Honors Chemistry: Homework Set 8-4

- 1. For each of the following composition reactions, identify the missing reactant(s) or product(s), and then balance the resulting equation.
 - a) Ba + ____ → BaO
 - b) Li + Cl₂ → _____
 - c) Al + \longrightarrow AlBr₃
- 2. Complete each of the following composition reactions, and then write a balanced chemical equation for the reaction.
 - a) sodium + oxygen →
 - b) magnesium + fluorine →
- 3. Complete and balance the equations for the following decomposition reactions.
 - a) $Ag_2O \rightarrow$
 - b) KCl →
- 4. Write and balance a chemical equation for each of the following reactions, and then identify each by type.
 - a) Calcium chlorate, when heated, produces calcium chloride and oxygen.
 - b) Aluminum reacts with oxygen to produce aluminum oxide.
 - c) Heating lead (II) carbonate yields lead (II) oxide and carbon dioxide.
 - d) Magnesium hydroxide forms magnesium oxide and water when heated.
 - e) Phosphoric acid (H₃PO₄) is produced through the reaction of tetraphosphorus decoxide and water.