

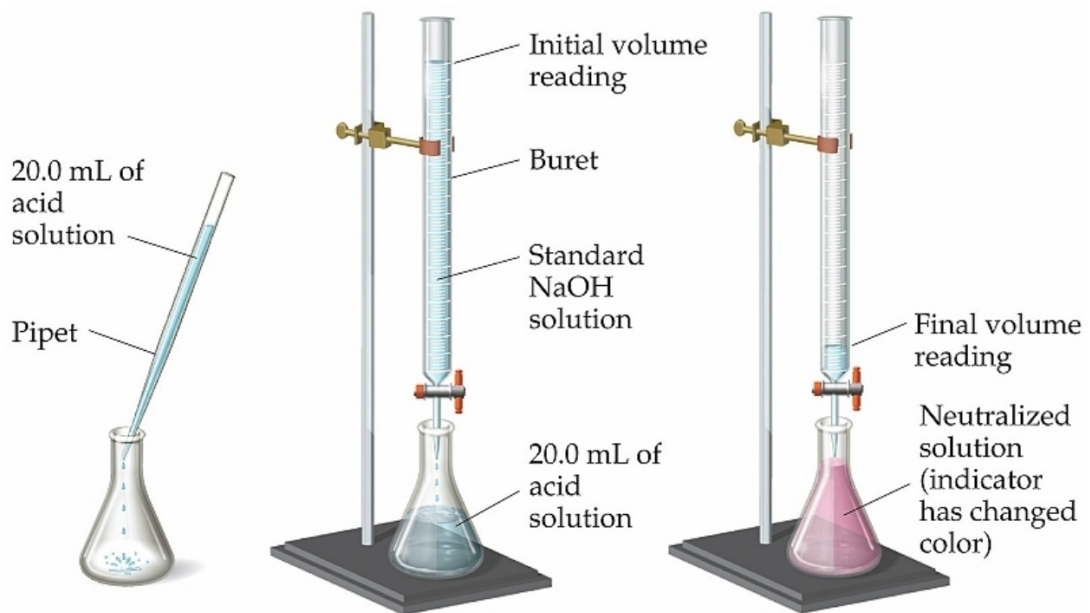
Lesson Overview

Titration

Objective: The student will be able to describe how the pH of a solution changes as varying types of acids and bases are combined.

