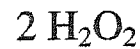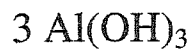**Balancing Equations Practice**   Name _____
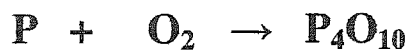
Part A: Identify the following parts of each chemical formula by circling the subscripts and drawing a square around the coefficients.

H_2 2 HCl   4 O_2 CH_4 3 CO_3 2 NaOH

Part B: List the symbols for the atoms in each formula and give the number of each.

C_2H_6 $2MgO$ $4P_4O_{10}$

NH_3 3 $Al(OH)_3$ 2 H_2O_2

Part C: Balance each of the following equations following the procedure described in class. Be sure to show your work.

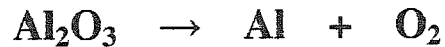P + O_2 → P_4O_{10} Mg + O_2 → MgO

P =   P =   Mg =   Mg =
O =   O =   O =   O =

HgO → Hg + O_2 Al_2O_3 → Al + O_2

Hg =   Hg =   Al =   Al =
O =   O =   O =   O =

$BaCl_2$ + H_2SO_4 → $BaSO_4$ + HCl

Ba =   Ba =
Cl =   Cl =
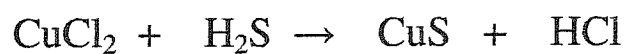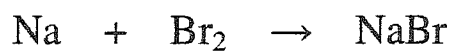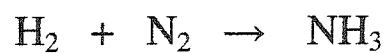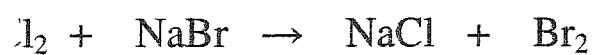H =   H =
S =   S =
O =   O =

Part D: Practice Problems – Balance each equation using the process from Part C.

Cl_2 + NaBr $\rightarrow$ NaCl + Br_2 H_2 + N_2 $\rightarrow$ NH_3

Na + Br_2 $\rightarrow$ NaBr $CuCl_2$ + H_2S $\rightarrow$ CuS + HCl

HgO + Cl_2 $\rightarrow$ HgCl + O_2 C + H_2 $\rightarrow$ CH_4
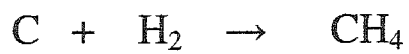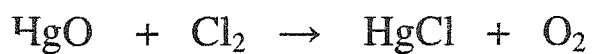
Challenge Problem: Give it your best shot!

$$C_2H_6 + O_2 \rightarrow CO_2 + H_2O$$