

**15** A crate of mass 50 kg is pushed a distance of 6.0 m along a horizontal surface against a constant resistive force of 70 N. The crate moves at a constant speed. It is then lifted, at a constant speed, through a vertical distance of 1.2 m onto the back of a lorry.

What is the total work done in this process?

**A** 420 J

**B** 480 J

**C** 590 J

**D** 1000 J

**16** The diagram shows a uniform rectangular block of mass 10 kg. It is suspended by a string from a horizontal ceiling. The block is in equilibrium.