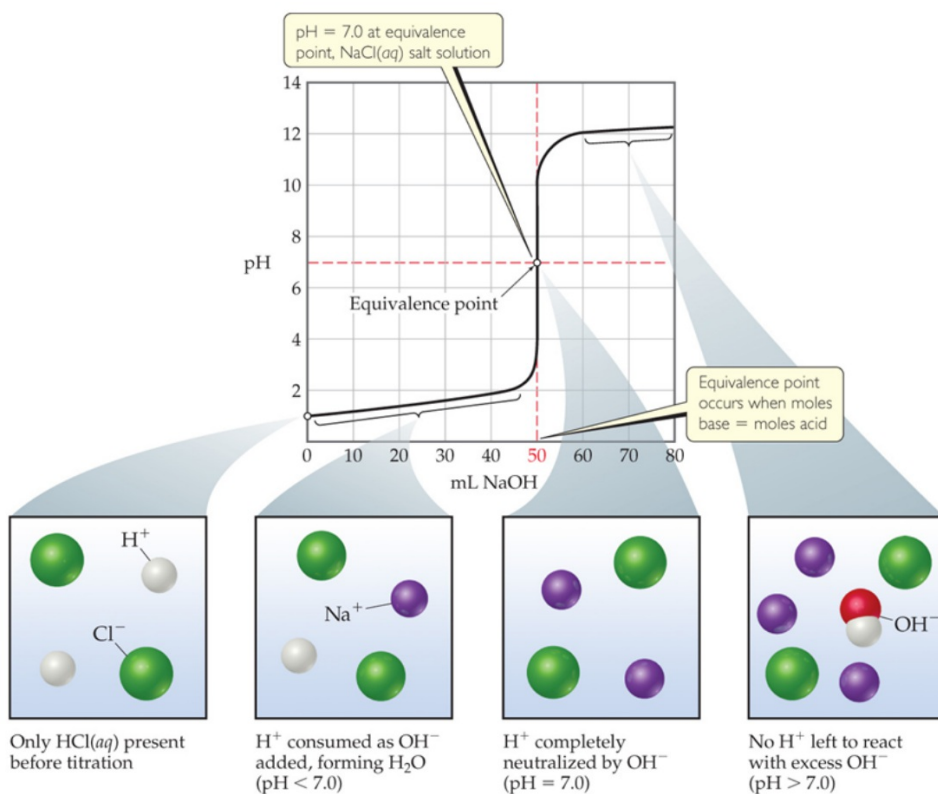
Titrations

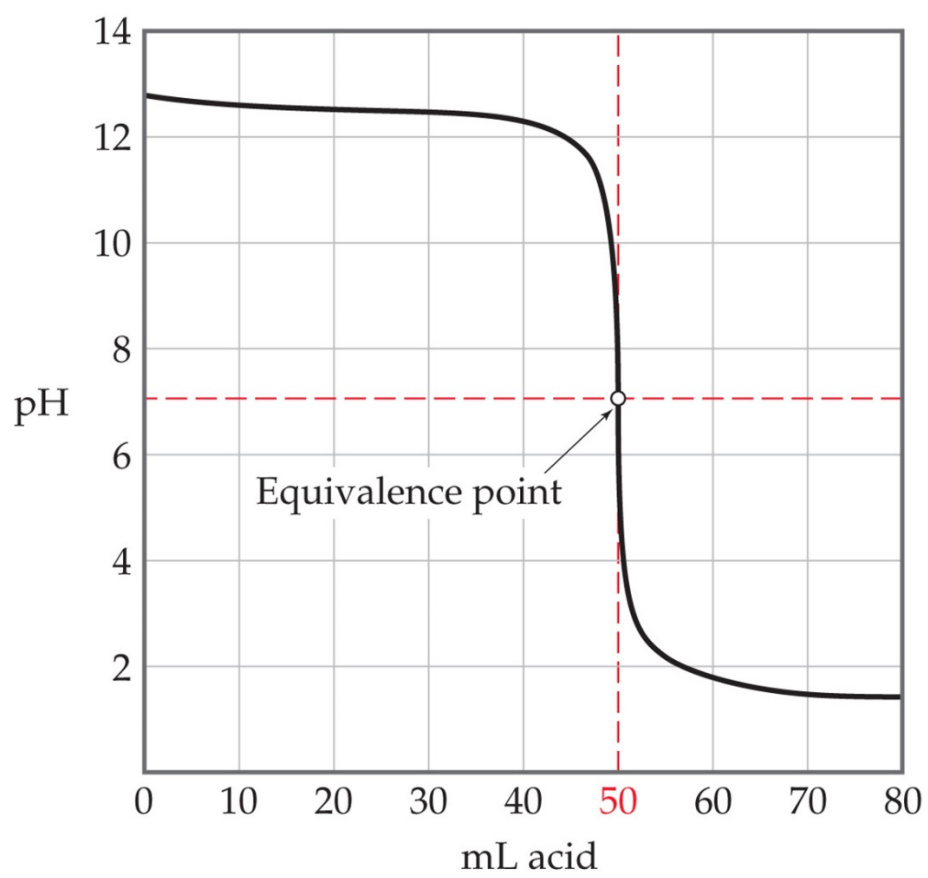
Purpose: to find the concentration of an unknown acidic or basic solution



Equation:

