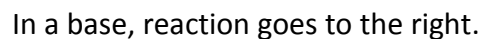


ACID-BASE REACTIONS

ACID + BASE \rightarrow IONIC SALT + WATER

Eg. $HCH_3CO_{2(aq)} + NaHCO_{3(aq)} \rightarrow NaCH_3CO_{2(aq)} + H_2CO_3$

$\swarrow \quad \searrow$
 $H_2O_{(l)} + CO_{2(g)}$



Eg. Phenolphthalein: pH 0 to 8: colourless
pH 8 to 10: pink

STOICHIOMETRY

A. FINDING CONCENTRATION

13.84 mL of $\text{HCl}_{(\text{aq})}$ just neutralizes 25.00 mL of a 0.1000 mol/L solution of $\text{NaOH}_{(\text{aq})}$.
What is the concentration of the $\text{HCl}_{(\text{aq})}$?

- Write a balanced chemical reaction
- Write givens under compounds
- Determine mol of known
- Determine mol of unknown
- Determine [] of unknown.

B. FINDING VOLUME

What volume of 0.250 mol/L sulfuric acid is needed to react completely with 37.2 mL of 0.650 mol/L potassium hydroxide?