STEPS FOR DOING CONVERSIONS AND/OR ANY MATH PROBLEMS

1) What am I starting with?
   a. Every problem has a quantitative measurement (number and units) that you will start with. This quantitative measurement is where you start your conversion.
2) Where do I need to go?
   a. Every problem has a measurement missing a number that you will need to end with. This unit of measurement is where you need to end your conversion.
3) How many steps is it?
   a. Plan out what you are going to do. If you don't know a relationship directly between the beginning and the end, you are going to need to do multiple steps. If it is a stoichiometry problem, use the stoichiometry map to determine how many steps it is.
4) Use the <u>units</u> to cancel from beginning to end
   a. If the beginning unit is "A", the first box needs to have "A" on the bottom. This will cancel out "A" and convert into the new unit.
   b. If the beginning unit has a denominator with "B", one of the boxes must have "B" on top to cancel out "B" and change it into the new unit.
5) Multiply all #'s on top, Divide all numbers on bottom
   a. Once the boxes have been setup with just the units, place the numbers in the boxes next to the correct units (when going between meters and kilometers, 1 always goes with the Kilometers and the 1000 always goes with the Meters)
   b. Grab a calculator and make sure to press multiply button before all the numbers on the top of the boxes and the divide button before all the numbers on the bottom of the boxes.