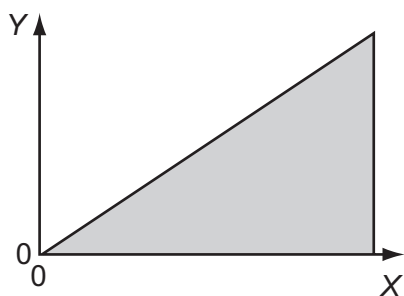


- 22** The graph shown was plotted in an experiment on a metal wire.



The shaded area represents the total strain energy stored in stretching the wire.

How should the axes be labelled?

	Y	X
<b>A</b>	force	extension
<b>B</b>	mass	extension
<b>C</b>	strain	energy
<b>D</b>	stress	strain

- 23** Nylon breaks when the stress within it reaches  $1 \times 10^9$  Pa.

Which range includes the heaviest load that could be lifted by a nylon thread of diameter 1 mm?

- A** 2 N to 20 N
  - B** 20 N to 200 N
  - C** 200 N to 2000 N
  - D** 2000 N to 20 000 N
- 24** Which observation indicates that sound waves are longitudinal?
- A** Sound can be reflected from a solid surface.
  - B** Sound cannot be polarised.
  - C** Sound is diffracted around corners.
  - D** Sound is refracted as it passes from hot air to cold air.