

# Mass

# Volume

Glue this  
side down  
into your  
science  
notebook.

Legal Size Print Out  
8.5 x 14

Liz LaRosa  
5th grade science  
[www.middle-school-science.com](http://www.middle-school-science.com)  
2009

# Density

**Using the formulas  
for mass, volume  
& density**

$$D = m/v$$

The amount of matter in  
a given space or volume.  
g/mL or g/cm<sup>3</sup>

A brick has a mass of 100 g and a  
volume of 25 cm<sup>3</sup>. What is the  
density of the brick?

The density of gold is 19.3 g/cm<sup>3</sup>. If I  
have a nugget with a volume of 10  
cm<sup>3</sup>, what is the mass of the cube?

How to solve a word problem:

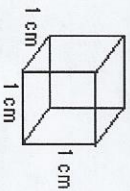
1. Read the word problem carefully.
2. Determine what is being asked for.
3. Write the formula and plug in the known values.
4. Calculate and solve for the unknown value.
5. Write the answer and corresponding unit.

My paperweight has a mass of 50 g  
and a density of 2.5 g/cm<sup>3</sup>. How  
much space does it take up?

$$m = V \times D$$

The amount of matter in an  
object. The amount of "stuff"  
is measured in grams.

Volume of 1 cubic  
(cm<sup>3</sup>) centimeter



$$1 \text{ mL} = 1 \text{ cm}^3$$

$$V = m/D$$

The amount of space an  
object takes up. We use cm<sup>3</sup>  
or mL to measure volume.