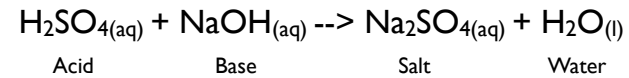
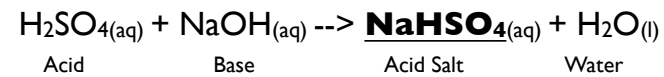


# Acid Salts

- Occur during the neutralization process
- Complete Neutralization:



- Partial Neutralization:



# Example #1

- carbonic acid to sodium hydrogen carbonate (also known as sodium bicarbonate = baking soda)
- $\text{H}_2\text{CO}_{3(\text{aq})} + \text{NaOH}_{(\text{aq})} \text{-->} \text{NaHCO}_{3(\text{aq})} + \text{H}_2\text{O}_{(\text{l})}$
- $\text{H}_2\text{CO}_{3(\text{aq})}$  loses one  $\text{H}^+$  (pairs with  $\text{OH}^-$ ) and becomes  $\text{HCO}_3^{1-}$  (hydrogen carbonate ion)
- $\text{HCO}_3^{1-}$  pairs up with  $\text{Na}^+$  and becomes  $\text{NaHCO}_3$

# Example #2

- boric acid to sodium dihydrogen borate and/or sodium hydrogen borate
- boric acid:  $\text{H}_3\text{BO}_{3(\text{aq})}$

Becomes:

sodium dihydrogen borate:  $\text{NaH}_2\text{BO}_3$

sodium hydrogen borate:  $\text{Na}_2\text{HBO}_3$

\*\*\*Full neutralization would result in  $\text{Na}_3\text{BO}_3$  (sodium borate)