

## Acids, Bases & pH Knowledge organiser



## 1. Keyword

Bronsted-Lowry acid	Proton donor	
Bronsted-Lowry base	Proton acceptor	
Conjugate base	An acid that has donated its hydrogen	
Conjugate acid	A <b>base</b> with a hydrogen ion added to it.	
Strong	Fully ionises/dissociates in solution	
Weak	Partially ionises/dissociates in solution	
рН	-Log <sub>10</sub> [H <sup>+</sup> ]	
Kw	lonic product of water = $[H^+]$ $[OH^-] = 1 \times 10^{-14}$ At 298k	
Ka	Acid dissociation constant. A measure of dissociation of a weak acid. Units = Mol dm <sup>-3</sup>	
Half equivalence point	Half the volume required to neutralise and acid or base = pKa	
Indicator	A compound or compounds that change colour when pH chang es. Should fall in the vertical rise on a pH curve	
10 <sup>×</sup>	Inverse log button on your calculator duh!	
Buffer	Solution which resists small changes in pH. Made from a weak acids and its salt.	

2. Useful acids			
Name	Formula	Strength	Protic
Hydrochloric	HCI	Strong	Mono
Sulphuric	H <sub>2</sub> SO <sub>4</sub>	Strong	Di
Nitric	HNO <sub>3</sub>	Strong	Mono
Phosphoric	H <sub>3</sub> PO <sub>4</sub>	Strong	Tri
Ethanoic	CH <sub>3</sub> COOH	Weak	Mono
Ethanedioic	НООССООН	Weak	Di



