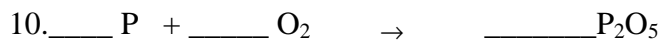
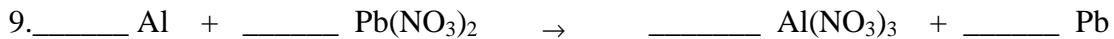
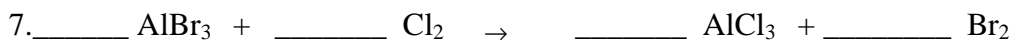
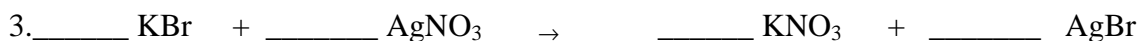
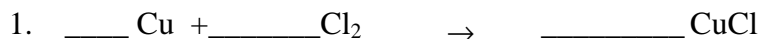
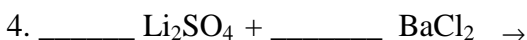
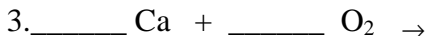
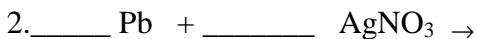
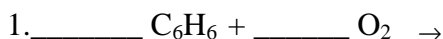


Practice Set- Balancing Reactions

Section I - Place the appropriate coefficient on the line in front of each species to balance each equation and then under each equation identify the reaction type.



Section II - Predict the product(s) and balance the chemical equation



Section III - On a separate sheet of paper, write a balanced equation for the following reactions and classify the type of reaction.

- a. Aluminum metal reacts with oxygen (in the air) to form aluminum oxide.
- b. Sodium oxide reacts with carbon dioxide to form sodium carbonate.
- c. Calcium metal reacts with water to form calcium hydroxide and hydrogen gas.
- d. Potassium nitrate decomposes to form potassium nitrite and oxygen.
- e. Barium metal reacts with Iron (III) sulfate to produce barium sulfate and iron metal.
- f. Barium chloride reacts with sodium sulfate to produce barium sulfate and sodium chloride.
- g. Bismuth (III) oxide and zinc metal react to produce zinc (II) oxide and bismuth metal.
- h. Calcium metal reacts with phosphorus to produce calcium phosphide.
- i. The combustion of decane forms water and carbon dioxide.
- j. A solution of hydrochloric acid reacts with solid calcium bicarbonate to produce water, carbon dioxide, and calcium chloride. (Note: Carbonic acid decomposes to form the water and carbon dioxide)
- k. A solution of acetic acid reacts with solid iron (II) hydroxide

Do you feel like an expert now?

