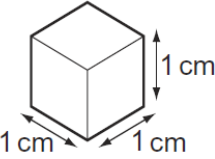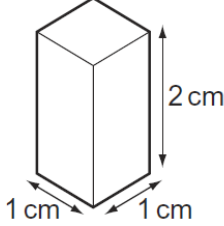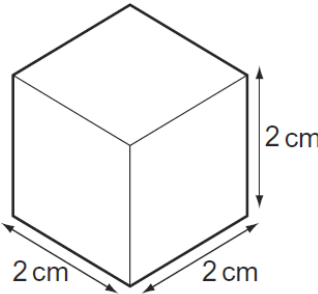|	MEASURING DENSITY-SET-2
1	What apparatus is needed to determine the density of a regularly-shaped block? **A** a balance and a ruler **B** a balance and a forcemeter (spring balance) **C** a measuring cylinder and a ruler **D** a measuring cylinder and a beaker
2	Which of the following is a unit of density? **A** cm^3/g **B** g/cm^2 **C** g/cm^3 **D** kg/m^2
3	The masses of a measuring cylinder before and after pouring some liquid into it are shown in the diagram. What is the density of the liquid? **A** $\frac{100}{120}$ g/cm³ **B** $\frac{100}{140}$ g/cm³ **C** $\frac{180}{120}$ g/cm³ **D** $\frac{180}{140}$ g/cm³

4	A person measures the length, width, height and mass of a rectangular metal block.

Which of these measurements are needed in order to calculate the density of the metal?

A mass only

B height and mass only

C length, width and height only

D length, width, height and mass |

5	Each of the solids shown in the diagram has the same mass.

Which solid has the greatest density?

 |

6	A stone has a volume of $0.50\,cm^3$ and a mass of $2.0\,g$.

What is the density of the stone?

A $0.25\,g/cm^3$

B $1.5\,g/cm^3$

C $2.5\,g/cm^3$

D $4.0\,g/cm^3$ |

7	A measuring cylinder has a mass of 120 g when empty.
	When it contains $50 \, cm^3$ of a liquid, the total mass of the measuring cylinder and the liquid is 160 g.
	What is the density of the liquid?
	A $\dfrac{40}{50}$ g/cm^3
	B $\dfrac{50}{40}$ g/cm^3
	C $\dfrac{120}{50}$ g/cm^3
	D $\dfrac{160}{50}$ g/cm^3

| 8	A liquid has a volume of $100 \, cm^3$ and a mass of 85 g.
	The density of water is $1.0 \, g/cm^3$.
	How does the density of the liquid compare with the density of water?
	A Its density is higher than that of water.
	B Its density is lower than that of water.
	C Its density is the same as that of water.
	D It is impossible to say with only this data.

9	The table gives the volumes and masses of four objects.
	Which object has the greatest density?

	mass/g	volume/cm^3
A	5.4	2.0
B	13	3.0
C	15	6.0
D	18	5.0

10	A metal block has the dimensions shown. Its mass is 1000 g.
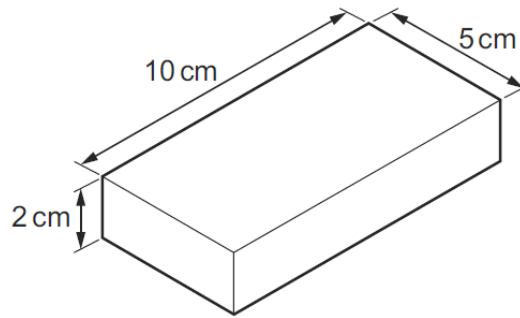
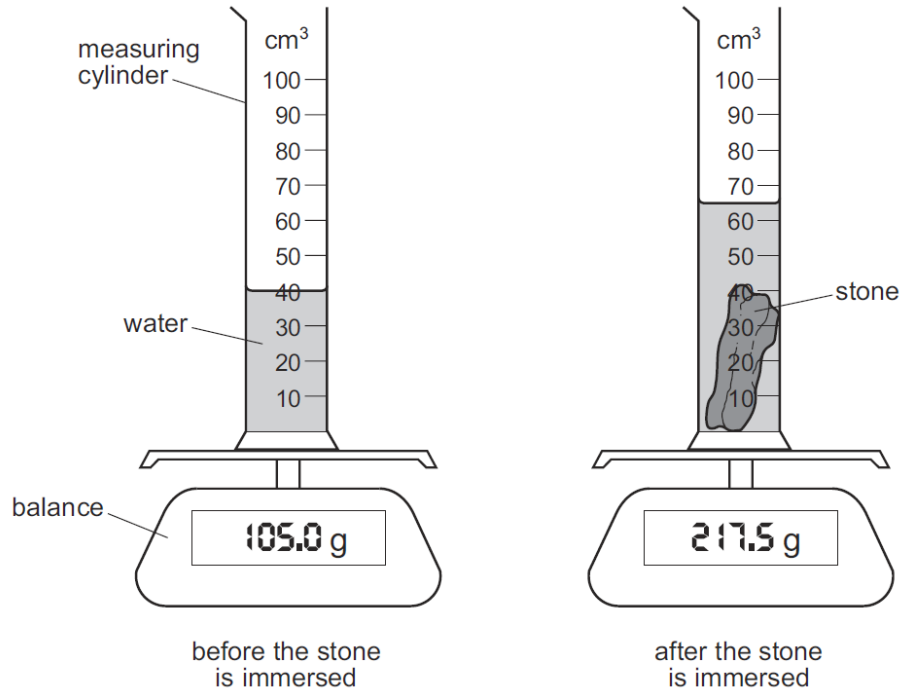
What is the density of the metal?

A $\left(\dfrac{5 \times 10}{1000 \times 2} \right)$ g/cm³

B $\left(\dfrac{2 \times 5 \times 10}{1000} \right)$ g/cm³

C $\left(\dfrac{1000 \times 2}{5 \times 10} \right)$ g/cm³

D $\left(\dfrac{1000}{2 \times 5 \times 10} \right)$ g/cm³

| 11 | A measuring cylinder containing only water is placed on an electronic balance. A small, irregularly shaped stone is now completely immersed in the water.

The diagrams show the equipment before and after the stone is immersed. |

before the stone is immersed

after the stone is immersed

What is the density of the material of the stone?

A $1.7\,\mathrm{g/cm^3}$　　**B** $3.3\,\mathrm{g/cm^3}$　　**C** $4.5\,\mathrm{g/cm^3}$　　**D** $8.7\,\mathrm{g/cm^3}$