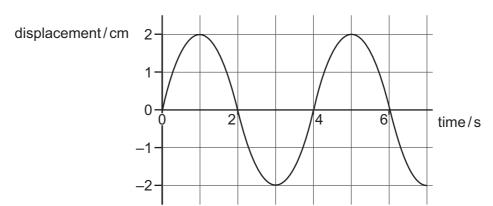
21 A load is hung from the end of a metal wire. The load is increased and the wire stretches elastically. The table shows the length of the wire for different loads.

load/kN	length/mm
0	500.0
1.0	502.0
2.0	504.0
3.0	506.0
4.0	508.0

When the load is 4.0 kN, what is the strain energy stored in the wire?

- **A** 16J
- **B** 32 J
- **C** 1.0 kJ
- **D** 2.0 kJ
- 22 The graph shows how the displacement of a particle in a wave varies with time.



Which statement is correct?

- **A** The wave has a period of 2s and could be either transverse or longitudinal.
- **B** The wave has a period of 2s and must be transverse.
- **C** The wave has a period of 4s and could be either transverse or longitudinal.
- **D** The wave has a period of 4s and must be transverse.