

### Revision Questions on Density

- 1) An object has a mass of 100 grams and a volume of 20 cubic centimetres. What is its density?
- 2) An object has a mass of 40 000 kilograms and a volume of 5 cubic metres. What is its density?
- 3) An object has a volume of 3 cubic metres and a density of 6000 kilograms per cubic metre. What is its mass?
- 4) Copy and complete this table.

Object	Density (kg/m <sup>3</sup> )	Mass (kg)	Volume (m <sup>3</sup> )
A		4000	2
B	8000		4
C	2000	1000	
D		2000	4

- a) Which object has the greatest mass?
  - b) Which has the smallest volume?
  - c) Which objects could be made of the same substance?
  - d) Which object would float on water?
- 5) A water tank measures 2 m × 4 m × 5 m. What mass of water will it contain?
  - 6) An object has a mass of 20 000 kilograms and a density of 4000 kilograms per cubic metre. What is its volume?
  - 7) The density of air is 1.3 kg/m<sup>3</sup>. What mass of air is contained in a room measuring 2.5 m × 4 m × 10 m? How does this compare with your mass?
  - 8) Describe, in detail, with diagrams, how you would find the density of a rock.