

# Changes of Heat, Specific Latent Heat

## Question Paper

Level	GCSE (9-1)
Subject	Combined Science: Trilogy - Physics
Exam Board	AQA
Topic	6.3 Particle Model of Matter
Sub-Topic	Changes of Heat, Specific Latent heat
Difficulty Level	Silver Level
Booklet	Question Paper

Time Allowed: 12 minutes

Score: /12

Percentage: /100

Grade Boundaries:

**Q1.** Solid, liquid and gas are three different states of matter.

- (a) Describe the difference between the solid and gas states, in terms of the arrangement and movement of their particles.

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**(4)**

- (b) What is meant by 'specific latent heat of vaporisation'?

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**(2)**

- (c) While a kettle boils, 0.018 kg of water changes to steam.

Calculate the amount of energy required for this change.

Specific latent heat of vaporisation of water =  $2.3 \times 10^6$  J / kg.

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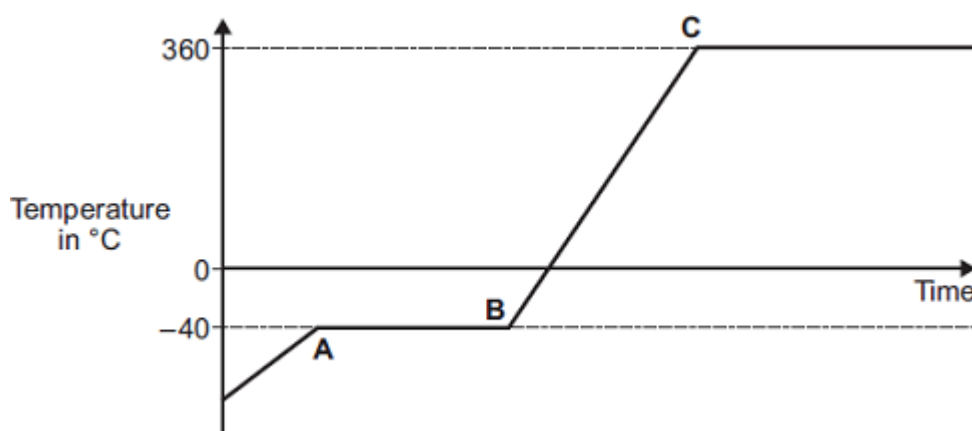
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Energy required = ..... J

(2)

- (d) The graph shows how temperature varies with time for a substance as it is heated.

The graph is **not** drawn to scale.



Explain what is happening to the substance in sections **AB** and **BC** of the graph.

Section **AB** .....

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Section **BC** .....

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(4)

(Total 12 marks)