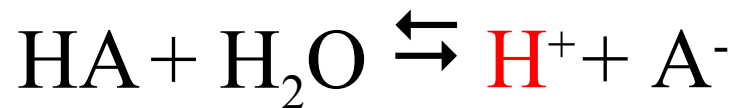


Acid/Base

Arrhenius definition **acid** produces **H⁺** in water

base produces **OH⁻** in water



$$K_a = \frac{[\text{H}^+][\text{A}^-]}{[\text{HA}]} \quad K_a \text{ strength of acid}$$

strong acids no **K_a**

weak acids

dissociate completely

equilibrium process

HCl, HBr, HI

HF **K_a** = 6.8 x 10⁻⁴

HNO₃, HClO₄, H₂SO₄

HIO₃ **K_a** = 0.16