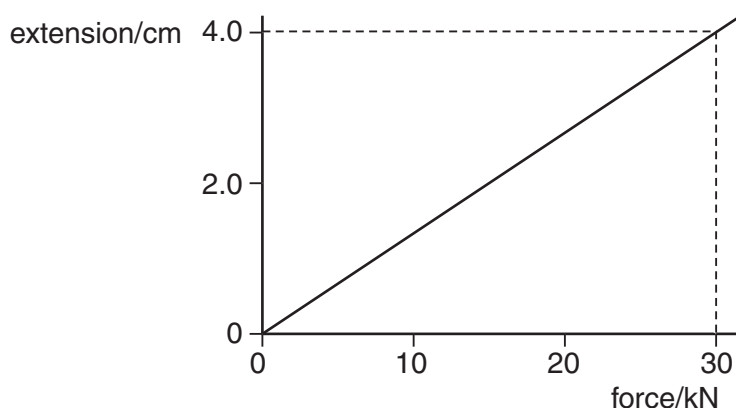


**21** What is the Young modulus of a metal?

- A** extension / force
- B** force / extension
- C** strain / stress
- D** stress / strain

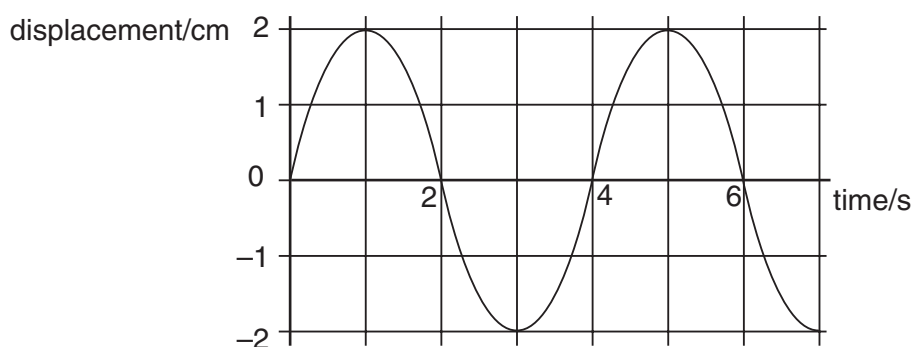
**22** The graph shows how the extension of a spring varies with the force used to stretch it.



What is the strain energy stored in the spring when the extension is 4.0 cm?

- A** 60 J      **B** 120 J      **C** 600 J      **D** 1200 J

**23** The graph shows how the displacement of a particle in a wave varies with time.



Which of the following is correct?

- A** The wave has an amplitude of 2 cm and could be either transverse or longitudinal.
- B** The wave has an amplitude of 2 cm and must be transverse.
- C** The wave has an amplitude of 4 cm and could be either transverse or longitudinal.
- D** The wave has an amplitude of 4 cm and must be transverse.