

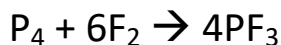
Name: _____ Period: _____

Balancing Equations Scavenger Hunt Answer Sheet

Directions: For each problem, write your work in the space below. When you have successfully balanced each equation, re-write the equation and highlight or circle the coefficients to make it easy to look for your next answers.

Post-Activity:

1. What is the Law of Conservation of Mass? Write the definition below.
2. How does balancing equations exhibit the Law of Conservation of Mass? Explain.
3. The only numbers that we can change while balancing a chemical equation are the coefficients. These are the numbers that are put in front of the molecules in the chemical formula. The subscripts of the molecules can NEVER change. Those must stay the same to maintain the correct identity of the molecule. In the chemical equation below, put a box around the coefficients and circle the subscripts.



4. Balance the equations below:

- a. $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
- b. $\text{ZnS} + \text{O}_2 \rightarrow \text{ZnO} + \text{SO}_2$
- c. $\text{KrF}_2 + \text{H}_2\text{O} \rightarrow \text{Kr} + \text{O}_2 + \text{HF}$
- d. $\text{Fe} + \text{FeCl}_3 \rightarrow \text{FeCl}_2$
- e. $\text{Ba(OH)}_2 + \text{AlCl}_3 \rightarrow \text{Al(OH)}_3 + \text{BaCl}_2$
- f. $\text{C}_6\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$