

Directions for the Types of Reactions Activity

1. Spread out the fifteen reactions. You will be separating these fifteen reactions into five groups with three reactions in each group.
2. In order to separate them into their groups, you will need to look at each reaction. You are trying to separate them into groups if they follow the same pattern or have certain characteristics in common. Here are some questions/observations that you may want to make about each reaction.
 - a. *How many reactants are there?*
 - b. *How many products are there?*
 - c. *Does the reaction have the same reactant(s) or product(s) as other reactions?*
 - d. *When you look at the reactants and the products, what are they?*
 - i. *Are there two compounds?*
 - ii. *Is there a compound and an element?*
3. Once you have separated your reactions into the five groups, determine what type of reaction is represented by each group and LABEL each group. Here are the five types of reactions.

a. **Combination or Synthesis** (Multiple substances come together to make one substance)

b. **Decomposition** (One substance comes apart to make more than one substance)

c. **Single Replacement** (A single element replaces part of a compound to create a new compound and single element.)

d. **Double Replacement** (Two compounds change partners)

e. **Combustion** (A hydrocarbon combines with oxygen to make carbon dioxide and water)

4. Once you have finished, ask Mr. Howe to check your work. After checking, glue your strips to a piece of paper, organizing by type of reaction. **After you have glued the strips balance the equations.**



