

## Strong and Weak Acids and Bases

strong acid - an acid that dissociates completely into ions in water



\* All of the HCl molecules dissociate into ions.

weak acid - an acid that dissociates very slightly into ions in water



\* Only 1% of the acetic acid molecules dissociate into ions.

monoprotic acid - an acid that contains a single hydrogen that can dissociate

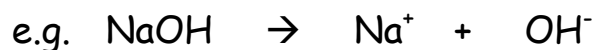


diprotic acid - an acid that contains two hydrogens that can dissociate  
e.g.  $\text{H}_2\text{SO}_4$

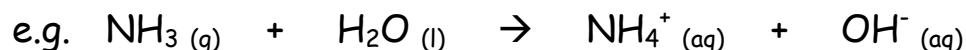


Note: Weak does not mean dilute and strong does not mean concentrated.

strong base - a base that dissociates completely into ions in water



weak base - a base that dissociates slightly into ions in water



\* Only 1% of ammonia molecules react with water to form ions.