CONCEPT: ACIDS AND BASES

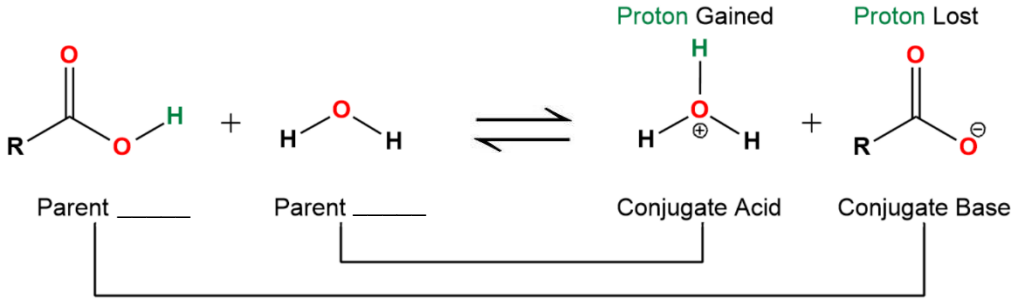
Brønsted-Lowry Acids & Bases

●Brønsted-Lowry Acids: substances capable of _____ a proton (H^+).

●Brønsted-Lowry Bases: substances capable of _____ a proton (H^+).

●Recall: Conjugate acids & conjugate bases differ from each other, respectively, by a gain or loss of *one* proton.

EXAMPLE:

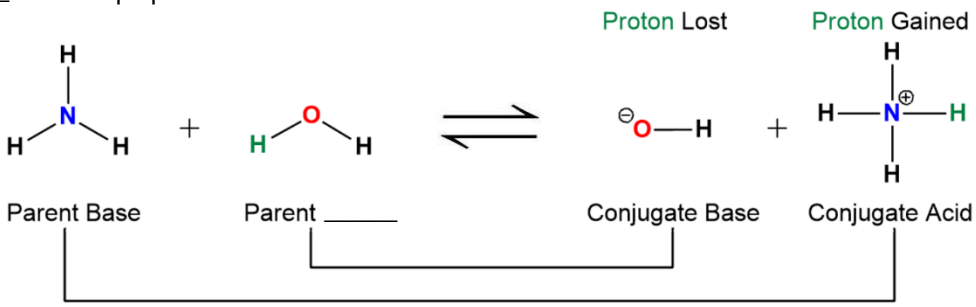


Amphiprotic Molecules

●_____ molecules: can act as either a Brønsted-Lowry acid or a base depending on conditions.

□ _____ is an amphiprotic molecule.

EXAMPLE:



PRACTICE: Which is the conjugate base of methylamine (CH_3NH_2)?

a) CH_3NH^-
b) $CH_3NH_3^+$
c) $CH_2NH_2^-$
d) $CH_3NH_2OH^-$
e) None of the above.

PRACTICE: Consider the reaction & determine which of the following is a conjugate acid-base pair?

$$HC_2O_4^-{}_{(aq)} + H_2O_{(l)} \longrightarrow H_3O^+{}_{(aq)} + C_2O_4^{2-}{}_{(aq)}$$

a) $HC_2O_4^-$ and H_2O
b) H_2O and $C_2O_4^{2-}$
c) $HC_2O_4^-$ and H_3O^+
d) $HC_2O_4^-$ and $C_2O_4^{2-}$