

- 21 A wire stretches 8 mm under a load of 60 N.

A second wire of the same material, with half the diameter and a quarter of the original length of the first wire, is stretched by the same load.

Assuming that Hooke's law is obeyed, what is the extension of this wire?

- A 1 mm B 4 mm C 8 mm D 16 mm

- 22 Polarisation is a phenomenon associated with a certain type of wave.

Which condition **must** be fulfilled if a wave is to be polarised?

- A It must be a light wave.
B It must be a longitudinal wave.
C It must be a radio wave.
D It must be a transverse wave.

- 23 A sound wave has displacement y at distance x from its source at time t .

Which graph correctly shows the amplitude a and the wavelength λ of the wave?

