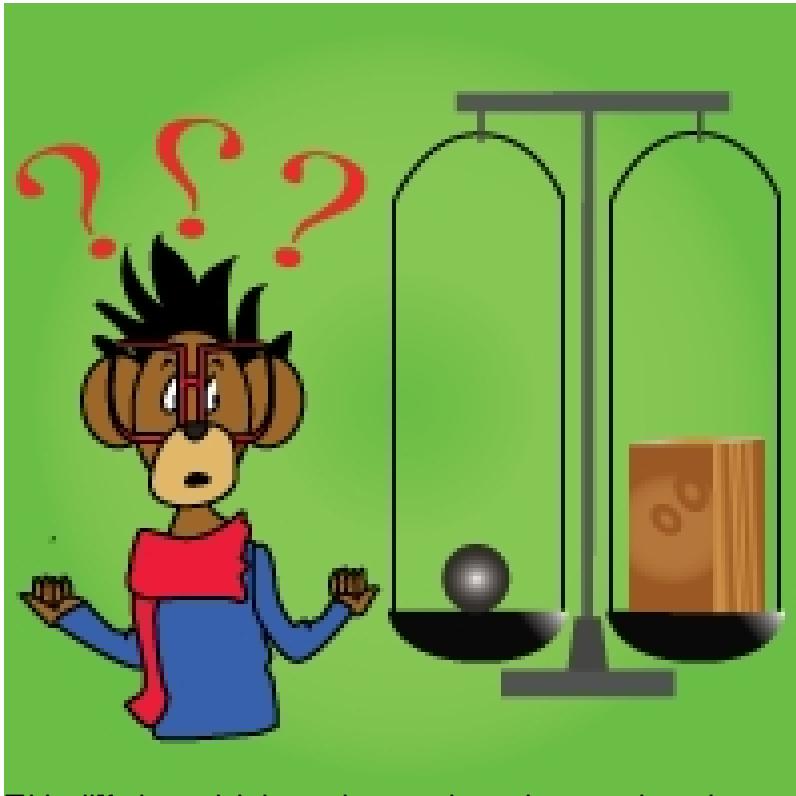


What is density?

In general the density of an object decides if the object can swim on top of the water or will sink.

Two components define the amount of density an object has: **mass** and **volume**.

In this case the volume defines the **size** and the mass defines the **weight** of the object.



The difference in mass and volume can be used to determine density. Density is a property of matter that is constant for a given substance. It is defined as mass per unit volume. The formula for density is $\text{Density} = \frac{\text{Mass}}{\text{Volume}}$. Density can be used to identify substances and to determine if an object will float or sink in a liquid.