**EQUATIONS EQUATIONS EQUATIONS!!!**

Write word and balanced chemical equations for the following.

1. When chlorine gas reacts with methane gas, carbon tetrachloride gas and hydrogen chloride gas are produced.
2. When solid sodium oxide is added to water, aqueous sodium hydroxide is produced.
3. In a blast furnace at 1200oC, solid iron (III) oxide and carbon monoxide gas produce carbon dioxide gas and solid iron.
4. Iodine crystals react with chlorine gas to produce iodine trichloride gas.
5. Zinc and aqueous lead (II) nitrate react to form aqueous zinc nitrate and solid Lead.
6. Solid aluminum bromide and chlorine gas when heated react to form solid aluminum chloride and bromine gas.
7. Aqueous solutions of sodium phosphate and calcium chloride react to form a white precipitate of calcium phosphate and aqueous sodium chloride.
8. Potassium metal and chlorine gas when heated combine to form solid potassium chloride
9. Aluminum metal and aqueous hydrochloric acid (HCl) react to form aqueous aluminum chloride and hydrogen gas.
10. Solid calcium hydroxide and phosphoric acid (H3PO4) react to form solid calcium phosphate and water.
11. Copper metal and aqueous sulfuric acid (H2SO4) react to form aqueous copper (II) sulfate, water and sulfur dioxide
12. Hydrogen gas and nitrogen monoxide gas react to form water and nitrogen gas.
13. When dissolved barium chloride reacts with dissolved potassium sulfate in water, barium sulfate precipitate and aqueous potassium chloride are made.
14. When calcium chloride and potassium phosphate are dissolved in water they react to form aqueous potassium chloride and calcium phosphate powder.
15. When solid sucrose (C12H22O11) burns in oxygen gas, carbon dioxide and water vapour are produced.
16. When dissolved calcium hydroxide reacts with sulfuric acid (H2SO4), a precipitate of calcium sulfate, and water are formed.
17. When sodium metal reacts with aqueous iron (III) chloride, iron metal and aqueous sodium chloride are formed.
18. When solid copper (II) carbonate is mixed with aqueous sulfuric acid (H2SO4), a blue aqueous solution of copper (II) sulfate, water and carbon dioxide gas is made
19. When ammonia gas is bubbled through aqueous sulfuric acid (H2SO4), aqueous ammonium sulfate is formed.
20. Sulfur dioxide gas burns in oxygen gas to form sulfur trioxide gas.
21. Aluminum metal and hydrochloric acid (HCl) yield aqueous aluminum chloride and hydrogen gas.
22. Solid potassium chlorate when heated yields solid potassium chloride and oxygen gas.
23. Metallic tin over time oxidises in the presence of oxygen to form tin (II) oxide
24. Although bright and shiny aluminum objects are covered with a tight invisible coating of aluminum oxide that forms when aluminum is exposed to oxygen.
25. When dissolved beryllium chloride reacts with dissolved silver nitrate in water, aqueous beryllium nitrate and silver chloride precipitates out.