




Year 5 Spring 1: Properties of Materials and Reversible/Irreversible Changes

States of Matter	Properties				
	Can Be Weighed	Occupies Space	Fixed Shape	Fixed Volume	Can Be Compressed
Solids 	✓	✓	✓	✓	✗
Liquids 	✓	✓	✗	✓	✗
Gases 	✓	✓	✗	✗	✓

Reversible Changes



When some materials change, they can be changed back or reversed. Dissolving, mixing and changes of state are reversible changes.

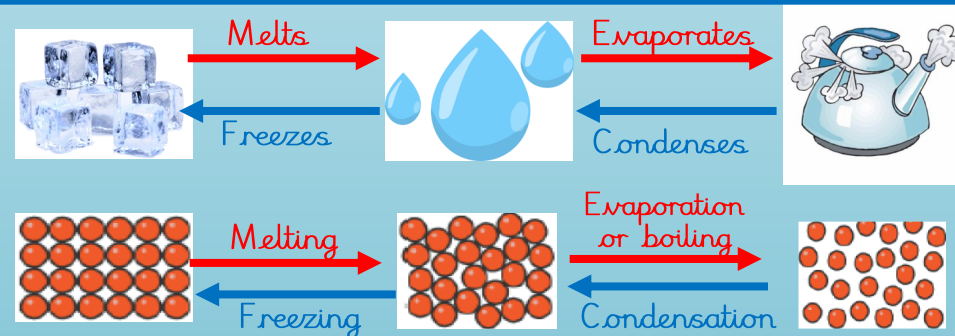
Irreversible Changes



Some changes in materials cannot be reversed. A new material is usually made from this type of change. Toasting bread is irreversible.

Change of state

This is when a material changes from being a solid to liquid, a liquid to gas, a gas to liquid or a liquid to a solid. These are reversible changes.



Dissolve

When something solid mixes with a liquid and becomes part of the liquid.

Evaporation

The process of turning from liquid to gas.

Soluble

Able to be dissolved, especially in water.

Insoluble

Solids which do not dissolve.

Melting

The process of turning from a solid to a liquid.

Rusting

An orange, reddish brown coating that forms on iron that has been exposed to air and water.

Chemical reaction

A process in which one or more substances are converted to one or more different substances (irreversible)

Magnetic

A material which is attracted to a magnet.

Conductor

A material which allows electricity to pass through it.

Insulator

A material which does not allow electricity to pass through it.

Transparent

A material which is see through.

Translucent

A material which lets light pass through but you cannot see through it.

Opaque

A material which does not let light pass through.