LO: Students will be able to balance chemical equations.

DOL: Students will be able to correctly balance at least 4/5 chemical equations.

Find the molar mass of each of the following compounds.

$$2H_2 + O_2 \longrightarrow 2H_2O$$
 reactants products

Multiply each molar mass by the number in front of it. What do you notice about the total masses on each side of the arrow? Compare the masses of the reactants to the products...

Chemical equations must be balanced before you can do anything with them.

Coefficients represent the molar ratios of the compounds in an equation.

You must have the same number of mols of EACH element in order to be balanced.

Dec 7-8:39 AM

Using a table to balance an equation:

$$H_2SO_4 + NaOH \longrightarrow H_2O + Na_2SO_4$$

Potassium reacts with water yielding potassium hydroxide and hydrogen.

Leave about 6 lines blank in your notebook to work this out in class

Dec 4-12:33 PM

Balance the equation.

Al + $N_2 \rightarrow$ AlN





Fe

+

 $O_2 \rightarrow$

Fe₃O₄

Leave about 6 lines blank in your notebook to work this out in class

Dec 7-8:43 AM

Balance the equation.



 $CaCO_3 \rightarrow$

CaO +

 CO_2



$$NH_4NO_3 \rightarrow N_2O + H_2O$$

Leave about 6 lines blank in your notebook to work this out in class

Dec 7-8:43 AM

Balance the equation.



$$KI + Cl_2 \rightarrow KCl + I_2$$



$$Pb(NO_3)_2 + HCl \rightarrow PbCl_2 + HNO_3$$

Leave about 6 lines blank in your notebook to work this out in class

Dec 7-8:43 AM

Balance the equation.



$$BaO_2 \rightarrow BaO + O_2$$



Al
$$+ H_2SO_4 \rightarrow Al_2(SO_4)_3 + H_2$$

Leave about 6 lines blank in your notebook to work this out in class

Dec 7-8:43 AM

Balance the equation.



$$CH_4 + Cl_2 \rightarrow CHCl_3 + HCl$$



$$MgCl_2 + NaOH \rightarrow Mg(OH)_2 + NaCl$$

Leave about 6 lines blank in your notebook to work this out in class

Dec 7-8:43 AM