

**1** A laser emits light of wavelength 600 nm.

What is the distance, expressed as a number of wavelengths, travelled by the light in one second?

**A**  $5 \times 10^8$

**B**  $5 \times 10^{11}$

**C**  $5 \times 10^{14}$

**D**  $5 \times 10^{17}$

**2** At temperatures close to 0 K, the specific heat capacity  $c$  of a particular solid is given by  $c = bT^3$ .