

10.11

acids and bases

Theories that answer "What is an acid and what is a base?"

they explain how acid-base rxns occur

①

Arrhenius
Acids and Bases

②

Bronsted-Lowry
Acids and Bases

How to determine
Conjugate acid base
pairs for Bronsted-Lowry
Theory

③

Lewis
Acids and Base

(10.11)

acids and bases

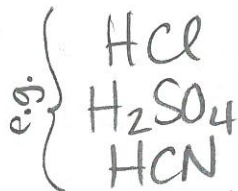
Acid (hydrogen-containing substance that produces H^+ in aqueous sol'n)

H^+ donor / excess H^+

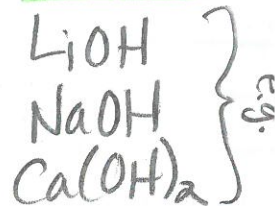
Base (hydroxide-containing substance that produces OH^- in aqueous sol'n)

OH^- donor / excess OH^-

Arrhenius Acid



Arrhenius Base

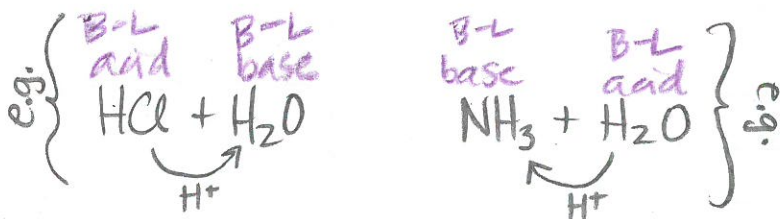


Acid

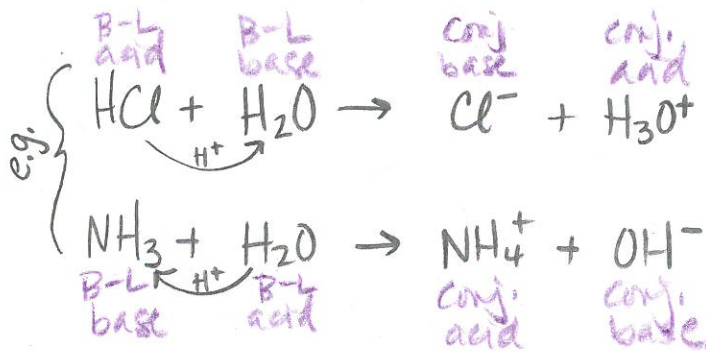
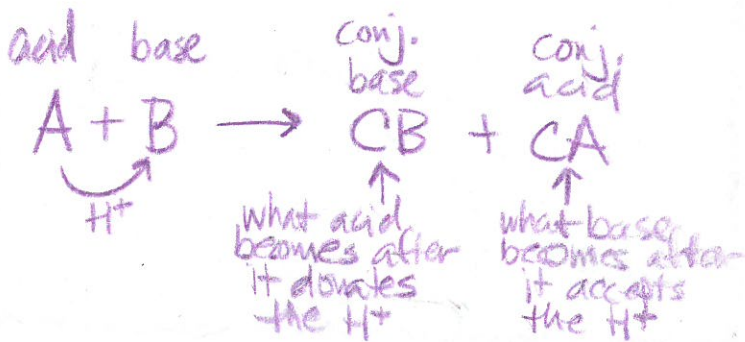
H^+ donor

Base

H^+ acceptor



water can act as a Brønsted-Lowry acid or base



Acid (any species that will bond to an unshared pair of e^-)

e^- pair acceptor

Base (any species that has an unshared pair of e^-)

e^- pair donor

