Name:_____ Per:___

Identifying the 5 Types of Chemical Reactions

Identify each of the reactions below as one of the 5 types of Reactions (Rxn):

- Synthesis Reaction
- Decomposition Reaction
- Single Replacement Reaction
- Double Replacement Reaction
- Combustion Reaction

Reactions (identify pattern below)	Name of Reaction Type
1. $2\ Na + Cl_2 \rightarrow 2\ NaCl$ EX: A B → AB (A & B combine)	Ex: synthesis
2. $Pb + FeSO_4 \rightarrow PbSO_4 + Fe$	
3. $P_4 + 3\ O_2 \rightarrow 2\ P_2O_3$	
4. $2\ NO_2 \rightarrow 2\ O_2 + N_2$	
5. $Na_3PO_4 + 3\ KOH \rightarrow 3\ NaOH + K_3PO_4$	
6. $C_3H_6O + 4\ O_2 \rightarrow 3\ CO_2 + 3\ H_2O$	
7. $MgCl_2 + Li_2CO_3 \rightarrow MgCO_3 + 2\ LiCl$	
8. $C_6H_{12} + 9\ O_2 \rightarrow 6\ CO_2 + 6\ H_2O$	
9. $CaCO_3 \rightarrow CaO + CO_2$	
10. $2\ AgNO_3 + Cu \rightarrow Cu(NO_3)_2 + 2\ Ag$	
11. $2H_2 + O_2 \rightarrow 2H_2O$	

Identifying Reaction Types & Balancing Equations

Step 1: Name the type of chemical reaction	**Step 2: Balance the following chemical equations:**
1. Ex: Synthesis	__ N_2 + __ H_2 → __ NH_3
2.	__ $KClO_3$ → __ KCl + __ O_2
3.	__ NaCl + __ F_2 → __ NaF + __ Cl_2
4.	__ H_2 + __ O_2 → __ H_2O
5.	__ $AgNO_3$ + __ $MgCl_2$ → __ AgCl + __ $Mg(NO_3)_2$
6.	__ $AlBr_3$ + __ K_2SO_4 → __ KBr + __ $Al_2(SO_4)_3$
7.	__ CH_4 + __ O_2 → __ CO_2 + __ H_2O
8.	__ C_3H_8 + __ O_2 → __ CO_2 + __ H_2O
9.	__ $FeCl_3$ + __ NaOH → __ $Fe(OH)_3$ + __ NaCl
10.	__ P + __ O_2 → __ P_2O_5
11.	__ Na + __ H_2O → __ NaOH + __ H_2
12.	__ Ag_2O → __ Ag + __ O_2
13.	__ CO_2 + __ H_2O → __ $C_6H_{12}O_6$ + __ O_2
14.	__ K + __ $MgBr_2$ → __ KBr + __ Mg
15.	__ $HNO_3(aq)$ + __ $Ba(OH)_2(aq)$ → __ $Ba(NO_3)_2(aq)$ + __ H_2O (l)
16.	__ $C_5H_{12}(g)$ + __ $O_2(g)$ → __ $CO_2(g)$ + __ $H_2O(g)$
17.	__ Al(s) + __ $Fe_2O_3(aq)$ → __ $Al_2O_3(aq)$ + __ Fe(s)
18.	__ Al(s) + __ $O_2(g)$ → __ Al_2O_3 (s)