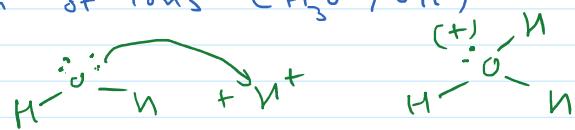
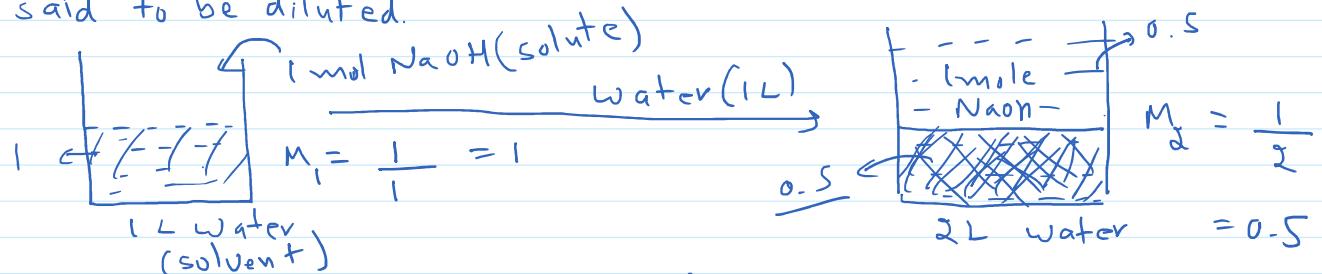


Dilution

Mixing an acid or base with water results in decrease in concentration of ions (H_3O^+ / OH^-) per unit volume.



This process is called dilution and the acid or the base is said to be diluted.



Molarity = Number of moles of solute in 1 L solution

$$M = \frac{n_{\text{solute}}}{V_{\text{solution}} (\text{in L})}$$

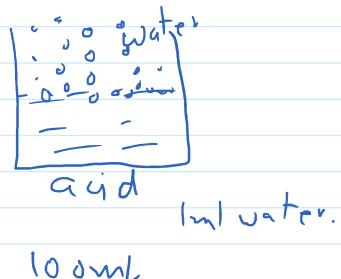
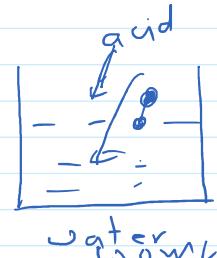


Method of dilution

The process of dissolving an acid or a base in water is highly exothermic. The acid must always be added slowly to water with constant stirring. If water is added to a concentrated acid, the heat generated may cause the mixture to splash out and cause burns. The glass container may also break due to excessive local heating.

Alkalies

All bases do not dissolve in water. An alkali is a base that dissolves in water.



- They are soapy in touch
- they are bitter
- They are corrosive.