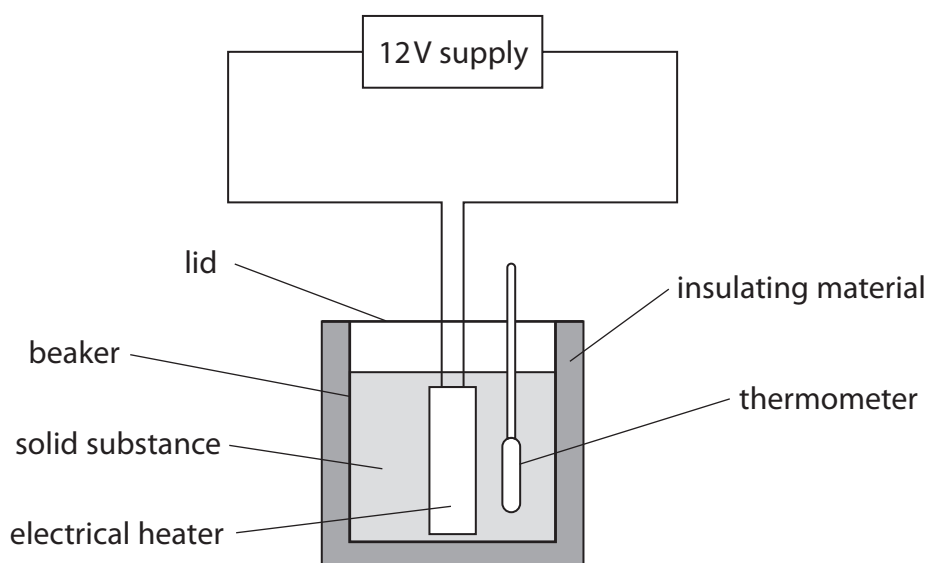


- 5 The diagram shows some of the apparatus a student uses to investigate the effect of heating a solid substance.



- (a) Describe how the student could use their apparatus to help determine the specific heat capacity of the substance.

You should give details of any additional apparatus needed in your answer.

(5)

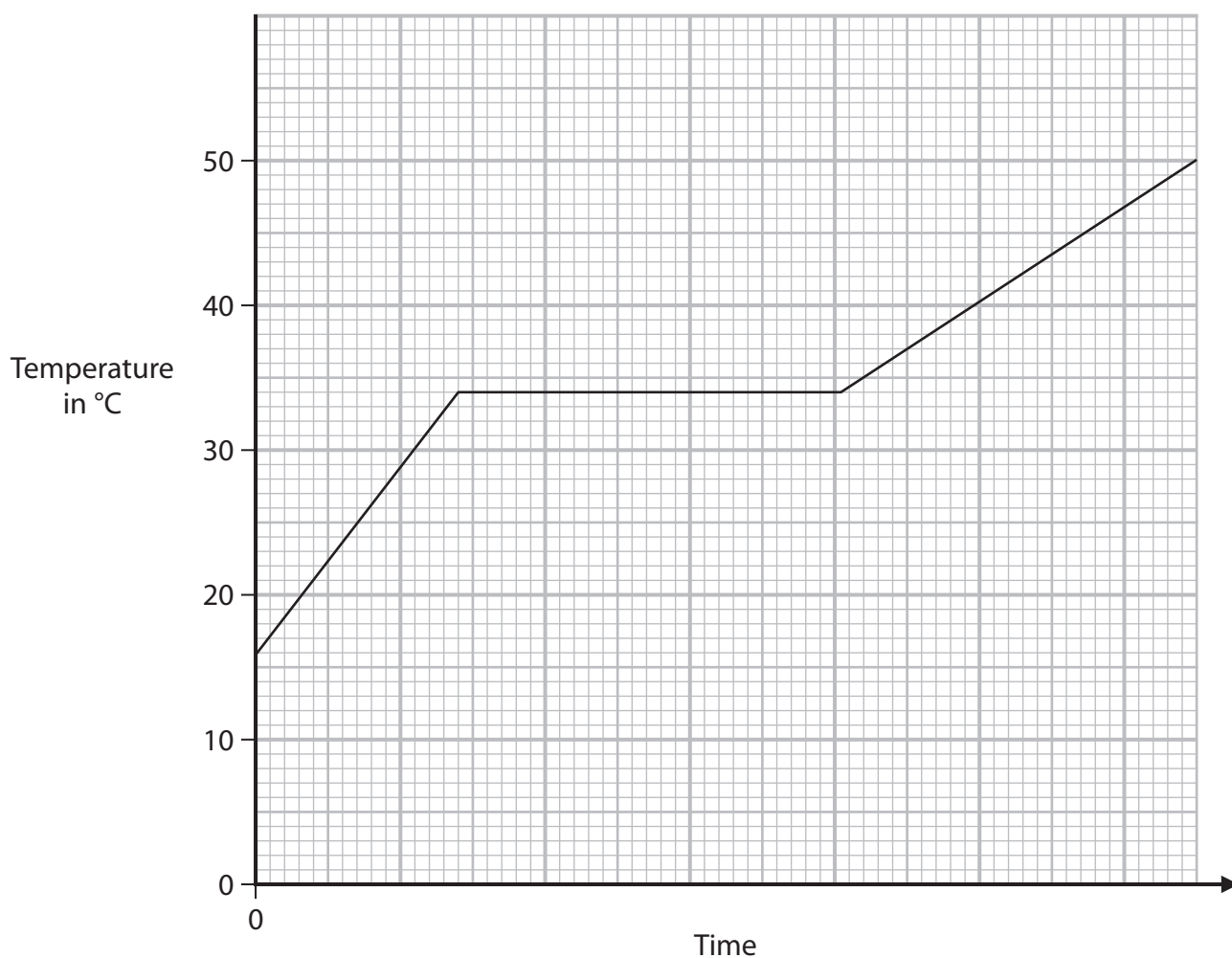


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- (b) The student continues to heat the substance, keeping the power of the heater constant. The graph shows how the temperature of the substance changes with time.



- (i) Use the graph to determine the melting point of this substance.

(1)

melting point = °C

- (ii) Describe, in terms of particles, what is happening in the substance when the graph line is horizontal.

(2)

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(iii) Suggest why the two non-horizontal lines on the graph have different gradients. (2)

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(Total for Question 5 = 10 marks)

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