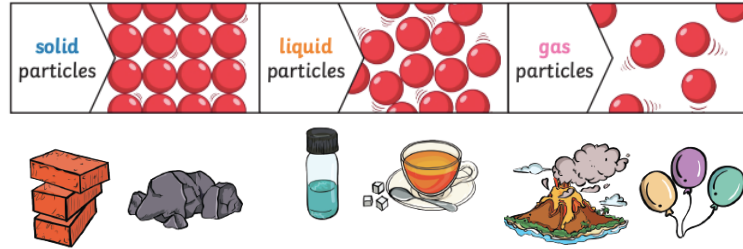




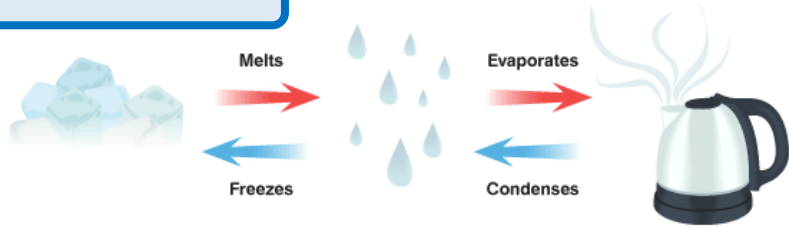
Working together to be the best that we can be

Golden Thread: Sustainability

Different materials are used for particular jobs based on their properties: electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, thermal conductivity, transparency.



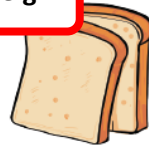
Changes of state



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

Irreversible changes are when you cannot get the original materials back again. Heating and chemical reactions can both cause irreversible changes.

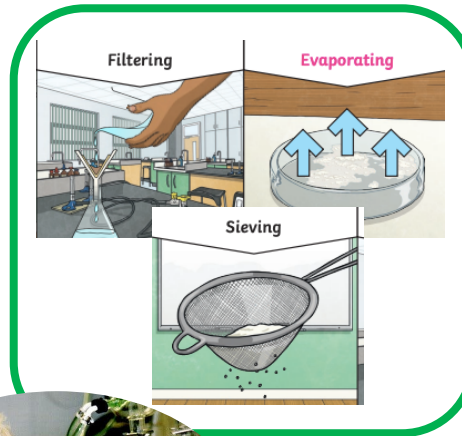
e.g.



making toast



baking a cake



Key Vocabulary

materials	The substance that something is made out of, e.g. wood, plastic, metal.
solids	One of the three states of matter. Solid particles are very close together, meaning solids, such as wood and glass, hold their shape.
liquids	This state of matter can flow and take the shape of the container because the particles are more loosely packed than solids and can move around each other. Examples of liquids include water and milk.
gases	One of the three states of matter. Gas particles are further apart than solid or liquid particles and they are free to move around. A gas fills its container, taking both the shape and the volume of the container. Examples of gases are oxygen and helium.
melting	The process of heating a solid until it changes into a liquid.
freezing	When a liquid cools and turns into a solid.
evaporating	When a liquid turns into a gas or vapour.
condensing	When a gas, such as water vapour, cools and turns into a liquid.
conductor	A conductor is a material that heat or electricity can easily travel through. Most metals are both thermal conductors (they conduct heat) and electrical conductors (they conduct electricity).
insulator	An insulator is a material that does not let heat or electricity travel through them. Wood and plastic are both thermal and electrical insulators.
transparency	A transparent object lets light through so the object can be looked through, for example glass or some plastics.

Did you know?

Dr Ruth Benerito created wrinkle-free cotton which is considered one of the most significant technological developments in the 20th century.

