



Ettington Primary School Knowledge organiser Properties of materials

Year 5

Vocabulary

Solid- Firm shape or form that can be measured in length, width, and height not like a liquid or gas. Tightly packed molecules.

Liquid- no defined shape, takes the shape of its container. Particles free to move over each other.

Gas- easy to compress, expand to fill containers and occupy more space than liquids or solids.

transparent- You can see through it

Soluble- able to be dissolved

Insoluble - cannot be dissolved.








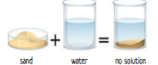








Conductor- a substance that heat or electricity can pass along or through.

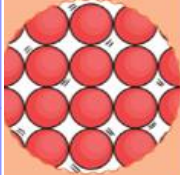
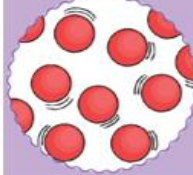
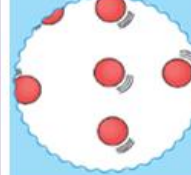
Filtering- a device used to remove dirt or other solids from liquids or gasses.

Evaporation- turn liquid into a gas; pass away in the form of vapour.

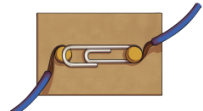
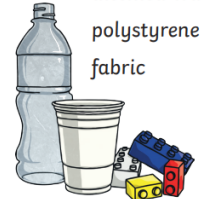
Condensation- small drops of water which form when water vapour or steam touches a cold surface.








Reversible- can be changed back e.g. ice to water.

flexible bends easily without breaking 	brittle hard but can break easily 	malleable able to be shaped without breaking 	rigid unable to bend; stiff 
fragile easily broken or damaged 	absorbent soaks up liquid easily 	soluble can be dissolved, especially in water 	insoluble cannot be dissolved 
transparent allows light to pass through 	translucent allows some light to pass through 	opaque does not allow light to pass through 	magnetic attract objects made of iron or steel 
permeable allows liquids to pass through it 	impermeable does not allow liquids to pass through 	insulator does not allow heat and/or electricity to travel through 	conductor allows heat and/or electricity to travel through 

Solid  Particles are tightly packed - usually a regular pattern	Liquid  Particles are close together - no regular pattern	Gas  Particles are well separated - no regular pattern
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Melting and dissolving
Melting is a change of state from solid to liquid, while dissolving is when a substance (solute) breaks down into tiny particles and mixes with a liquid (solvent) to form a solution

	Good Conductors allow energy to pass through Metals e.g. copper, silver, gold, iron, steel, aluminum tap water 	Insulators stop or slow down energy rubber wood plastic glass paper cotton 
Electrical		

Reversible <ul style="list-style-type: none"> ✓ States of matter  ✓ Solid + Liquid  ✓ Solid + Solid  ✓ Soluble solid + Liquid 	Irreversible <ul style="list-style-type: none"> ✗ Burning  ✗ Rusted metals  ✗ Heating food  ✗ Mixed ingredients 
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