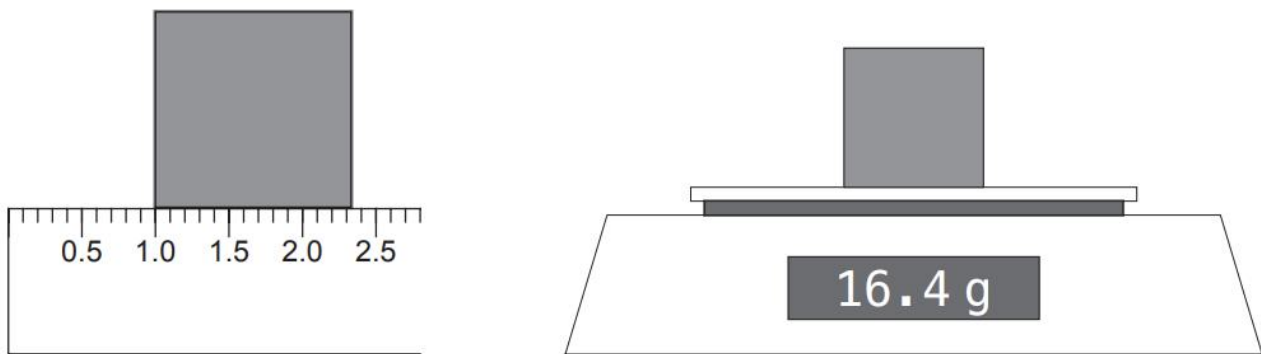


Question 10

(7 marks)

A group of students was set the task of calculating the density of a cube made from an unknown material. They measured the length of each side using a ruler with millimetre intervals and found each side was exactly the same length. That length is shown below.



They then placed the cube on a set of scales. The reading is shown in the diagram above. They recorded their measurements in the following table.

Side length (cm)	Mass (g)
1.33 ± 0.05	16.4 ± 0.1

Given density = $\frac{\text{mass}}{\text{volume}}$, calculate the density of the cube in g cm^{-3} . Include the absolute uncertainty in your answer.

Answer:

g cm^{-3} + g cm^{-3}