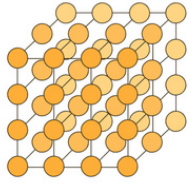


# Science

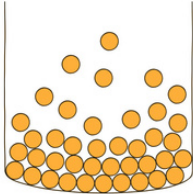
Knowledge Organiser  
Year 5  
Spring 1

States of Matter  
**SOLID**



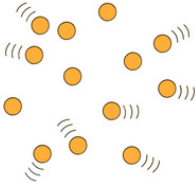
Solids are objects that keep their shape and do not flow. The molecules of solids are very close to each other.

States of Matter  
**LIQUID**













Liquids do not have their shape but can take the shape of its container. The molecules of liquids are slightly farther apart from each other.

States of Matter  
**GAS**

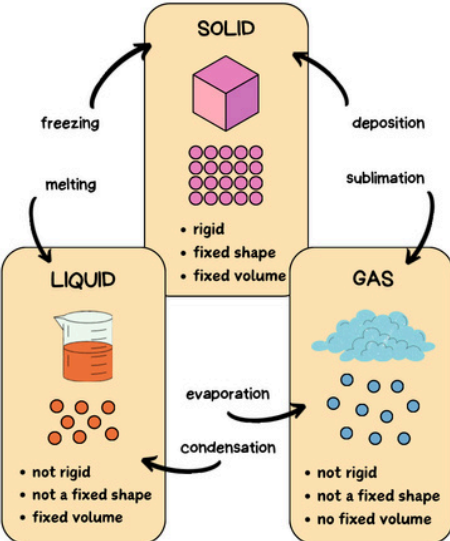


Gases can move around freely. Gases do not have their shape. Molecules of gas are very far apart from each other.

## Key Vocabulary

 thermal insulator/conductor	 filter
 electrical insulator/conductor	 sieve
 change of state	reversible/irreversible
 mixture	 burning
 dissolve	 rusting
solution	new material
 soluble	insoluble

## CHANGING STATES



**SOLID**

- rigid
- fixed shape
- fixed volume

**LIQUID**

- not rigid
- not a fixed shape
- fixed volume

**GAS**

- not rigid
- not a fixed shape
- no fixed volume

Processes: melting, freezing, evaporation, condensation, sublimation, deposition.


## REVERSIBLE

A change where matter can return to its original form is known as a reversible change.

For example:

- Melting
- Freezing
- Boiling

**These are physical changes.**




## IRREVERSIBLE

A change where matter cannot return to its original form is known as an irreversible change.

For example:

- Rusting
- Burning
- Cooking

**These are chemical changes.**



## Choosing the right material for the job

The properties of materials are the characteristics that define them. It is what makes them good at the jobs they do.

Properties	Materials
hard	plastic
soft	rock
rough	glass
smooth	metal
shiny	fabric
dull	wood
absorbent	rubber