# Changes of materials

#### Links

In Year I we learnt about how to describe objects based on their materials.

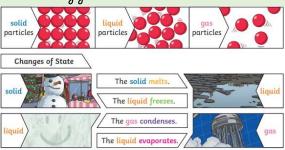
In Year 2 we learnt about the suitability of materials and how to change the shape of solids.

### Key Knowledge - States of Matter

Solids - Solid particles are very close together, meaning solids, such as wood and glass, hold their shape.

Liquids - This state of matter can flow and take the shape of the container because the particles are more loosely packed than solids and can move around each other. Examples of liquids include water and milk.

Gases - Gas particles are further apart than solid or liquid particles and they are free to move around. A gas fills its container, taking both the shape and the volume of the container. Examples of gases are oxygen and helium



### Key Vocabulary

materials - The substance that something is made out of, e.g. wood, plastic, metal.

dissolve - to mix completely with liquid

soluble - can be dissolved

insoluble - cannot be dissolved

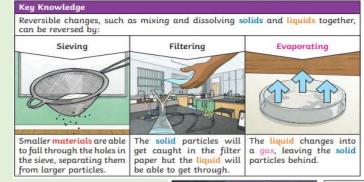
reversible - a change that can be corrected

evaporation - when a liquid turns into a gas

condensation - when a gas cools and turns into a liquid

irreversible - impossible to reverse, turn back of change

## Key Knowledge - reversible and irreversible changes





Irreversible changes often result in a new product being made from the old materials (reactants). For example, burning wood produces ash. Mixing vinegar and milk produces casein lastic.

