1 Which quantity is a physical quantity?

A flavour

B kelvin

C minute

D potential difference

2 What is a power of 3.7 MW when expressed in kilowatts?

A 3.7×10^{-3} kW

B 3.7×10^{-3} KW

C 3.7×10^{3} kW

D 3.7×10^{3} KW

3 A spring is suspended from a fixed point and a force is applied. The position of a pointer attached to the bottom of the spring against a vertical ruler is recorded.

Before the force is applied, the position of the pointer is (225 ± 2) mm.

After the force is applied, the position of the pointer is (250 ± 2) mm.

The extension of the spring is determined.

What is the percentage uncertainty in the extension?

A 1.6% **B** 1.8% **C** 8.0% **D** 16%

4 What is the difference between a scalar quantity and a vector quantity?

A A scalar quantity has direction but a vector quantity does not.

B A scalar quantity has magnitude but a vector quantity does not.

C A vector quantity has direction but a scalar quantity does not.

D A vector quantity has magnitude but a scalar quantity does not.