

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Chemical Reactions Ws #3: Identifying Reaction Type

Directions: Write a balanced equation and indicate the reaction type for each of the following equations. SR = single replacement DR = double replacement

C = Combination

D = Decomposition

- \_\_\_\_\_ 1. Aluminum nitrate solution reacts with sodium hydroxide solution to yield sodium nitrate solution and a precipitate of aluminum hydroxide
- \_\_\_\_\_ 2. Solid potassium chlorate is heated to yield solid potassium chloride and oxygen gas.
- \_\_\_\_\_ 3. A solution of phosphoric acid reacts with magnesium hydroxide solution to give a precipitate of magnesium phosphate and liquid water.
- \_\_\_\_\_ 4. In the presence of heat, ammonium nitrite solid will yield nitrogen gas and liquid water.
- \_\_\_\_\_ 5. Solid Aluminum Sulfate breaks down to produce solid Aluminum Oxide and Sulfur trioxide gas.
- \_\_\_\_\_ 6. Aqueous barium chloride reacts with aqueous sodium sulfate to give sodium chloride solution and a precipitate of barium sulfate.
- \_\_\_\_\_ 7. A solution of iron III bromide reacts with aqueous ammonium sulfide to give solid iron III sulfide and aqueous ammonium bromide.
- \_\_\_\_\_ 8. Solid calcium oxide combines with solid diphosphorus pentoxide to produce solid calcium phosphate
- \_\_\_\_\_ 9. An aqueous solution of magnesium chloride combines with an aqueous solution of silver nitrate to produce aqueous magnesium nitrate and solid silver chloride.
- \_\_\_\_\_ 10. Solid aluminum hydroxide and acetic acid solution combine to produce aqueous aluminum acetate and liquid water.
- \_\_\_\_\_ 11. Solid iron reacts with solid silver acetate to yield iron II acetate solution plus beautiful solid silver.
- \_\_\_\_\_ 12. Calcium hydroxide solution reacts with phosphoric acid to yield the salt precipitate calcium phosphate and water.
- \_\_\_\_\_ 13. Sodium hydroxide solution reacts with sulfuric acid to give the soluble salt sodium sulfate and water
- \_\_\_\_\_ 14. Solutions of Calcium Nitrate and Sulfuric acid are mixed and produce a solid precipitate of Calcium sulfate in a nitric acid solution.
- \_\_\_\_\_ 15. A solution of Sulfuric Acid is synthesized from liquid water and sulfur trioxide gas.