Name: Period: Seat#:

Directions: These are the Qs that went with WS #3. For any questions you did not complete in class, use this paper to finish the problems on WS #3. Put your answers on WS #3 not this paper, this is just the questions!

- 1) What charge will Nitrogen have when it forms an ion? What will its name be?
- 2) What is the formula for Calcium Hydroxide?
- 3) Mg(OH)₂ Name and type of bond?
- **4)** Ba(NO₃)₂ Name and type of bond?
- 5) What is the formula for lithium sulfate?
- 6) What charge will sulfur have when it forms and ion? What will its name be?
- **7)** CoF₃ Name and type of bond?
- 8) What is the formula for Aluminum sulfate?
- 9) What is the formula for Iron (III) Chloride?
- **10)**Fe₂O₃ Name and type of bond?
- **11)**Co₃N₂ Name and type of bond?

12) ___Mg + ___
$$N_2 \rightarrow$$
 ___Mg₃ N_2

13) ___KOH +__H₃PO₄
$$\rightarrow$$
 ___K₃PO₄ +___H₂O

14) Fe +
$$H_2SO_4 \rightarrow Fe_2 (SO_4)_3 + H_2$$

15)___C₂H₆ +___O₂
$$\rightarrow$$
 ___H₂O +___CO₂

- **16)**Identify type of reaction 3 Mg + N₂ → Mg₃N₂
- 17) Identify type of reaction $3 \text{ KOH} + \text{H}_3 \text{PO}_4 \rightarrow \text{K}_3 \text{PO}_4 + 3 \text{H}_2 \text{O}$
- 18) Identify type of reaction 2 Fe +3 H₂SO₄ \rightarrow Fe₂ (SO₄)₃ + 3 H₂
- **19)**Write and Balance:
 Sodium plus Oxygen yield Sodium Oxide
- **20)**Write and Balance: Potassium oxide is added to water producing Potassium Hydroxide

- **21)**Write and Balance: Solid Carbon (graphite) is added oxygen makes carbon dioxide
- **22)**Write and Balance: Beryllium oxide is added to carbon dioxide producing Beryllium Carbonate
- **23)**Write and Balance: Aluminum oxide added to water makes aluminum hydroxide
- **24)**Write and Balance: Zn+ HCl →
- 25) Write and Balance: $Al_2(SO_4)_{3(aq)} + Ca_3(PO_4)_{2(aq)} \rightarrow$
- **26)**Write and Balance: $C_7H_6O + O_2 \rightarrow$
- **27)**Write and Balance: Barium metal reacts with Iron (III) sulfate to produce...
- **28)**Write and Balance: The combustion of decane. (C₁₀H₂₂)...
- **29)**Write and Balance: A solution of Potassium Carbonate plus a solution of barium chloride produces...
- **30)** Determine if a precipitate forms when the following solutions are mixed. Write the overall equation, the total ionic equation, and the net ionic equation. A solution of sodium fluoride is mixed with a solution of barium nitrate.
- **31)**Determine if a precipitate forms when the following solutions are mixed. Write the overall equation, the total ionic equation, and the net ionic equation. A solution of potassium bromide is mixed with a solution of ammonium sulfate.