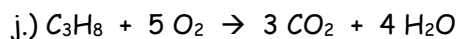
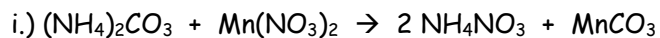
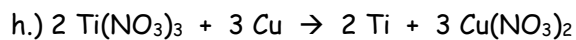
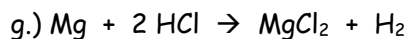
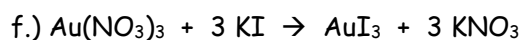
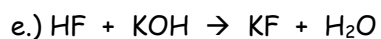
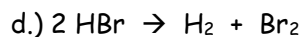
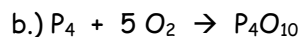
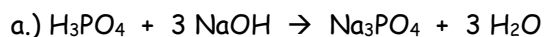
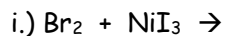
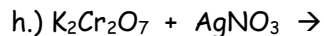
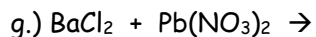
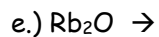
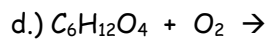
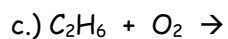
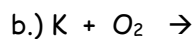
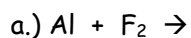


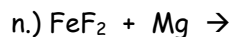
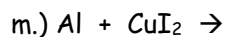
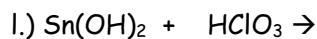
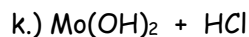
## 6 Types of Reactions - Review

1.) Express what type of reaction each of the following are.



2.) Predict the products formed from each reaction.





3.) Which type of reaction matches the description?

- a.) There is only one reactant.
- b.) There is only one product.
- c.) The reactants are an acid and a base.
- d.) The reactants are an element and a compound.
- e.) The products are carbon dioxide and water.
- f.) Both reactants are compounds.
- g.) One reactant is an element. The other is a compound.

4.) Name the most important reaction rate modifier for each scenario.

- a.) Extra dish soap is needed to help "cut" the grease when washing a frying pan.
- b.) Firewood is chopped in smaller pieces (kindling).
- c.) A lit match is brought near a candlewick in order to light the candle.
- d.) Lemon juice is rubbed on an iron sink to help remove rust.
- e.) The accelerator pedal in a car is pressed to speed a car up, while increasing the fuel consumed.
- f.) The reaction of oxygen with sucrose (sugar) in human cells takes place in the presence of enzymes.
- g.) To release the smell of garlic the clove is crushed and ground up.
- h.) Hydrogen peroxide is used in a solution for disinfecting wounds at 3% for larger wounds and 1% for smaller wounds.

5.) Classify each of the following reactions, and write a balanced equation as well.

a.) Lithium plus oxygen makes lithium oxide.

b.) Magnesium mixed with aluminum chloride will produce magnesium chloride and aluminum metal.

c.) Butane ( $C_4H_{10}$ ) burns with oxygen gas to produce carbon dioxide and water.

d.) Hydrochloric acid plus lithium hydroxide yields lithium chloride and water.

e.) Aluminum oxide degrades into aluminum metal and oxygen gas.

f.) Tin metal and gold (III) nitrate combine to form tin (IV) nitrate and gold metal.

g.) Barium hydroxide and lead (IV) bromide make barium bromide and lead (IV) hydroxide.

h.) Glycerine ( $C_3H_8O_3$ ) and oxygen gas make carbon dioxide gas and water.

i.) Nitrogen gas and oxygen gas combine to make nitrogen dioxide gas.