Types of Reactions
Chem Worksheet 10-3

Name _____

Balance the following reactions. Classify the reactions as synthesis, decomposition, single displacement, or double displacement.

1. $Fe + Ag_2SO_4 \rightarrow FeSO_4 + Ag$

2. $Fe + O_2 \rightarrow Fe_2O_3$

3. $H_2O_2 \rightarrow H_2O + O_2$

4. $Cl_2 + KI \rightarrow KCl + I_2$

5. $CaCO_3 + HCl \rightarrow CaCl_2 + H_2CO_3$

6. $(NH_4)_2Cr_2O_7 \rightarrow N_2 + H_2O + Cr_2O_3$

7. $Fe_2O_3 + Al \rightarrow Al_2O_3 + Fe$

8. $C_2H_6 \rightarrow C + H_2$

9. $BaCl_2 + NaOH \rightarrow Ba(OH)_2 + NaCl$

10. $N_2 + H_2 \rightarrow NH_3$

Write complete equations for the following reactions. Balance each equation.

11. Aluminum and sulfur react in a synthesis reaction.

12. Lead (II) nitrate and sodium carbonate react in a double replacement reaction

13. Zinc metal and tin (II) chloride solution undergo a single replacement reaction.

14. Water is decomposed with an electrical current.

15. Magnesium metal and iron (II) nitrate undergo a single replacement reaction.