

Daily Homework

1.) a) mass of silver = 1000 gm = 1 kg
 volume of silver = $10 \text{ cm}^3 = 10/1000000$
 $= 10^{-5}$
 density = mass/volume = $1/10^{-5} = 10^5 \text{ kg/m}^3$

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

2.) Density = $\frac{\text{mass}}{\text{volume}}$

$d = \frac{150 \text{ g}}{200 \text{ cm}^3} = 0.75 \text{ g/cm}^3$

density of wood in C.G.S unit = 0.75 g/cm³

3.) As the temperature increases, volumes of most of the liquids also increase and when the volume increases density decreases.

- 4.) The ratio of the density of a substance to the density of a standard, usually water for a liquid or solid, and air for a gas.
- 5.) The density of an object determines whether it will float or sink in another substance.
- 6.) When any boat displaces a weight of water equal to its own weight it floats.