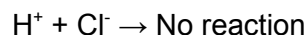
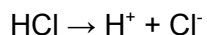


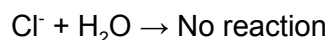
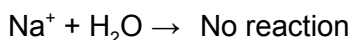
8.3 Salts and Equilibrium

Previous Knowledge

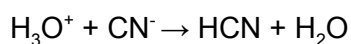
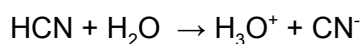
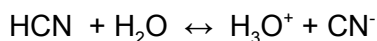
Strong acids/bases do not form equilibrium situations
(the conjugate acid/base does not form the original strong acid)



So sodium ions and chloride ions do not produce sodium hydroxide or hydrochloric acid



Weak acids/bases do form equilibrium situations
(Weak acids form conjugate bases and weak base form conjugate acids)



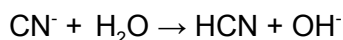
If the [weak acid] was to decrease then the equilibrium would shift to the left - the conjugate acid/base would form some of the weak acid/base



New Knowledge

Water is amphiprotic. It can behave like an acid or a base.

Therefore if the conjugate acids/bases was placed in water it would form the original weak acid/base.



So conjugate acids/bases actually behave like acids/bases

Therefore, if an ionic compound was made up of one of these conjugate acids/bases, then that ionic compound would behave like an acid/base

NaCN is an ionic compound but it behave like a base because it has the conjugate base of HCN

NH₄Cl is an ionic compound but it behaves like an acid because it has the conjugate acid of NH₃