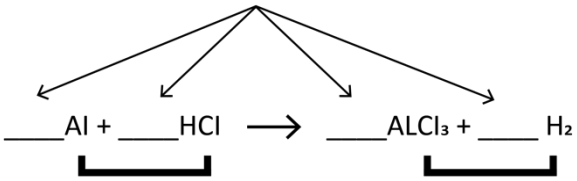
STOICHIOMETRY: MOLES TO MOLES NOTES

Vocabulary:

Fill in the blank:

Stoichiometry - Greek, “stoiechion” (_____) and “metron” (to _____). The calculation of the amount of substances in a chemical reaction from the balanced equation.

Balance the equation and then label the reactants, products, and coefficients in the following chemical equation:



Conversion factor- a numeric _____ of equal measurements used to convert quantities between different _____.

Moles- the _____ of an element or compound containing _____(Avagadro’s number) particles (ex. atoms, ions, etc.) of that element/compound.

Molar(Molecular) Mass- the _____(in_____) of a single mole of particles (atoms, ions, or molecules) of an element/compound.

Steps:

1. _____ the equation
2. Determine the _____ to _____ ratio between A and B
3. _____ across, _____ bottom

General Form for mole to mole conversions:

$$\frac{\qquad\qquad}{\qquad\qquad} =$$

ketzbook's Stoichiometry Tricks Video:

Nitrogen reacts with Hydrogen to produce a component of fertilizer called ammonia, NH_3. How many moles of Nitrogen, N_2, do you need to make 10 moles of ammonia,NH_3?

1. Balance the equation:

   ___N_2 +____ H_2 ->___ NH_3
2. Determine the mole-to-mole ratio:_____
3. ___ moles NH_3 require____ moles N_2
4. Using the given information to solve the problem: