

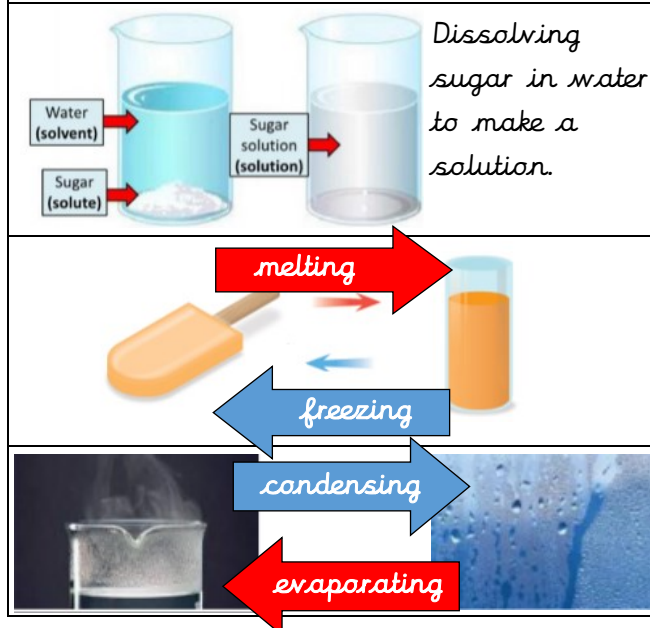
### Can I still recall...?

- Name and describe everyday materials and their simple physical properties?
- How can materials be shaped?
- Name some magnetic materials?
- How do magnets and electrical circuits work?
- Explain what happens when a material is heated or cooled?
- What is the role of evaporation and condensation in the water cycle?

### Vital Vocabulary

|                              |                                                                |
|------------------------------|----------------------------------------------------------------|
| <b>Dissolve</b>              | A solid that completely mixes with a liquid and can't be       |
| <b>Solution</b>              | A mixture of a liquid with a dissolved solid or gas..          |
| <b>Soluble</b>               | Solids and gasses that will dissolve in a liquid.              |
| <b>Insoluble</b>             | Solids that do not dissolve in liquid,                         |
| <b>Condensing</b>            | When a gas such as water vapour cools and turns into a liquid. |
| <b>Evaporating</b>           | When a liquid turns into a gas or vapour                       |
| <b>Reversible change</b>     | Changes that can be switched back and are not permanent        |
| <b>Non-reversible change</b> | Changes that cannot be reversed back to their original.        |

### Reversible Changes



**Non-reversible changes** - these result in the formation of new material

**Burning**



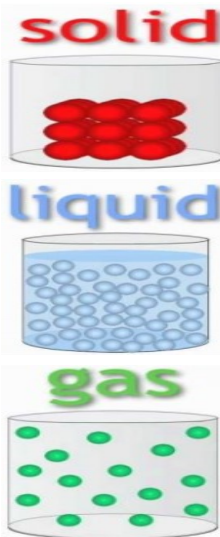
**Cooking an egg**



**Rusting**



**States of matter**



### Key Questions

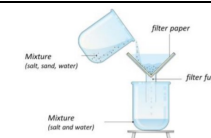
- How can you compare and group materials based on their properties?
- Which materials will dissolve in a liquid?
- How can you separate a dissolved material?
- Why are certain materials used for particular jobs?
- Explain how some changes of state are reversible?
- Explain how some changes of state result in the formation of new materials and cannot be reversed?

### Separating Materials

**Sieving** separates smaller materials from larger materials by passing them through a sieve.



**Filtering** to separate a solid from a liquid by passing it through filter paper.



**Evaporating** liquid changes into a gas leaving solid particles behind



**Materials can be grouped together based on their properties**

- |                |                           |
|----------------|---------------------------|
| • Hardness     | • Thermal conductivity    |
| • Solubility   | • Electrical conductivity |
| • Transparency | • Response to magnets     |