## Density and Buoyancy

-Density: $\quad \rho=\frac{\text { Mass }}{\text { Volume }}$


Bouyancy Force $=\rho_{\text {fluid }} V g$
here $V$ is the volume of the body, $g=9.8 \mathrm{~m} / \mathrm{s}^{2}$.

## Homework 19

## Problem

The object weights 5 kg in the air and 3 kg in the liquid. What is the density of the liquid if the volume of the object is $100 \mathrm{~cm}^{3}$ ?


