

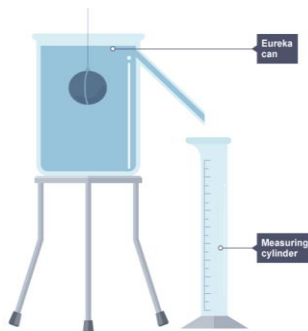
Section 1- Density

	Word	Definition
1a	Density (kg/m ³) =	Mass (kg) / volume (m ³)
1b	Density of a regular solid	Mass = use scales. Volume = height x width x length measured with a ruler.
1c	Density of an irregular solid	Mass = use scales. Volume = water displaced by a eureka can.
1d	Density of a liquid	Mass = use scales. Volume = measure in a measuring cylinder.

Section 2- States of matter

	Word	Definition
2a	Solid	Particles arranged in rows, do not move but vibrate in a fixed position.
2b	Liquid	Particles are tightly packed but free to move past each other.
2c	Gas	Particles are spread out and move randomly.
2d	Melting	Solid → Liquid. Particles are further apart and move more as they have more energy.. The reverse is freezing.
2e	Evaporating	Liquid → Gas. Particles are further apart and move more as they have more energy. The reverse is condensation.

P1- Particle model of matter



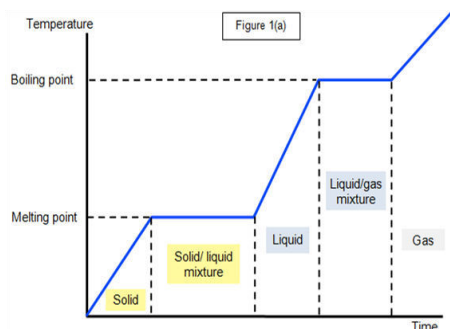
1c- Determining the volume of an irregular solid.

[Particle model of matter](#)

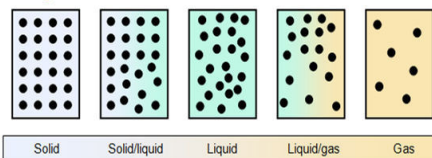
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Section 2 and 3i- A heating curve and the states of matter.



Arrangement of the molecules



Section 3- Transferring energy

	Word	Definition
3a	Internal energy	The total kinetic and potential energy of all the particles in a closed system.
3b	What happens to particles if they are heated?	The temperature of the particles increases or they particles change state.
3c	Specific heat capacity	The amount of energy needed to increase 1kg of a material by 1°C.
3d	Equation involving specific heat capacity	Change in thermal energy = mass x specific heat capacity x temperature change
3e	Specific latent heat	The amount of energy needed to change the state of 1kg of a material.
3f	Equation involving specific latent heat	Energy for a change of state = mass x specific latent heat
3g	Specific latent heat of fusion	The amount of energy needed to change the state of 1kg of a material from a solid to a liquid.
3h	Specific latent heat of vaporisation	The amount of energy needed to change the state of 1kg of a material from a liquid to a gas.
3i	Plateau on a heating or cooling curve	The flat sections, this indicate that a change of state is occurring.

Key Words
(highlighted)



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