

Equations: Practice Sheet 3

Directions: Determine the type of reaction and place the letter S (synthesis), D (decomposition) R (replacement) or I (ionic) to the left of the number to indicate the type. Then write the formulas for all reactants and products, predicting the product(s) for each reaction. Write "NR" if no reaction occurs.

1. Decomposition of mercury(II) oxide \longrightarrow

2. Decomposition of potassium chlorate \longrightarrow

3. Electrolysis of water \longrightarrow

4. Lithium + chlorine \longrightarrow

5. potassium oxalate + barium nitrate \longrightarrow

6. Zinc + hydrochloric acid \longrightarrow

7. calcium carbonate + acetic acid \longrightarrow

8. strontium chloride + sodium sulfate \longrightarrow

9. sodium + water \longrightarrow

10. potassium hydroxide + nitric acid \longrightarrow

11. Decomposition of copper(II) carbonate \longrightarrow

12. copper + hydrochloric acid \longrightarrow

13. potassium iodide + lead(II) acetate \longrightarrow

14. Decomposition of copper(II) hydroxide \longrightarrow

15. potassium sulfate + hydrochloric acid \longrightarrow

16. aluminum + iron(II) sulfate \longrightarrow

17. copper + silver nitrate \longrightarrow

18. Complete combustion of octane (C_8H_{18}) \longrightarrow

19. lead(II) acetate + magnesium \longrightarrow

20. potassium sulfide + hydrochloric acid \longrightarrow

21. calcium nitrate + sodium carbonate \longrightarrow

22. ammonium hydroxide + lead(II) nitrate \longrightarrow

23. calcium chloride + bromine \longrightarrow

24. iron(III) oxide + carbon monoxide \longrightarrow

25. hydrogen + nitrogen \longrightarrow