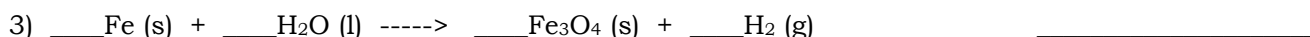
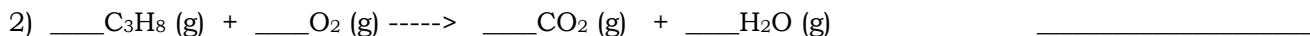


## Equations 3

Name: \_\_\_\_\_

Part 1. Supply the correct coefficients to balance the following reaction equations (assume that all formulas are correct). Then classify each reaction as either synthesis, decomposition, single replacement, double replacement or combustion.

Type of Reaction



Part 2. Write the correct formulas for all reactants and products, then supply the necessary coefficients to balance the equations. Then classify each equation according to its reaction type.

6) Solid chromium metal reacts with liquid iodine to form liquid chromium (III) iodide.

7) Aqueous iron (III) chloride reacts with aqueous calcium sulfate to produce aqueous iron (III) sulfate and aqueous calcium chloride.

8) Aqueous aluminum sulfide reacts with hydrogen gas to produce aqueous hydrosulfuric acid (H<sub>2</sub>S) and aluminum metal.

9) Using electrolysis, the gaseous compound dinitrogen pentoxide (N<sub>2</sub>O<sub>5</sub>) can be broken down into nitrogen gas and oxygen gas.

Part 3: For each of the following redox reactions, balance the reaction and identify the element being oxidized and the element being reduced.

