

## Chapter 10

### GRAVITATION

#### EXAMPLE- 6:

Relative density of gold is 19.3, the density of water is  $10^3 \text{ kg / m}^3$ . What is the density of gold in  $\text{kg / m}^3$ ?

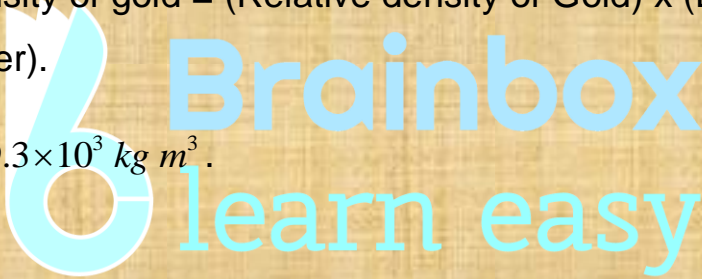
#### Solution:

Given relative density of gold = 19.3

Density of water =  $10^3 \text{ kg / m}^3$

Density of gold = (Relative density of Gold) x (Density of water).

$$= 19.3 \times 10^3 \text{ kg m}^3.$$



#### EXAMPLE- 7:

Mass of  $0.025 \text{ m}^3$  of aluminium is 67 kg. Calculate the density of aluminium.

#### Solution:

Given mass of aluminium = 67 kg

Volume of aluminium =  $0.025 \text{ m}^3$

$$\text{Density} = \frac{M}{V} = \frac{67}{0.025} = 2680 \text{ kg/m}^3.$$