



## Facts

A material is any substance which has a name. Wood, iron, water, plastic, rubber and stone are all different types of materials. When you choose to make something, you need to choose the best material for the job.

Salty water can be heated over a Bunsen burner to evaporate the water out of the mixture to leave the salt in the container.

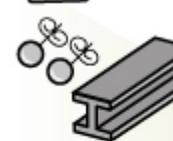
Magnets have north poles and south poles. These attract each other. But two north poles will repel each other, as will two south poles.

## Key skills

To work scientifically

To investigate materials:

- To be able to compare and group together everyday materials based on their hardness, solubility, conductivity and response to magnets.
- To understand how some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.
- To decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Give reasons for the particular uses of everyday materials, including metals, wood and plastic.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning, oxidation and the action of acid on bicarbonate of soda.



## Key vocabulary

### **Solid-**

A solid holds its shape, it does not flow like a liquid. For example: rocks and wood.

### **Liquid-**

A liquid can flow and take on the shape of a container. For example: liquid and honey.

### **Gas-**

Gases are everywhere; they fill any size container because the molecules spread out to fill it. For example: oxygen and carbon dioxide.

### **Solubility-**

This is the amount of a substance that will dissolve in another substance. For example salt into water.

### **Reversible-**

A process which is reversible is one where the previous state can be restored. For example: chocolate can be melted from a solid to a liquid and then cooled to restore it to a solid.

### **Conductivity-**

The power to conduct heat or electricity.

### **Evaporation-**

Autumn term Year 5