Name: _____

Period: _____

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1. Displacement	B	A. To burn something.
2. Addition	C	B. To push something out of the way.
3. Combustion	A	C. To combine things.
4. Decomposition	E	D. To create something new from ingredients.
5. Synthesize	D	E. To break something apart.

1. Single Displacement Reaction	B	A. The metals in two compounds switch places.
2. Addition Reaction	C	B. An element replaces one of the elements in a compound.
3. Combustion Reaction	E	C. Two elements combine to form a compound.
4. Double Displacement Reaction	A	D. A compound breaks up into its elements.
5. Decomposition Reaction	D	E. A fuel burns in oxygen, creates heat, and usually produces CO_2.

Which type of reaction has only one reactant?
Decomposition

Which type of reaction has two compound reactants and two compound products? Displacement Comb

Which type of reaction always has oxygen as a reactant?
combustion

Which type of reaction has only one product?
addition

Which type of reaction has an element and a compound as reactants? Single Displacement

Write a reaction of Magnesium chloride combining with Lithium oxide to produce Magnesium oxide and Lithium Chloride. (Be sure that the ionic compounds are balanced.)

$Mg^{2+}Cl^{1-} + Li^{1+}O^{2-} \rightarrow Mg^{2+}O^{2-} + Li^{1+}Cl^{1-}$

$MgCl_2 + Li_2O \rightarrow MgO + 2LiCl$

Directions: Complete the chart below.

Element	Number of Valence Electrons	# of electrons gained or lost to fill outer energy level	Charge (Oxidation Number)
Sodium	1	1 Lost	1+
Chlorine	7	1 G	1−
Beryllium	2	2 L	2+
Fluorine	1	1 G	1−
Lithium	1	1 L	1+
Oxygen	6	2 G	2−
Potassium	1	1 L	1+
Magnesium	2	2 L	2+
Phosphorous	5	3 G	3−
Aluminum			

Type of Reaction

Double Displacement

Addition

Decomposition

Combustion

Single dspl

Balance the reactions:

$\_\_ Na_2S + \_\_ Zn(NO_3)_2 \rightarrow \_2\_ Na(NO_3) + \_\_ ZnS$

$\_6\_ Li + \_\_ N_2 \rightarrow \_2\_ Li_3N$

$\_2\_ KClO \rightarrow \_2\_ KCl + \_\_ O_2$

$\_\_ CH_4 + \_2\_ O_2 \rightarrow \_2\_ H_2O + \_\_ CO_2$

$\_\_ Mg + \_2\_ Ag(NO_3) \rightarrow \_\_ Mg(NO_3)_2 + \_2\_ Ag$