces casein plastic.



States of Matter

solid	liquid	gas
● rigid	● not rigid	● not rigid
● fixed shape	● no fixed shape	● no fixed shape
● fixed volume	● fixed volume	● no fixed volume
cannot be squashed	cannot be squashed	can be squashed
Solid (at room temperature)	Liquid (at room temperature)	Gas (at room temperature)
Wood Iron Copper Plastic	water milk blood oil	oxygen carbon dioxide nitrogen steam

