

Lecture 13.2 oxoacids & the Lewis Acid-Base model

Note Title

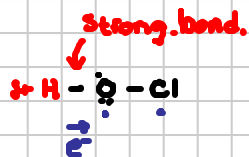
1/24/2012

Strong Acids: weakly held hydrogen: found w/o H attached

Weak Acids: Strongly held hydrogen: found w/ H attached

oxoacids: family

hypochlorous acid



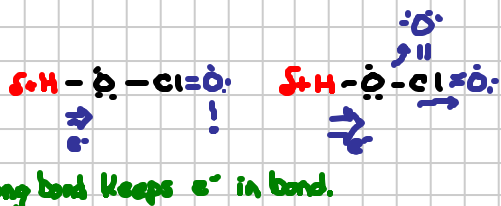
$$K_a = 2.9 \times 10^{-8}$$

Smallest

weakest acid

H-O strongest

chlorous acid



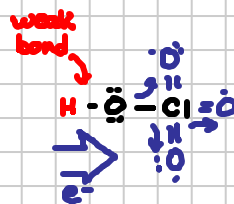
$$K_a = 1.1 \times 10^{-2}$$

Chloric acid



$$K_a = 10$$

perchloric acid



$$K_a = \infty$$

Largest

Strongest acid

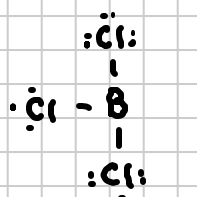
H-O weakest

Lewis Acid Base Model : Acid: e- pair receiver

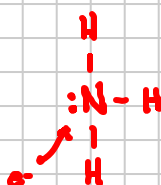
Base: e- pair donor

Boron trichloride

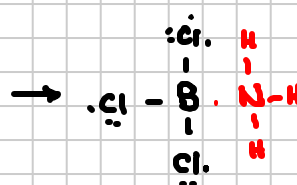
+ ammonia



Lewis Acid



Lewis Base



Coordinate covalent bond.

e- came orig. from one species :NH₃