

- 1) The mass of  $10 \text{ cm}^3$  of silver is  $103 \text{ gm}$ . Find
- The density of silver in  $\text{kg/m}^3$ .
  - Relative density of silver.

Ans

a) Mass of silver =  $1000 \text{ gm} = 1 \text{ kg}$   
Volume of silver =  $10 \text{ cm}^3 = \frac{10}{1000000} = 10^{-5}$   
Density =  $\frac{\text{Mass}}{\text{Volume}}$   
$$= \frac{1}{10^{-5}}$$
$$= 10^5 \text{ kg/m}^3$$

b) Relative density = density of silver / water  
Density of water =  $1 \text{ kg/m}^3$   
$$= 10^5 / 1$$
$$= 10^5$$