

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