

Density Practice

1. A block has a mass of 325g and a volume of 500 cm³.

A. What is the block's density?

B. Will it sink or float in freshwater?

Solution:

$$\text{A. Density} = \frac{\text{Mass}}{\text{Volume}} = \frac{325\text{g}}{500\text{cm}^3} = 0.65\text{g/cm}^3$$

B. Density of water = 1.00g/cm³

$$1.00\text{g/cm}^3 > 0.65\text{g/cm}^3$$

Water is denser than the block & the block will **FLOAT**