

**Answer ALL questions.**

**Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.**

- 1** A material is stretched by applying an increasing load. The material shows elastic behaviour as it is stretched.

(a) Describe what is meant by elastic behaviour.

(2)

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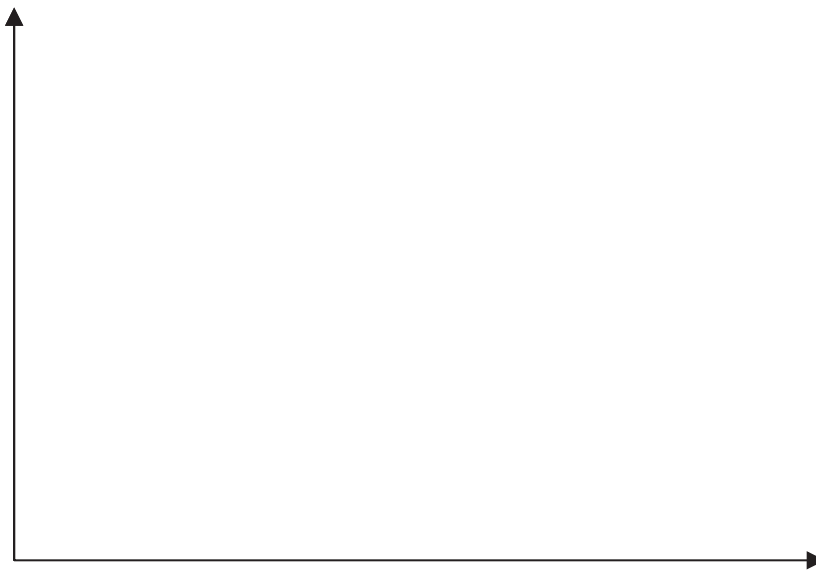
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(b) The material obeys Hooke's law.

Sketch a graph for this material to show that it obeys Hooke's law as it is stretched.

You should label both axes with appropriate physical quantities.

(3)



**(Total for Question 1 = 5 marks)**

