**CHEMISTRY A Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**REVIEW**

**Chemical Equations Period\_\_\_\_\_\_\_**

1. Balance the following equations by inserting the correct coefficients.

 a. Cu + H2O Cu(OH)2 + H2

 b. Al(NO3)3 + NaOH Al(OH)3 + NaNO3

 c. Fe + H2SO4 Fe2(SO4)3 + H2

 d. O2 + CS2 CO2  + SO2

 e. Mg + N2 Mg3N2

 f. WO3 + H2 W + H2O

 g. PdCl2 + HNO3 Pd(NO3)2 + HCl

 h. RbCl + O2 RbClO4

1. Write balanced chemical equations for the following statements.
2. When copper(II) carbonate is heated, it decomposes into copper(II) oxide and carbon dioxide gas.
3. Silver nitrate reacts with sulfuric acid to produce silver sulfate and nitric acid.

1. Sulfuric acid decomposes to water and sulfur trioxide.

1. Barium hydroxide reacts with carbon dioxide to form barium carbonate and water.
2. Pentane, C5H12, burns in oxygen to produce carbon dioxide and water.

REACTION TYPES AND PREDICTING PRODUCTS

Classify each of the following reactions and write a balanced equation.

1. H2O2

2. Ag + S

3. C4H8 + O2

4. K + H2O

5. HCl + NaOH

Predict the products and write the balanced chemical equation.

1. aluminum metal plus copper (II) nitrate
2. sulfuric acid is added to potassium hydroxide
3. the combustion of cyclopentane , C5H10
4. zinc metal is added to hydrochloric acid
5. the decomposition of magnesium chlorate
6. barium chloride is added to phosphoric acid