

Name _____

Writing Reactions

For the following reactions:

- Identify the type of reaction: Synthesis=S; Decomposition=D; Single replacement=SR; Double Replacement=DR; Combustion=CB
- Write the names of the product(s).
- Write the equation with reactants and products (don't forget the phases)
- Balance the equation.
- Write NR on the right if the reaction will not occur.

RXN type	
SR	Ex. Calcium and Cobalt (III) nitrate yield (Calcium Nitrate and Cobalt) $3\text{Ca}_{(s)} + 2\text{Co}(\text{NO}_3)_3 \text{(aq)} \rightarrow 3\text{Ca}(\text{NO}_3)_2 \text{(aq)} + 2\text{Co}_{(s)}$
_____	1) Strontium Carbonate solid yields a metal oxide and a gas
_____	2) Magnesium and nitrogen yield
_____	3) The complete combustion of liquid octane (C_8H_{18})
_____	4) Aluminum fluoride and iodine yield
_____	5) Nickel (II) bromide and sodium phosphate yield
_____	6) Iron plus oxygen yields an iron (III) salt
_____	7) Sodium chloride and calcium bromide yield
_____	8) Copper and potassium phosphate yield (copper (II))

RXN type	
_____	9) Calcium and mercury (I) nitrate yields
_____	10) Water is broken into elements at 25°C
_____	11) The complete combustion of propane gas (C_3H_8)
_____	12) Sodium hydroxide and lead (II) nitrate yields
_____	13) Zinc and tin (IV) chloride yields
_____	14) Sodium and chlorine yields
_____	15) Barium oxide and copper (II) chlorate yields
_____	16) Ethanol breaks down into elements
_____	17) The complete combustion of solid paraffin wax ($\text{C}_{25}\text{H}_{52}$)
_____	18) Aluminum, sulfur, and oxygen yield a sulfate salt
_____	19) Iron and aluminum iodide yields and iron(II) salt
_____	20) Magnesium hydroxide and phosphoric acid yields