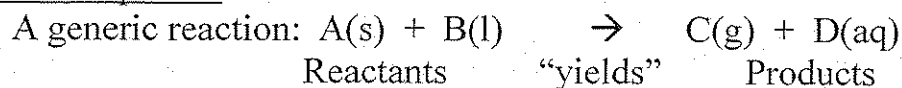


Parts of an Equation

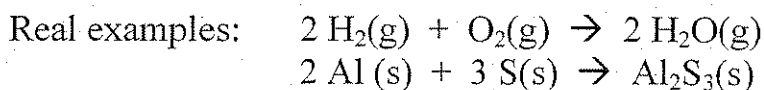
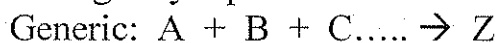


(s) = solid (g) = gas
(l) = liquid
(aq) = aqueous = in water

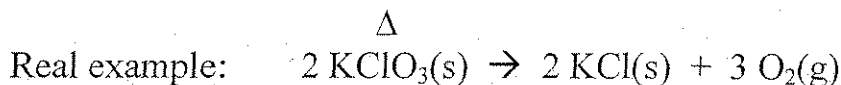
Anything written "over the arrow" is a condition needed for reaction (ex: Δ = heat)

Types of Reactions

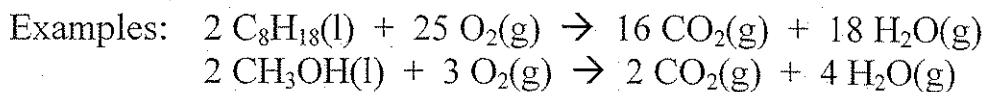
1. Synthesis reactions (also called addition reactions) – characterized by having only 1 product



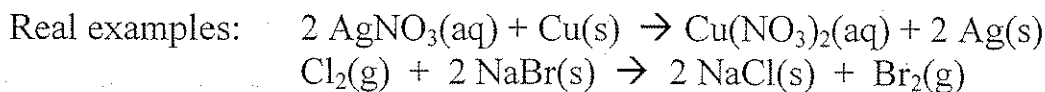
2. Decomposition reactions – characterized by having only 1 reactant



3. Combustion reaction – characterized by always forming carbon dioxide and water

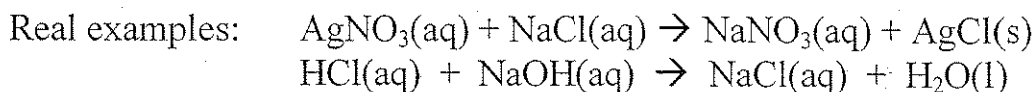
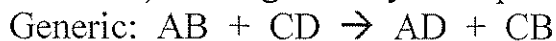


4. Single Replacement (or displacement) reactions – recognized by having a single element on each side "switching"



(Note: In the first example, Cu a metal replaces Ag, another metal. In the second example, Cl, a nonmetal, replaces another nonmetal, Br.)

5. Double Replacement (or displacement) reactions (also called Ionic reactions) – recognized by two "partners" switching



(Note: To see the "switches" in the second example, consider H_2O to be written as H-OH)