

Acids/Bases

Definitions

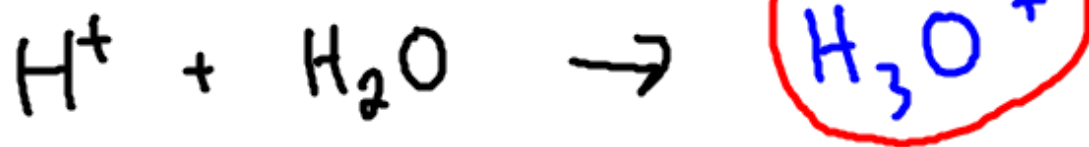
Arrhenius Acid donates H^+

Base donates OH^-

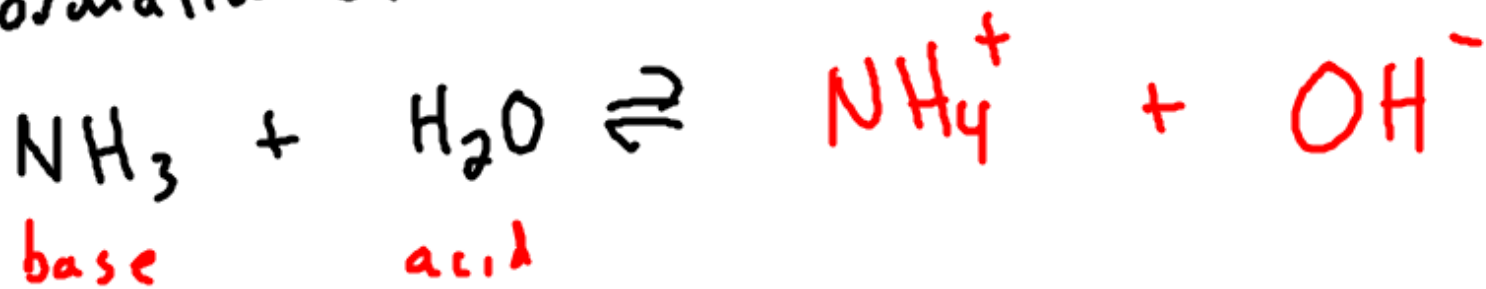
Bronsted Acid donates H^+

Base accept H^+

Hydronium ion really H^+ same

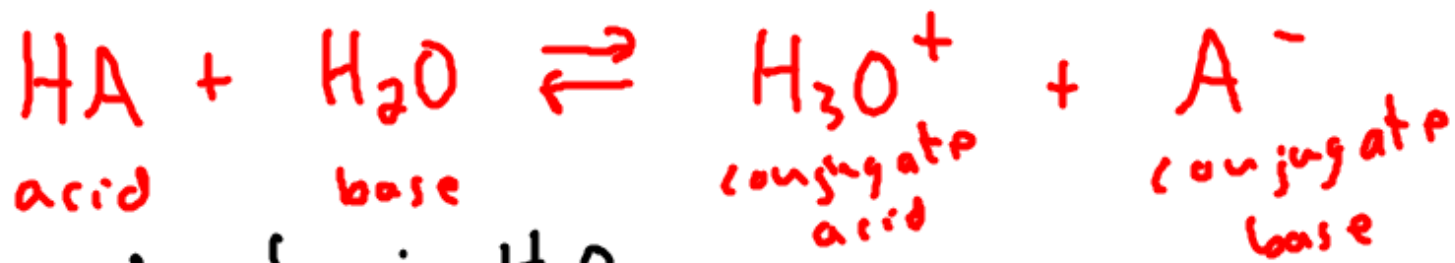


formation of OH^-

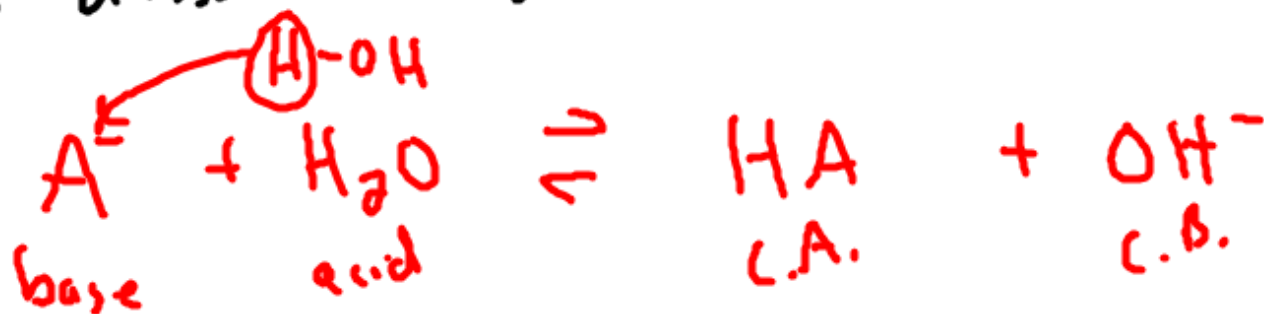


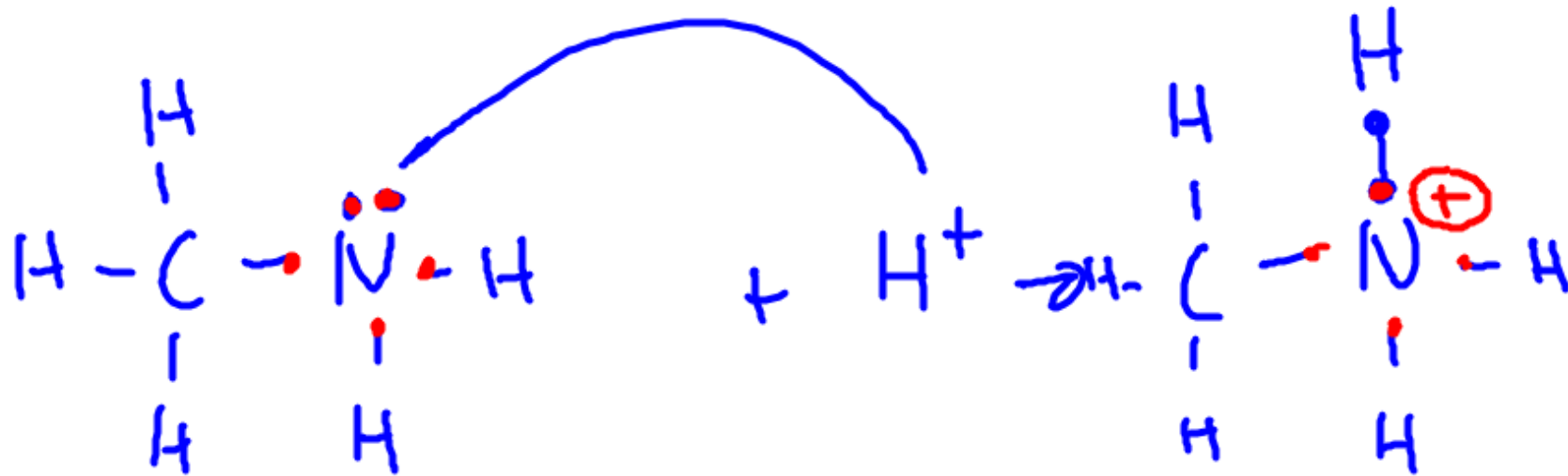
Sum up

