

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$



1. You have a mineral with a volume of 15 cm^3 and a mass of 45 g. What is its density?

$$D = \frac{45\text{g}}{15\text{cm}^3} \quad \text{Its density is: g/cm}^3$$

2. You have a different mineral with a volume of 15 cm^3 and a mass of 75 g. What is its density?

$$D = \frac{\text{.....g}}{\text{....cm}^3} \quad \text{Its density is: g/cm}^3$$

3. In the above two examples:
which mineral is more dense?



The..... mineral is more dense than the one.

4. What is the density of a cube of sugar weighing 12.8 grams measuring 2 cm on a side?

$$\text{mass} = \text{.....g}$$

$$\text{volume} = \text{....} \times \text{....} \times \text{....} = \text{..... cm}^3$$



$$D = \frac{\text{....g}}{\text{....cm}^3} \quad \text{Its density is: g/cm}^3$$



5. A brick of Himalayan salt measures $20\text{ cm} \times 10\text{ cm} \times 4\text{ cm}$ and weighs 1 kg and 600 g. What is its density?

mass=g

$$\text{volume}= \dots \times \dots \times \dots = \dots \text{ cm}^3$$

$$D=\frac{\dots \text{g}}{\dots \text{cm}^3} \quad \text{Its density is: } \dots \text{ g/cm}^3$$



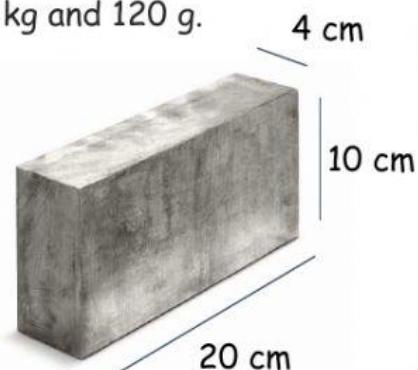
6. A brick of lead measures the same and weighs 9 kg and 120 g.

What is its density?

mass=g

$$\text{volume}= \dots \times \dots \times \dots = \dots \text{ cm}^3$$

$$D=\frac{\dots \text{g}}{\dots \text{cm}^3} \quad \text{Its density is: } \dots \text{ g/cm}^3$$



7. Two liquids, A and B, have densities 0.75 g/cc and 1.14 g/cc respectively. When both liquids are poured into a container, one liquid floats on top of the other. Which liquid is on top?

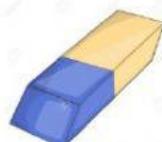
Solution: Liquid floats on top of liquid



8. Which has greater density: an eraser with a mass of 3g and a volume of 1cm^3 , or an eraser with a mass of 3 g and a volume of 3 cm^3 ?



$$D=\frac{\dots \text{g}}{\dots \text{cm}^3} \quad \text{Its density is: } \dots \text{ g/cm}^3$$



$$D=\frac{\dots \text{g}}{\dots \text{cm}^3} \quad \text{Its density is: } \dots \text{ g/cm}^3$$

Solution:

The eraser has a greater density

Maria Liste

