

1 Which pair includes a vector quantity and a scalar quantity?

- A** displacement; acceleration
- B** force; kinetic energy
- C** power; speed
- D** work; potential energy

2 For which quantity is the magnitude a reasonable estimate?

- A** frequency of a radio wave 500 pHz
- B** mass of an atom 500 μg
- C** the Young modulus of a metal 500 kPa
- D** wavelength of green light 500 nm

3 The following physical quantities can be either positive or negative.

s : displacement of a particle along a straight line

θ : temperature on the Celsius scale

q : electric charge

V : readings on a digital voltmeter

Which of these quantities are vectors?

- A** s, θ, q, V
- B** s, q, V
- C** θ, V
- D** s only