Balancing Equations Challenge

Part A: Parts & Pieces

- (1) Circle each subscript in each chemical formula.
- (2) Draw a square around each coefficient.
- (3) Answer the questions related to each chemical formula.

 O_2

 CO_2

 $5H_2$

What element does the O represent?

How many atoms of each element are in the formula shown?

C = ____ O = ____

How many atoms of Hydrogen are in this formula as shown?

 $2C_2H_6$

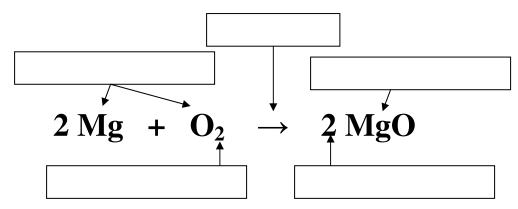
 $2Na_2SO_4$

How many atoms each element are in the formula shown?

C = _____ H = ____

How many atoms each element are in the formula shown?

Part B: Label the chemical equation using PRODUCT, REACTANTS, SUBSCRIPT, COEFFICIENT, and YIELDS.



$$H_2 + O_2 \rightarrow H_2O$$

$$H_2 + O_2 \rightarrow H_2O$$
 $H_2O_2 \rightarrow H_2O + O_2$ $Na + O_2 \rightarrow Na_2O$

$$Na + O_2 \rightarrow Na_2O$$

$$N_2 + H_2 \rightarrow NH_3$$

$$N_2$$
 + H_2 \rightarrow NH_3 P_4 + O_2 \rightarrow P_4O_6 C + H_2 \rightarrow CH_4

$$C + H_2 \rightarrow CH_4$$

$$Al_2 O_3 \rightarrow Al + O_2$$

$$Fe + H_2O \rightarrow Fe_3O_4 + H_2$$

$$C_2 H_6 + O_2 \rightarrow CO_2 + H_2O$$

$$C_2 \ H_6 \ + \quad O_2 \quad \rightarrow \quad CO_2 \quad + \quad H_2O \qquad \qquad Na_2SO_4 \ + \quad CaCl_2 \ \rightarrow \quad CaSO_4 \ + \quad NaCl$$