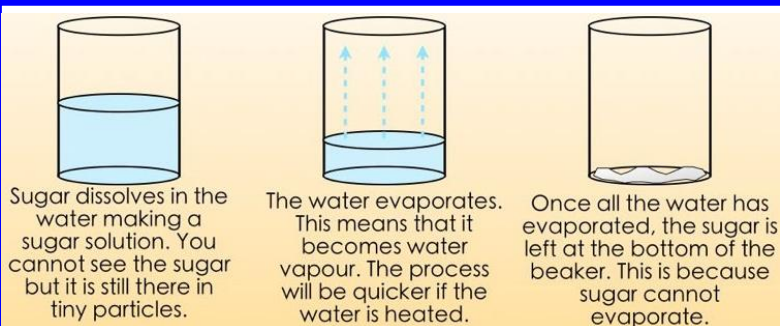
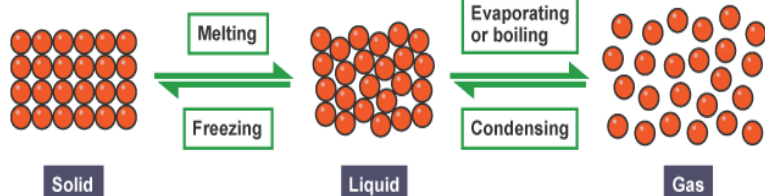
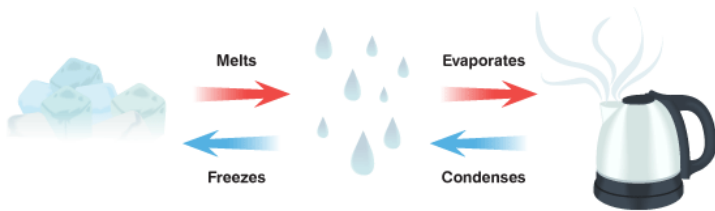




Key Questions

How can I explain that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution?

Can I compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets?

How do I use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating?

What do I need to know to demonstrate that dissolving, mixing and changes of state are reversible changes?

Am I able to explain that some changes result in the formation of new materials, and that including changes associated with burning and the action of acid on bicarbonate of soda. this kind of change is not usually reversible?

Key Vocabulary to learn

conductor – A material or device which allows heat or electricity to carry through

dissolve – When something solid mixes with a liquid and becomes part of the liquid

evaporation – The process of turning from liquid to vapour

flexible – Capable of bending easily without breaking

gas – An air-like fluid substance which expands freely to fill any space available

insulator – A substance which does not readily allow the passage of heat or sound

irreversible – Cannot be reversed back to its original state

liquid – A substance that flows freely but can be measured by volume e.g. water or oil

magnetic – Capable of being magnetised or attracted by a magnet

material – The matter from which a thing is or can be made from

opaque – Not able to be seen through, not transparent

reversible – Able to be reversed back to its original state

solid – Firm and stable in shape, not a liquid or fluid

soluble – Able to be dissolved, especially in water

thermal – Relating to heat

transparent – Allows light to pass through so that objects behind can be seen

Did you Know?

Burning, rusting, and cooking are permanent changes. They cannot be undone by reversing the conditions that brought them about.

Melting and boiling are reversible changes produced by heat. Steam from a boiling kettle condenses back into drops of water when it comes into contact with a cold surface, such as a window.

Rusting is a chemical reaction between iron, oxygen, and water

Properties and Changes of Materials Year 5

