

- 5 The density of the material of a rectangular block is determined by measuring the mass and linear dimensions of the block. The table shows the results obtained, together with their uncertainties.

mass	=	$(25.0 \pm 0.1)\text{g}$
length	=	$(5.00 \pm 0.01)\text{cm}$
breadth	=	$(2.00 \pm 0.01)\text{cm}$
height	=	$(1.00 \pm 0.01)\text{cm}$

The density is calculated to be 2.50 g cm^{-3} .

What is the uncertainty in this result?

- A** $\pm 0.01\text{ g cm}^{-3}$ **B** $\pm 0.02\text{ g cm}^{-3}$ **C** $\pm 0.05\text{ g cm}^{-3}$ **D** $\pm 0.13\text{ g cm}^{-3}$
- 6 A football is dropped from the top of a tall building.

Which acceleration-time graph best represents the motion of the football through the air?

