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.

$P + O_2 \rightarrow P_4O_{10}$

P = P =

O = O =

$Mg + O_2 \rightarrow MgO$

Mg = Mg =

O = O =

$HgO \rightarrow Hg + O_2$

Hg = Hg =

O = O =

$Al_2O_3 \rightarrow Al + O_2$

Al = Al =

O = O =

$BaCl_2 + H_2SO_4 \rightarrow BaSO_4 + HCl$

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!

$C_2H_6 + O_2 \rightarrow CO_2 + H_2O$