Acids dissolve in H_2O



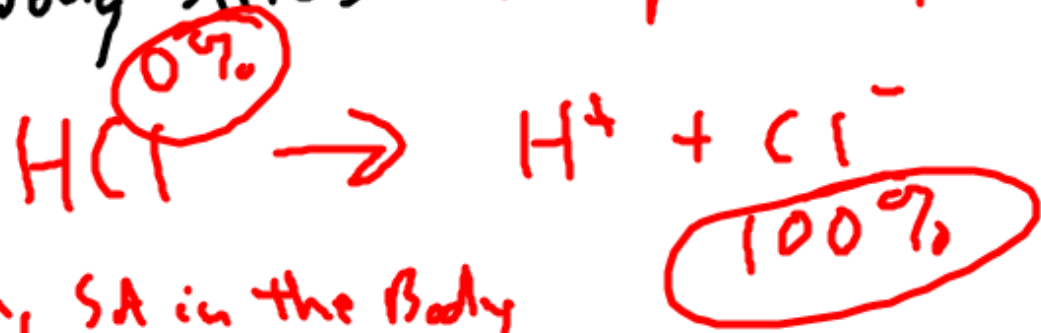
Bases dissolve in H_2O





Strength of Acids / Bases

Strong Acids - completely dissociate



only, SA in the Body

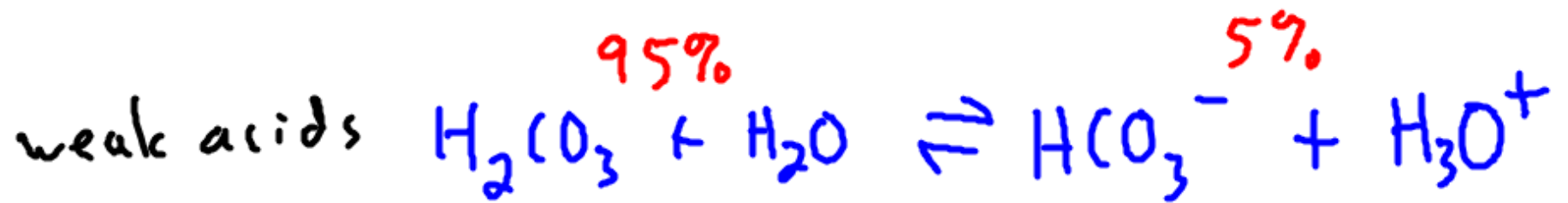


Strong Bases completely dissociate
OH⁻ compounds

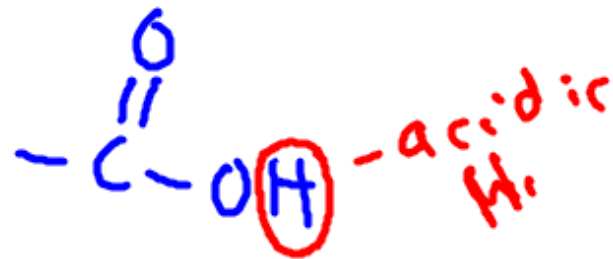


weak acids / Bases

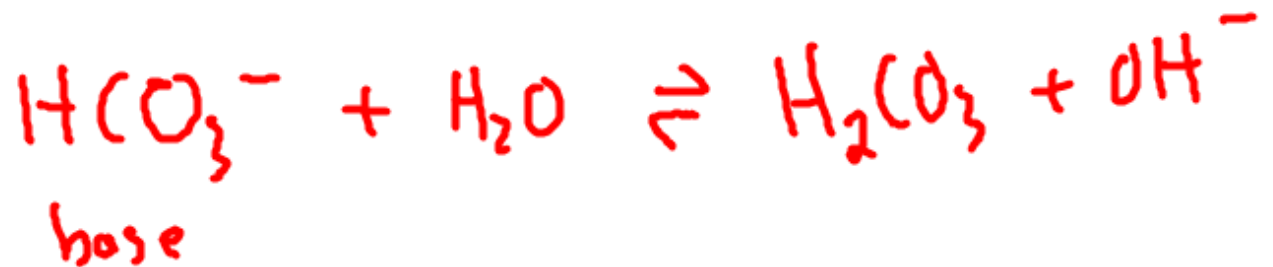
only, partial dissociate



$\text{-CO}_2\text{H}$ carboxylic acids



weak bases



amines
amino acids

Acid-Base Equilibria

forward / Reverse Rates are equal

Le Châtelier's Principle - an equilibrium will adjust to relieve any changes



add more B - shift right

remove D - shift right

remove A - shift left

Neutralization Rxns

acid + base \rightarrow salt + water



\downarrow
amphoteric
compound

