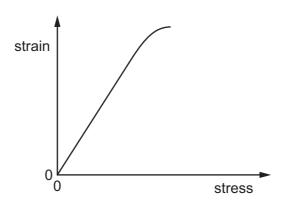
22 The graph shows the variation with stress of the strain of a material as it is extended elastically.

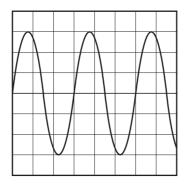


Why is the strain energy per unit volume of the material **not** the area under the graph?

- **A** The axes are the wrong way round.
- **B** The graph is not a straight line.
- **C** The graph is strain-stress instead of extension-force.
- **D** The material is polymeric.
- 23 A wire has a final length of 6.0 m after undergoing a strain of 200%.

What is the original length of the wire?

- **A** 1.5 m
- **B** 2.0 m
- **C** 3.0 m
- **D** 4.0 m
- 24 A sound wave is displayed on the screen of a cathode-ray oscilloscope, as shown.



The time-base setting is 0.50 ms per division.

What is the frequency of the sound wave?

- **A** 250 Hz
- **B** 500 Hz
- **C** 670 Hz
- **D** 1300 Hz