Acids, Bases & pH Reference

Strong and weak acids and bases with an everyday pH scale

Strong Acids · fully dissociate

Hydrochloric acid	HCl
Hydrobromic acid	HBr
Hydroiodic acid	HI
Nitric acid	HNO_3
Sulfuric acid (first proton)	H_2SO_4
Perchloric acid	$HClO_4$
Chloric acid	$HClO_3$

Strong Bases · fully dissociate

Lithium hydroxide	$LiOH$
Sodium hydroxide	$NaOH$
Potassium hydroxide	KOH
Rubidium hydroxide	$RbOH$
Caesium hydroxide	$CsOH$
Calcium hydroxide	$Ca(OH)_2$
Strontium hydroxide	$Sr(OH)_2$
Barium hydroxide	$Ba(OH)_2$

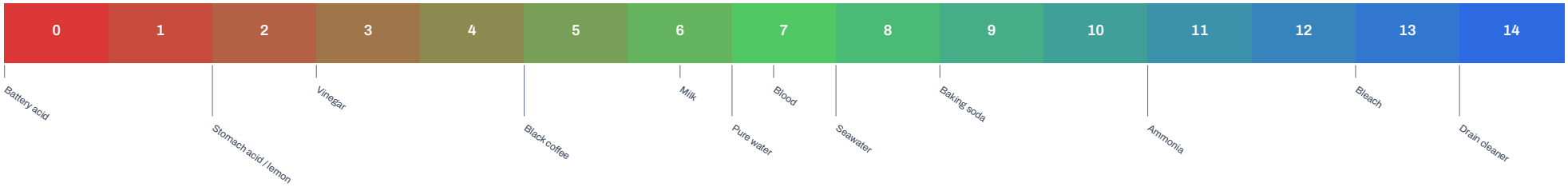
Common Weak Acids

Hydrofluoric acid	HF
Acetic acid	CH_3COOH
Carbonic acid	H_2CO_3
Phosphoric acid	H_3PO_4
Nitrous acid	HNO_2
Sulfurous acid	H_2SO_3
Hydrocyanic acid	HCN
Hydrosulfuric acid	H_2S

Common Weak Bases

Ammonia	NH_3
Methylamine	CH_3NH_2
Pyridine	C_5H_5N
Aniline	$C_6H_5NH_2$

pH Scale · approximate everyday reference points



Everything not on the strong lists is weak under ordinary aqueous conditions. Memorise these seven strong acids and eight strong bases.