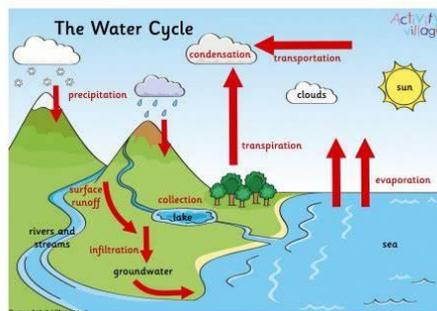


Knowledge Organiser UKS2 Science - Properties and Changes of Materials

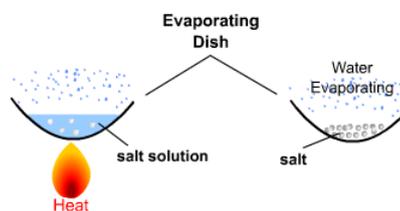
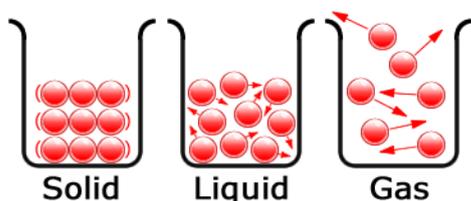
What Should I Already Know About This Topic?

- How the shape of solids can be changed by squashing, bending, twisting and stretching.
- What solids, liquids and gases are.
- Some materials change states between solids, liquids and gases when their temperature is changed.
- The processes of the water cycle:



Key Vocabulary

Condensation	Small drops of water which form when water vapour or steam touches a cold surface.
Dissolves	When a substance is mixed with a liquid and it disappears.
Evaporation	To turn a liquid into a gas.
Filtering	To pass (a liquid, gas, light, or sound) through a device to remove unwanted material.
Solid	A substance with a firm shape.
Liquid	A substance that flows easily.
Gas	A substance that spreads out and can often be invisible to the naked eye.
State	Whether something is a solid, liquid or a gas.
Properties	The way an object behaves.
Particles	A tiny amount of something.
Soluble	Something can be dissolved.
Insoluble	Something cannot be dissolved.
Solution	A mixture that contains two or more substances i.e salt and water.
Temperature	How hot or cold something is.
Carbon Dioxide	A gas consisting of carbon and oxygen.
Sieving	One way of separating materials.
Yeast	A product essential in the chemical reaction of making bread.
Reaction	A chemical process in which substances act mutually on each other and are changed into different substances, or one substance changes into other substances.



Key Facts

- A change that is **reversible** means a substance that has been changed can be changed back into its original state. There has not been a chemical reaction.
- A change that is **irreversible** means a substance that has been changed cannot be changed back into its original state. This is due to a chemical reaction.
- Some materials will dissolve in a liquid to form a solution.
- Chemical reactions are essential in cooking and baking everyday products.
- Some materials can be separated after they have been mixed based on their properties.
- Some methods of separation include the use of a magnet, a filter, a sieve and evaporation.

