1 A signal has a frequency of 2.0 MHz.

What is the period of the signal?

A 2 μs **B** 5 μs **C** 200 ns **D** 500 ns

2 A metal sphere of radius r is dropped into a tank of water. As it sinks at speed v, it experiences a drag force F given by $F = krv$, where k is a constant.

What are the SI base units of k?

A $kg\,m^2\,s^{-1}$ **B** $kg\,m^{-2}\,s^{-2}$ **C** $kg\,m^{-1}\,s^{-1}$ **D** $kg\,m\,s^{-2}$

3 Which physical quantity would result from a calculation in which a potential difference is multiplied by an electric charge?

A electric current

B electric energy

C electric field strength

D electric power

Space for working