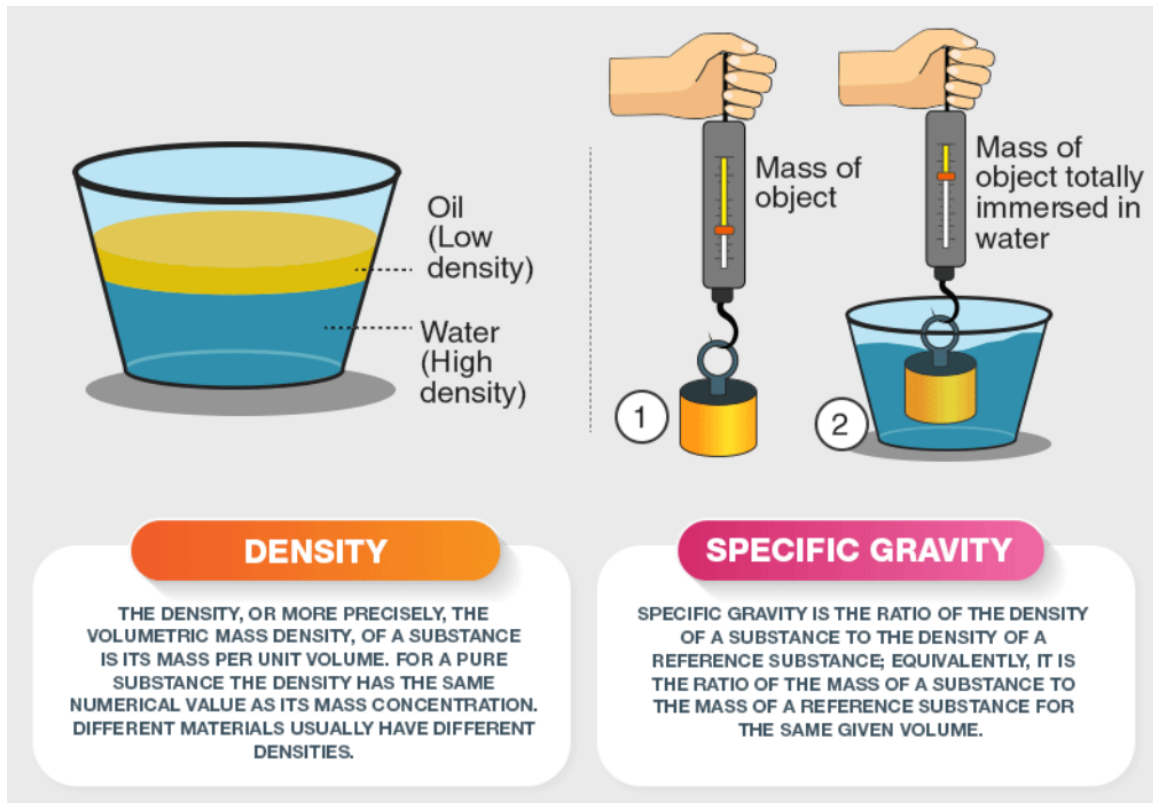


DENSITY AND SPECIFIC GRAVITY

- There is a noticeable difference between density and specific gravity, even though both are used to represent mass and are used to compare different substances.
- Density is the property of matter represented by a ratio of mass to a unit volume of matter.
- Specific gravity which is also called as relative density is a measure of density with respect to a density of pure water.



Difference Between Specific Gravity and Density

If a material has a specific gravity less than 1, it will float on water.

It is represented as,

$$\text{Specific gravity}_{\text{substance}} = \rho_{\text{substance}} / \rho_{\text{reference}}$$

Density, on the other hand, is represented as,

$$\rho = \text{mass} / \text{volume}$$

And it is represented in kilograms per cubic meter

Difference Between Density and Specific Gravity	
Density	Specific Gravity (Relative Density)
It is the mass of an object per unit volume	Relative density is the ratio of a substance's weight to the weight of the same volume of water.
To calculate density, we need to know the weight and volume of the substance.	We can get this by dividing the density of a substance with the density of water.
It is represented in absolute term	It is represented in relative term
Its symbol is ρ is represented in kilogram per cubic meter	It does not have a SI unit
It is used in many domestic and commercial applications	It is used in industries to measure the concentration of solutions.