

- 5 In an experiment, a radio-controlled car takes 2.50 ± 0.05 s to travel 40.0 ± 0.1 m.
What is the car's average speed and the uncertainty in this value?
- A $16 \pm 1 \text{ ms}^{-1}$
 - B $16.0 \pm 0.2 \text{ ms}^{-1}$
 - C $16.0 \pm 0.4 \text{ ms}^{-1}$
 - D $16.00 \pm 0.36 \text{ ms}^{-1}$
- 6 In an experiment to determine the acceleration of free fall using a falling body, what would lead to a value that is too large?
- A air resistance
 - B dimensions of the body are too large
 - C measured distance longer than true distance
 - D measured time longer than true time
- 7 Which feature of a graph allows acceleration to be determined?
- A the area under a displacement-time graph
 - B the area under a velocity-time graph
 - C the slope of a displacement-time graph
 - D the slope of a velocity-time graph

Space for working