Water

CHANGING STATE

Solids, liquids and gases are called the three states of matter. Materials can be changed from one state to another by heating or cooling.

Heating

If ice (solid) is heated, it changes to water (liquid). This change is called **melting**.

Water (liquid) can change to water vapour (gas). This is called **evaporation**.

If water (liquid) is heated until it **boils**, it changes to water vapour (gas) very quickly. Water boils at 100°C.

Cooling

If water vapour (gas) is cooled, it changes to water (liquid). This change is called **condensing**.

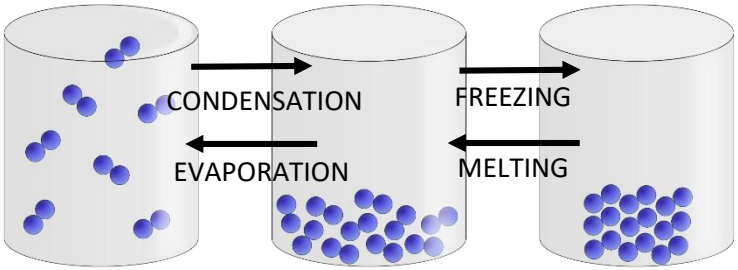
If water (liquid) is cooled, it changes to ice (solid). This change is called **freezing**. Water freezes at 0°C.

FEATURES

- Solids hold their shape. (Salt, sand and sugar are tiny solids so they pour like a liquid but they pile up and are nit wet.)
- Liquids form a pool not a pile!
- Gases escape from an unsealed container and fill the entire volume of space.

Three states of matter

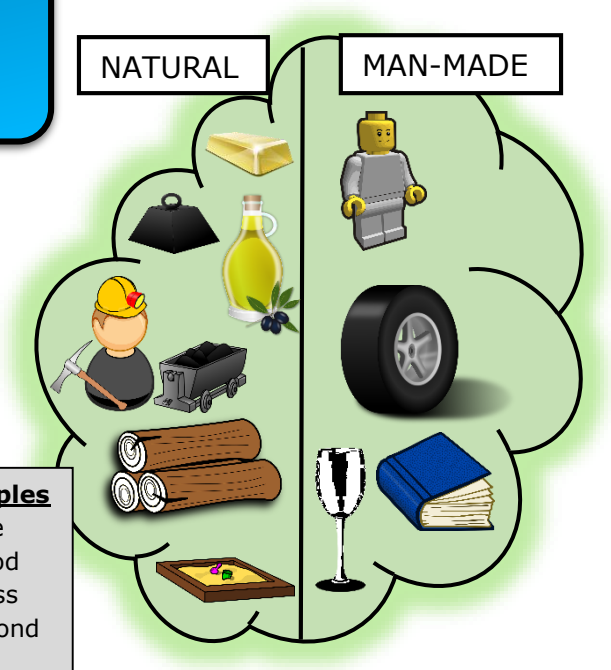
GAS: particles far apart and randomly arranged / move around
LIQUID: particles close but randomly arranged / move around
SOLID: particles very close together / vibrate around a fixed position



Gas | Liquid | Solid

Examples
Steam (water vapour)
Hydrogen
Carbon Dioxide
Oxygen

Examples
Water
Milk
Washing up liquid



Examples
Ice
Wood
Glass
Diamond