

CHEM. HOMEWORK 6c.-> 5c. Name: \_\_\_\_\_

**A. REVIEW.** Write the correct formula of each compound:

- |                         |                         |                       |
|-------------------------|-------------------------|-----------------------|
| 1. potassium bromide    | 9. lithium sulfide      | 17. nitric acid       |
| 2. magnesium cyanide    | 10. sodium sulfate      | 18. nitrous acid      |
| 3. vanadium(III) oxide  | 11. copper(II) chlorate | 19. sulfuric acid     |
| 4. titanium(IV) oxide   | 12. calcium sulfite     | 20. sulfurous acid    |
| 5. ammonia              | 13. barium iodide       | 21. lithium phosphide |
| 6. ammonium fluoride    | 14. magnesium acetate   | 22. acetic acid       |
| 7. ammonium sulfate     | 15. hydrochloric acid   | 23. sulfur trioxide   |
| 8. nickel(II) phosphate | 16. rubidium carbonate  | 24. phosphoric acid   |

**B. Use the activity series shown on page 266 in your text, and the solubility rules, to determine whether or not a reaction will take place in each of the following cases.**

If no reaction will occur (or only a balanced equilibrium), write NR or No Reaction.

If a reaction will occur, write a balanced equation for the reaction.

- 1.)  $\text{Cu} + \text{H}_2\text{SO}_4 \rightarrow$
- 2.)  $\text{MgCl}_2 + \text{AgNO}_3 \rightarrow$
- 3.)  $\text{NaBr} + \text{CuSO}_4 \rightarrow$
- 4.)  $\text{Fe} + \text{Pb}(\text{NO}_3)_2 \rightarrow$
- 5.)  $\text{Sn} + \text{KOH} \rightarrow$
- 6.)  $\text{Cl}_2 + \text{RbBr} \rightarrow$
- 7.)  $(\text{NH}_4)_2\text{SO}_4 + \text{Ba}(\text{C}_2\text{H}_3\text{O}_2)_2 \rightarrow$
- 8.)  $\text{SnF}_2 + \text{Na} \rightarrow$
- 9.)  $(\text{NH}_4)_2\text{S} + \text{Al}(\text{ClO}_3)_3 \rightarrow$

CHEMISTRY  
OLD HOMEWORK 6c.

Name: \_\_\_\_\_

**A. Write a balanced equation** for each of the following reactions:

1. Nitric acid neutralizes calcium hydroxide, producing calcium nitrate and water.
2. Hydrogen is formed when aluminum reacts with dilute nitric acid.
3. Silver acetate reacts with hydrochloric acid; a precipitate forms in the reaction.
4. Sulfuric acid reacts with calcium carbonate to form calcium sulfate, water, and carbon dioxide.  
(This is what happens when acid rain falls on marble statues.)
5. Sodium reacts vigorously with chlorine gas to form salt.

**B.** Find the number of grams of KOH required to neutralize 135 g of sulfuric acid, as follows:

