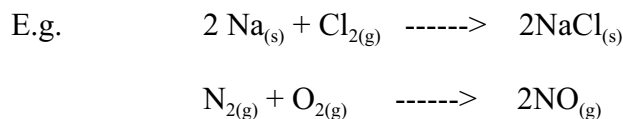


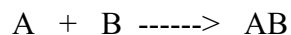
## Types of Chemical Reactions

Many of the reactions you will encounter in this class can be classified under 4 reaction types.

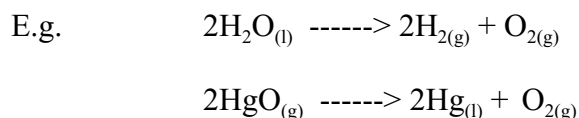
1. **Synthesis or Combination** reactions are those in which a compound is formed from simpler substances.



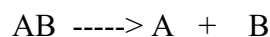
Their general format is



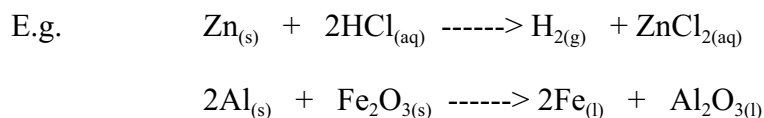
2. **Decomposition** reactions are the opposite of synthesis reactions and consist of a compound breaking down into simpler substances or smaller units.



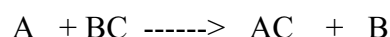
Their general format is



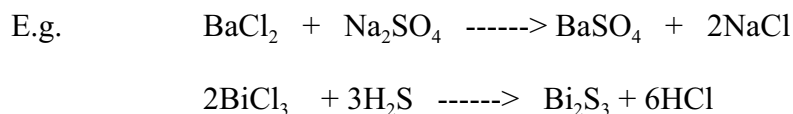
3. **Single Displacement** reactions involve one element or atom taking the place of another in a compound.



The general format is



4. **Double Displacement** reactions are like the single displacement reaction except that compounds exchange (trade) atoms.



The general format is

