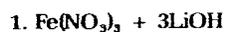


Chemical Reactions

A. Conservation of Mass and Atoms

The total number of atoms of each kind must remain the same in a chemical reaction. How many atoms of each kind should be present among the product molecules and formula units in reactions involving the following reactants?



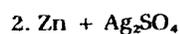
Number of Fe atoms _____

Number of N atoms _____

Number of O atoms _____

Number of Li atoms _____

Number of H atoms _____

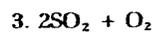


Number of Zn atoms _____

Number of Ag atoms _____

Number of S atoms _____

Number of O atoms _____



Number of S atoms _____

Number of O atoms _____



Number of C atoms _____

Number of H atoms _____

Number of O atoms _____

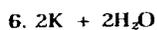


Number of N atoms _____

Number of H atoms _____

Number of O atoms _____

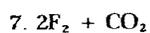
Number of S atoms _____



Number of K atoms _____

Number of H atoms _____

Number of O atoms _____



Number of F atoms _____

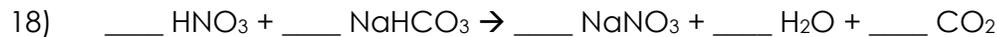
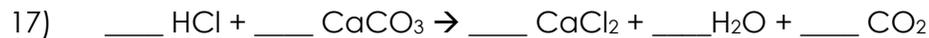
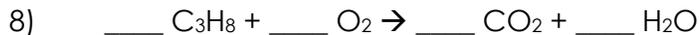
Number of C atoms _____

Number of O atoms _____

Chapter 7 Worksheet #1

Balancing Chemical Equations

Balance the equations below:



Word Equations

Write the word equations below as chemical equations and balance:

- 1) Zinc and lead (II) nitrate react to form zinc nitrate and lead.
- 2) Aluminum bromide and chlorine gas react to form aluminum chloride and bromine gas.
- 3) Sodium phosphate and calcium chloride react to form calcium phosphate and sodium chloride.
- 4) Potassium metal and chlorine gas combine to form potassium chloride.
- 5) Aluminum and hydrochloric acid react to form aluminum chloride and hydrogen gas.
- 6) Calcium hydroxide and phosphoric acid react to form calcium phosphate and water.
- 7) Copper and sulfuric acid react to form copper (II) sulfate and water and sulfur dioxide.
- 8) Hydrogen gas and nitrogen monoxide react to form water and nitrogen gas.