

Name: _____

Period: _____

Seat#: _____

These are the questions 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) $\text{Mg}(\text{OH})_2$ Name and type of bond?
- 4) $\text{Ba}(\text{NO}_3)_2$ Name and type of bond?
- 5) What is the formula for lithium sulfate?
- 6) What charge will sulfur have when it forms an ion? What will its name be?
- 7) CoF_3 Name and type of bond?
- 8) What is the formula for Aluminum sulfate?
- 9) What is the formula for Iron (III) Chloride?
- 10) Fe_2O_3 Name and type of bond?
- 11) Co_3N_2 Name and type of bond?
- 12) Balance the equation $___ \text{Mg} + ___ \text{N}_2 \rightarrow ___ \text{Mg}_3\text{N}_2$
- 13) Balance the equation $___ \text{KOH} + ___ \text{H}_3\text{PO}_4 \rightarrow ___ \text{K}_3\text{PO}_4 + ___ \text{H}_2\text{O}$
- 14) Balance the equation $___ \text{Fe} + ___ \text{H}_2\text{SO}_4 \rightarrow ___ \text{Fe}_2(\text{SO}_4)_3 + ___ \text{H}_2$
- 15) Balance the equation $___ \text{C}_2\text{H}_6 + ___ \text{O}_2 \rightarrow ___ \text{H}_2\text{O} + ___ \text{CO}_2$
- 16) Identify type of reaction $3 \text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
- 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 $2 \text{Fe} + 3 \text{H}_2\text{SO}_4 \rightarrow \text{Fe}_2(\text{SO}_4)_3 + 3 \text{H}_2$
- 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

Dougherty Valley HS Chemistry
Reactions – Predicting Products Practice - QUESTIONS

24) Write and Balance: $__ \text{Zn} + __ \text{HCl} \rightarrow$

25) Write and Balance: $__ \text{Al}_2(\text{SO}_4)_{3(\text{aq})} + __ \text{Ca}_3(\text{PO}_4)_{2(\text{aq})} \rightarrow$

26) Write and Balance: $__ \text{C}_7\text{H}_6\text{O} + __ \text{O}_2 \rightarrow$

27) Write and Balance: Barium metal reacts with Iron (III) sulfate to produce...

28) Write and Balance: The combustion of decane. ($\text{C}_{10}\text{H}_{22}$)...

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.