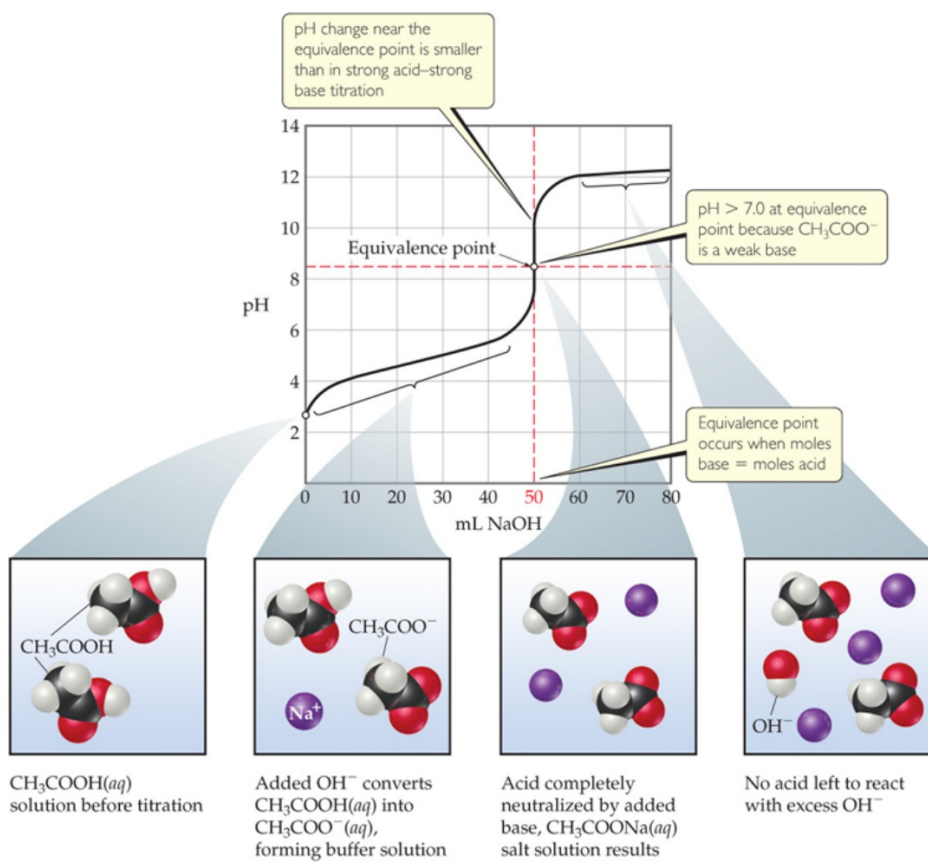
Titration Curves





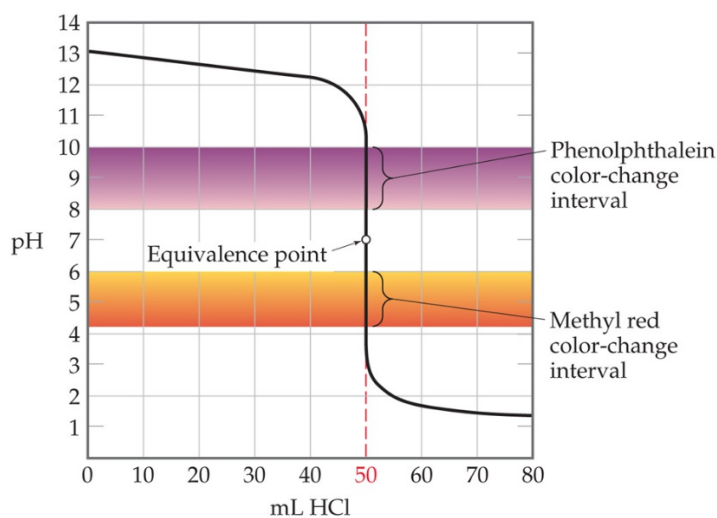
strong base - strong acid

Weak Acid - Strong Base Titration



Choosing an appropriate Indicator

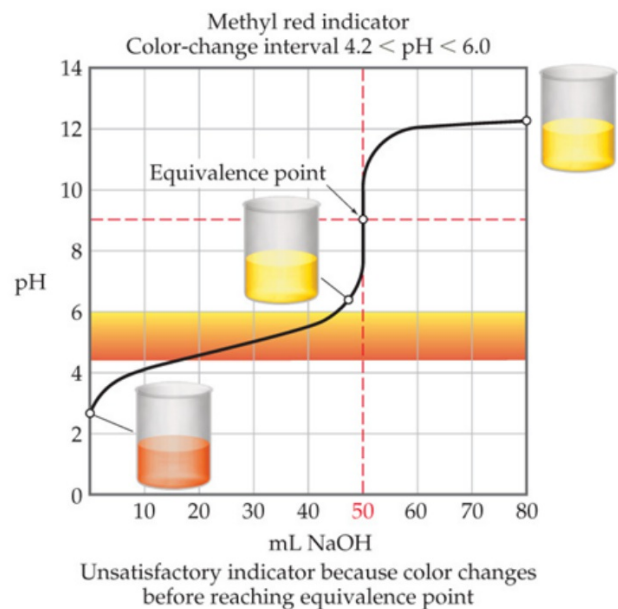
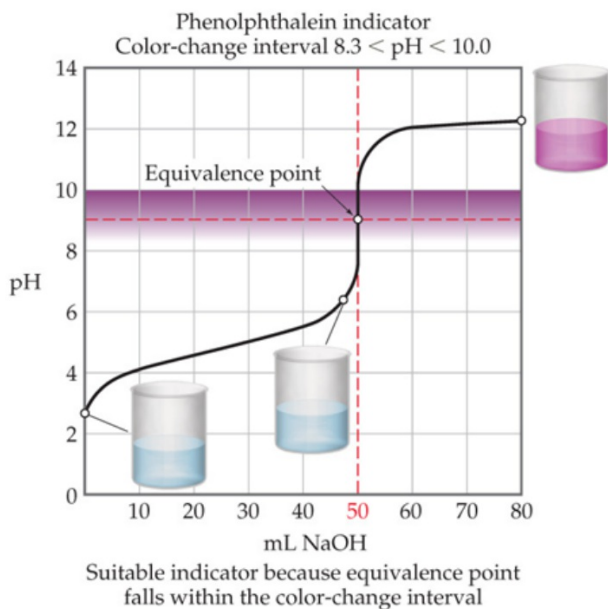
An indicator should change color at the equivalence point in the titration.



