

**16** A concrete cube of side 0.60 m and uniform density  $2.0 \times 10^3 \text{ kg m}^{-3}$  is lifted 5.0 m vertically by a crane.

What is the change in potential energy of the cube?

**A** 2.2 kJ

**B** 21 kJ

**C** 59 kJ

**D** 450 kJ

**17** The force resisting the motion of a car is taken as being proportional to the square of the car's