Answer Key

Balancing Equations Challenge

Part A: Parts & Pieces

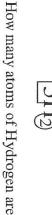
- (1) <u>Circle each subscript</u> in each chemical formula.(2) <u>Draw a square</u> around each coefficient.
- (3) Answer the questions related to each chemical formula



What element does the O represent? OXYGEN



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



in this formula as shown? 10

 $C = 1 \ 0 = 2$



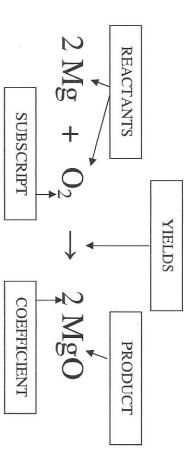
How many atoms each element are in the formula shown?

C = 4 H = 12

2NapSO₄

How many atoms each element are in the formula shown? $Na = 4 S = 2 O = _8$

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



$$2H_2 + O_2 \rightarrow 2H_2O$$

$$2H_2O_2 \rightarrow 2H_2O + O_2$$

$$4\text{Na} + \text{O}_2 \rightarrow 2\text{Na}_2\text{O}$$

$$N_2 + 3H_2 \rightarrow 2NH_3$$

$$P_4 + 3O_2 \rightarrow P_4O_6$$

$$+$$
 $2H_2 \rightarrow CH_4$

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$$2Al_2O_3 \rightarrow 4Al + 3O_2$$

$$4H_2O \rightarrow Fe_3O_4 + 4H_2$$

3Fe +

$$2C_2H_6 + 7O_2 \rightarrow 4CO_2 + 6H_2O$$

$$Na_2SO_4 + CaCl_2 \rightarrow CaSO_4 + 2NaCl$$