Phenolphthalein is used most often in SA-SB titrations, although other indicators are sufficient.

Choosing an appropriate Indicator

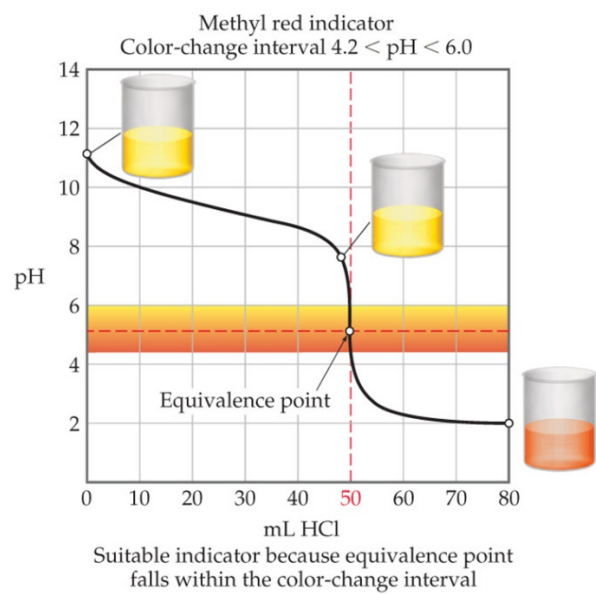
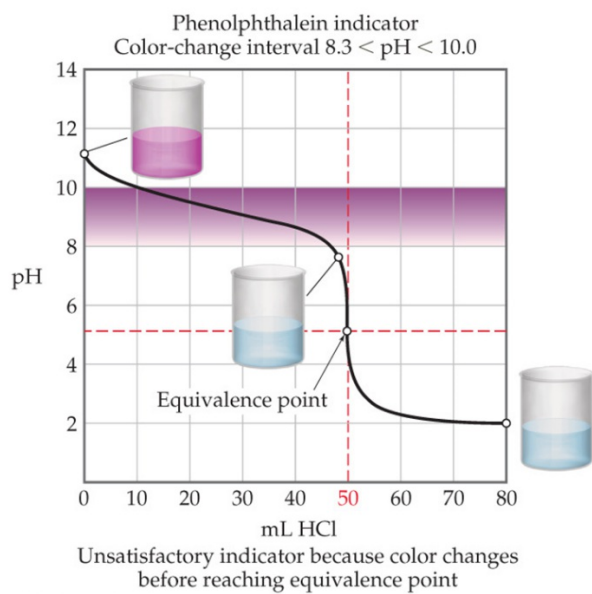
Indicator choice is critical in weak-strong titrations.



WA-SB

Choosing an appropriate Indicator

Indicator choice is critical in weak acid-strong base titrations.



WB-SA

Polyprotic Titration Curves

