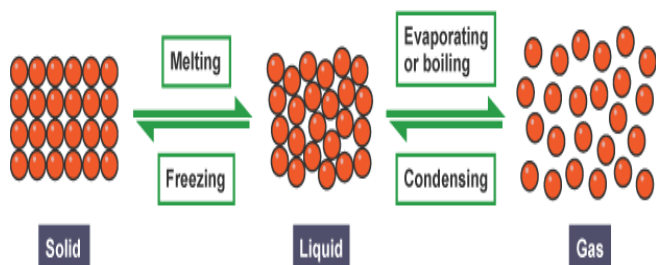


Science Topic : Materials and their Properties Year 5 Term 1

Key Knowledge
To understand:
<ul style="list-style-type: none"> the states of matter: solid, liquid and gas the meaning of the terms opaque, thermal, transparent, flexible, insulator, soluble, waterproof, conductor, translucent, shiny, permeable, absorbent, rigid, natural, hard that objects are made from materials according to their suitability/properties that some materials are attracted to magnets and others are not that conductors let energy flow through them (for example, electrical or thermal energy). that heat energy travels through solids because of conduction. that materials that do not conduct heat well are heat insulators. the difference between reversible and irreversible change the difference between soluble and insoluble substances the difference between filtration, evaporation and sieving to separate substances

Key Vocabulary	
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 it
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 electricity
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



Sugar dissolves in the water making a sugar solution. You cannot see the sugar but it is still there in tiny particles.

The water evaporates. This means that it becomes water vapour. The process will be quicker if the water is heated.

Once all the water has evaporated, the sugar is left at the bottom of the beaker. This is because sugar cannot evaporate.