

Density =  $\frac{\text{Mass}}{\text{Volume}}$  →  $D = \frac{M}{V}$  → Density = Mass ÷ Volume

## Mass, Volume and Density



1. You have a rock with a volume of 12 cm<sup>3</sup> and a mass of 84 g. What is its density?

$D = \frac{84 \text{ g}}{12 \text{ cm}^3}$  Its density is ..... g/cm<sup>3</sup>

2. You have a different rock with a volume of 24 cm<sup>3</sup> and a mass of 192 g. What is its density?

$D = \frac{\text{g}}{\text{cm}^3}$  Its density is ..... g/cm<sup>3</sup>



3. In question 1 and 2, which rock is more dense? Drag and drop.

FIRST                  SECOND

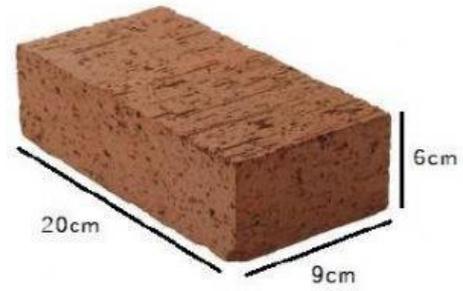
The ..... rock is more dense than the ..... rock.

4. What is the density of a rectangular brick with a weight of 2160 g ?

Volume = ..... X ..... X ..... = ..... cm<sup>3</sup>

$D = \frac{\text{g}}{\text{cm}^3}$

Its density is ..... g/cm<sup>3</sup>



5. A block of marble measures 10 cm X 10 cm X 10 cm. It weighs 4000 g. What is its density ?

Mass: ..... g  
Volume: ..... X ..... X ..... = ..... cm<sup>3</sup>

$D = \frac{\text{g}}{\text{cm}^3}$

Its density is ..... g/cm<sup>3</sup>