**CHEMISTRY A NAME**

**Chemical Equations**

**Period\_\_\_\_\_\_**

*Complete the following and balance.*

1. chromium displaces hydrogen from hydrochloric acid, with chromium(II) chloride as the other product
2. barium hydroxide reacts with carbon dioxide to form barium carbonate and water

3. Na + O2

4. AsCl3 + H2O

5. Zn+ H20

6. HCl + NaOH

7. Zn + H2SO4

8. NbI3 + I2

9. Pb(CH3COO)2 + K2CrO4

10. CaCO3

11. Mg + CuSO4

12. Cl2 + Na

*Balance each of the following reactions after predicting the products.*

13. silver oxide decomposes

14. copper plus silver nitrate (copper(II) compound is formed)

15. magnesium plus oxygen (synthesis)

16. hydrochloric acid plus silver nitrate

17. magnesium plus hydrochloric acid

18. iron plus oxygen (synthesis; iron(III) compound is formed)

19. iron plus sulfur (synthesis; iron(II) compound is formed)

20. Calcium plus water

**Writing Equations**

*Write equations for the following reactions:*

1) The reaction of ammonia with iodine to form nitrogen triiodide (NI3) and hydrogen gas.

2) The combustion of propane (C3H8).

3) The incomplete combustion of propane to form CO and water.

4) The reaction of nitric acid with potassium hydroxide.

5) The reaction of copper (II) oxide with hydrogen to form copper metal and water.

6) The reaction of iron metal with oxygen to form iron (III) oxide.

7) The complete combustion of 2,2-dimethylpropane (C4H10) in oxygen.

8) The reaction of Aluminum Bromide with Magnesium Hydroxide.

9) The decomposition of hydrogen peroxide to form water and oxygen.

10) The reaction of ammonia with sulfuric acid H2SO4.