

**1** A solid metal sphere has a diameter of  $(3.42 \pm 0.02)\text{cm}$  and a mass of  $(67 \pm 2)\text{g}$ .

**(a)** Calculate the density, in  $\text{g cm}^{-3}$ , of the metal.

density = .....  $\text{g cm}^{-3}$  [3]

**(b)** Determine the percentage uncertainty in the density.

percentage uncertainty = .....% [2]

[Total: 5]