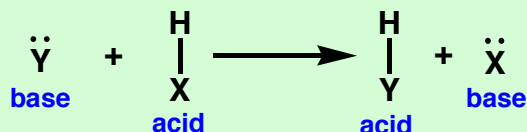


Classes of Chemical Transformations

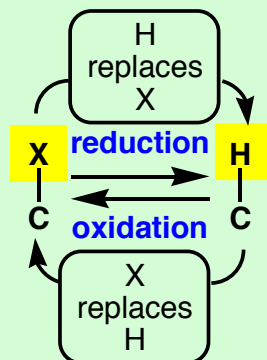
This page summarizes the main classes of chemical transformations. The purpose of presenting this overview is to provide an organizational framework as an outline of upcoming studies. In learning new reactions you will benefit from recognizing to which of the seven classes the new reaction belongs.

1) Acid-Base - hydrogen swap

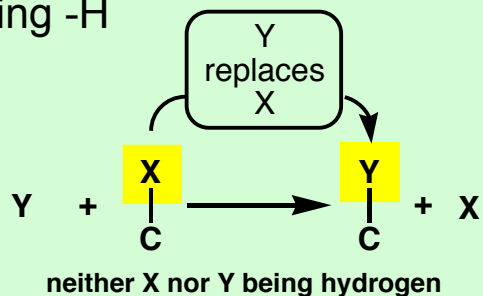


2 & 3) Oxidation & Reduction

change in the number of C-H bonds in relation to the number of C-X bonds

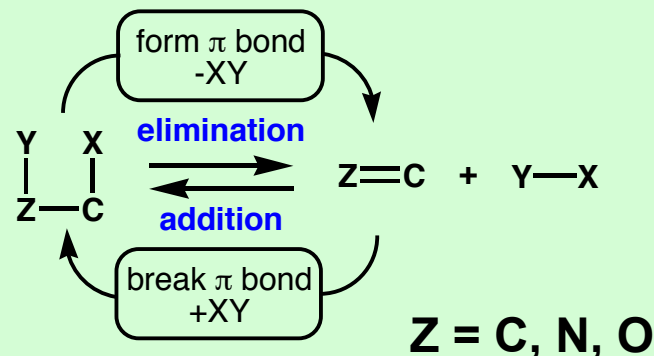


4) **Substitution** - replace C's substituent (-X) with another (-Y), neither being -H



5) **Elimination** - loss of XY elements with concomitant pi bond formation

6) **Addition** - gain of XY elements with concomitant loss of pi bond



7) **Rearrangement** - isomerization process (no atoms lost or gained); results in new bonding connectivity (one of many examples shown as there is no generic representation).

