




# Particle model

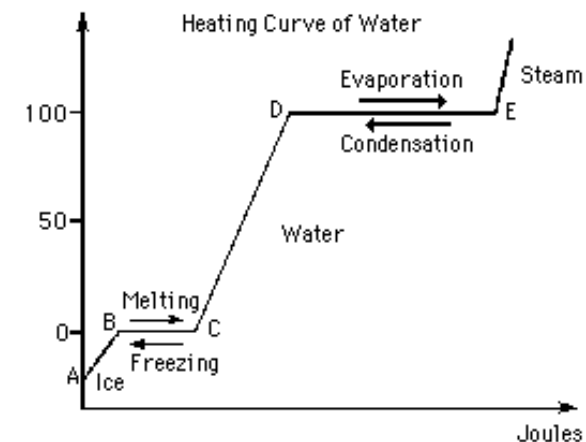
Key words	Definitions
<b>Condensation</b>	A change of state where a gas turns back to a liquid
<b>Control</b>	A measure you put in place to ensure that you are safe
<b>Crystallisation</b>	Using evaporation to remove salt crystals from a solution
<b>Evaporation</b>	A change of state where a liquid becomes a gas
<b>Filtration</b>	A method of removing insoluble substances from a liquid
<b>Freezing</b>	A change of state where a liquid becomes a solid
<b>Hazard</b>	A thing that can cause harm
<b>Insoluble</b>	A solid that will not dissolve in a solution
<b>Kinetic energy</b>	The movement energy particles have
<b>Melting</b>	A change of state where a solid becomes a liquid
<b>Mixture</b>	More than one substance together – can be separated
<b>Particle theory</b>	A way of describing matter in terms of its particles and properties
<b>Pure substance</b>	A substance only made of one type of thing
<b>Risk</b>	The harm a hazard could cause
<b>Soluble</b>	Will dissolve in a solvent
<b>Solute</b>	A soluble solid that will dissolve in a solvent
<b>Solution</b>	A mixture of a solute and a solvent
<b>Solvent</b>	The liquid a solute will dissolve in
<b>Sublimation</b>	Changing from gas to solid or solid to gas without a liquid phase
<b>Vibration</b>	The particle movement caused by kinetic energy

# Particle theory

State	Solid	Liquid	Gas
<b>Diagram</b>			
<b>Arrangement of particles</b>	Regular arrangement	Randomly arranged	Randomly arranged
<b>Movement of particles</b>	Vibrate about a fixed position	Move around each other	Move quickly in all directions
<b>Closeness of particles</b>	Very close	Close	Far apart

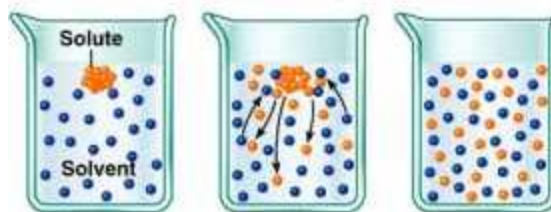
	Condensing	Freezing
<b>Description</b>	Gas to liquid	Liquid to solid
<b>Closeness of particles</b>	Become much closer together	Stay close together
<b>Arrangement of particles</b>	Stay random	Random to regular
<b>Motion of particles</b>	Stop moving quickly in all directions, and can only move around each other	Stop moving around each other, and only vibrate on the spot

# Change of state



	Melting	Evaporating or boiling
<b>Description</b>	Solid to liquid	Liquid to gas
<b>Closeness of particles</b>	Stay close together	Become much further apart
<b>Arrangement of particles</b>	Regular to random	Stay random
<b>Motion of particles</b>	Start to move around each other	Become able to move quickly in all directions

## Solutions



## Filtration



## Evaporation

