

Density Practice Problems

What is density? Describe it in your own words.

Mathematically speaking,

$$\text{Density} = \frac{\text{mass (g)}}{\text{Volume (ml)}}$$

What does this really mean? You can think of it as the amount of stuff in a certain space.

Practice Problems

1. A loaf of bread has a mass of 454 g and a volume of 2270 ml. What is its density?
2. A block of wood has a density of 0.6 g/ml and a volume of 1.2 ml. What is its mass?
3. One liter of water has a mass of 1000 g. What is its density?

Identify the Substance:

Mass (g)	Volume (ml)	Density (?)	Substance (?)
171	15		
148	40		
475	250		
680	1000		

Substances	Densities (g/ml)
Gold	19.3
Mercury	13.5
Lead	11.4
Iron	7.87
Aluminum	3.7
Bone	1.7-2.0
Gasoline	0.66-0.69
Air (dry)	0.00119

Which of the substances to the left would float in liquid water?

Why are bone and gasoline densities given as a range instead of a specific value?

Explain how water displacement can help you find the volume of an irregularly shaped object.