

- 5 A student measures the length l and the period T of oscillation of a simple pendulum. He then uses the equation shown to calculate the acceleration of free fall g .

$$T = 2\pi\sqrt{\frac{l}{g}}$$

His measurements are shown.

l	$(87.3 \pm 0.2) \text{ cm}$
T	$(1.9 \pm 0.05) \text{ s}$

What is the percentage uncertainty in his calculated value of g ?

- A** 2.4% **B** 2.9% **C** 5.5% **D** 7.2%