
Chapter 7 Worksheet

Homework is not collected or graded, but should be worked on seriously every week.

Part A: Writing Equations and Classifying Reactions

1. Write balanced chemical equations for each reaction described below, then classify them as either combination, decomposition, combustion, single displacement or double displacement reactions.
 - a. Phosphoric acid reacts with pure sodium metal to form pure hydrogen and aqueous sodium phosphate.
Equation: _____
Classification: _____
 - b. Benzene liquid (C₆H₆) burns in oxygen to form carbon dioxide and water (and heat).
Equation: _____
Classification: _____
 - c. Calcium nitrate (aq) reacts with lithium sulfide (aq) forming solid calcium sulfide and lithium nitrate (aq).
Equation: _____
Classification: _____
 - d. Sodium bicarbonate when heated will form solid sodium carbonate, carbon dioxide and water vapor.
Equation: _____
Classification: _____
 - e. Sulfur naturally exists as S₈ molecules. Sulfur reacts with pure fluorine to form gaseous sulfur hexafluoride.
Equation: _____
Classification: _____
 - f. Cobalt(III) bromide (aq) reacts with pure chlorine forming pure bromine and cobalt(III) chloride (aq).
Equation: _____
Classification: _____
 - g. Aqueous potassium hydroxide reacts with sulfuric acid to form water and aqueous potassium sulfate.
Equation: _____
Classification: _____
 - h. Iron(II) oxide reacts with pure oxygen to form iron(III) oxide.
Equation: _____
Classification: _____