Notes 9/30/15

Physical science is the study of matter and energy

Chemistry is the study of the properties of matter and how matter changes.

Physics is the study of how matter and energy interact

All matter is composed of atoms

Matter is anything that has mass and   volume.

Can you name something that has   just mass or volume? Explain why

Mass: the amount of matter something contains; measured in grams

Volume: is the amount of space matter occupies; volume of a liquid is measured in mL; volume of a solid is measured in cm3

Measuring Volume:

for liquids:

 -use a beaker for larger, less precise  measurements

 -use a graduated cylinder for smaller,  more precise measurements

when measuring a liquid make sure to use the measurement at the bottom of the meniscus and get down to eye level

* for regular solids (cubes and prisms)
  + use a ruler to measure length, width, and  height then calculate using the  appropriate equation
* for irregular solids use the displacement method
* fill a container with a liquid
* submerge irregular solid
* see how much liquid was displaced
* this is the volume in mL
* 1 mL = 1cm3

Density: how tightly packed matter is in a given volume

Density = mass divided by volume

Units: g/mL for liquids; g/cm3 for solids