

**17** A force of 1000 N is needed to lift the hook of a crane at a constant velocity. The crane is then used to lift a load of mass 1000 kg at a constant velocity of  $0.50 \text{ m s}^{-1}$ .

What is the power needed to lift the hook and the load?

A 4.9 kW

B 5.4 kW

C 20 kW

D 22 kW

**18** Data for a steel wire on an electric guitar are listed.