

Particle Model of Matter

Past Paper Answers AQA Physics GCSE

Question	Answers	Extra information	Mark
1		2 marks for all correct 1 mark for 1 or 2 correct	2
2	B		1
3	D		1
4	the kinetic energy of the particles		1
5	$E = 0.250 \times 334\,000$ $E = 83\,500 \text{ (J)}$		1 1
6	sublimates		1
Total			8

Question	Answers	Mark
7	Level 2: The method would lead to the production of a valid outcome. The key steps are identified and logically sequenced.	3–4
	Level 1: The method would not necessarily lead to a valid outcome. Some steps are identified, but the method is not fully logically sequenced.	1–2
	No relevant content	0
	Indicative content <ul style="list-style-type: none"> ● use a eureka/displacement can ● fill the eureka/displacement can with water ● fill the eureka/displacement can up to the spout ● place lime in eureka/displacement can ● collect water that overflows ● use a measuring cylinder to measure volume of water OR <ul style="list-style-type: none"> ● use a measuring cylinder ● part fill the measuring cylinder with water ● measure the initial volume of water ● place lime in measuring cylinder ● record new volume of water ● volume of lime = new volume – initial volume 	
8	$\text{mean} = \frac{(2.1+2.1+2.4)}{3}$	1
	$\text{mean} = 2.2 \text{ (cm}^3\text{)}$	1
9	allows anomalous results to be identified and ignored	1
	reduces the effect of random errors when using the equipment	1

10	density = $\frac{84}{120}$ density = 0.70 (g/cm ³)		1 1
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