Leamington Primary School Knowledge Organiser: Year 5 - Changes of Materials

Careers connected to changes of materials: laboratory technicians, technical associates, research analysts, chemistry teachers.

Lesson Sequence

1. Use evaporation to recover the solute from a solution

2. Recognise and describe reversible changes

3. Observe chemical reactions and describe how we know new materials are made

4. Investigate rusting reactions

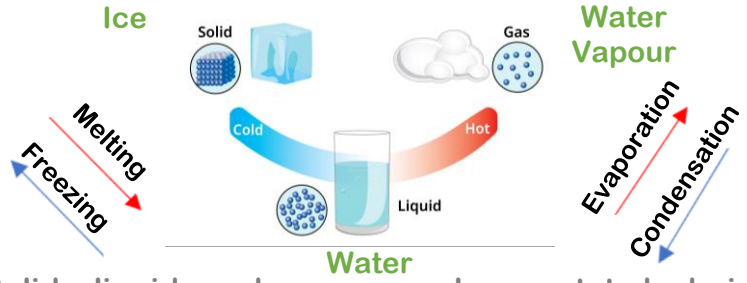
5. Investigate burning reactions

6. Investigate chemical reactions - acids and bicarbonate of soda

Evaporation

If a solid has **dissolved** in water (for example in a salt solution), **heating** it causes the water to **EVAPORATE**, leaving the solid (salt) behind.

Changes of State



Solids, liquids and gases can change state by being **heated** or **cooled**.

Irreversible Changes




These are **CHEMICAL** changes – they **cannot** be reversed as a new material has been made.

Reversible Changes

liquid chocolate
– cool –
solid cholate

solid lolly
– heat –
liquid lolly

mixture of rice and flour
– sieve –
both separated

dissolved sugar
– evaporation (heat) –
solid sugar

These are **PHYSICAL** changes – they **can** be reversed as no permanent change has been made.