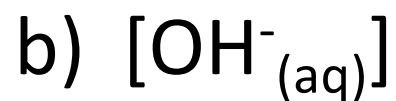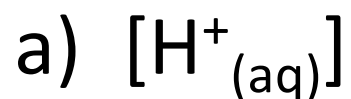# Chapter 8.5
Calculations Involving Basic Solutions

Learning Goals: I will be able to...

1. **calculate** K_b, $[H^+_{(aq)}]$, $[OH^-_{(aq)}]$ and pH for strong and weak bases

Strong Bases

A solution of calcium hydroxide has a concentration of 0.05 mol/L. Calculate the

a) $[H^+_{(aq)}]$

b) $[OH^-_{(aq)}]$

c) pH of the solution

Weak Bases

A solution of aniline, $C_6H_5NH_2$, has a concentration of 5.0 g/L and the pH of the solution is 8.68. Calculate the K_b for analine.

Weak Bases

Quinine, $C_{20}H_{24}N_2O_2$, has a K_b of 3.3×10^{-6}. What are the hydroxide ion concentration and pH of a 3.6×10^{-3} mol/L solution of quinine?

HOMEWORK

Required Reading:

p. 526 – 530

(remember to supplement your notes!)

Questions:

P. 527 #1, 2

P. 529 #1-3

P. 530 #1-9

Chemistry Dubstep

Drop Da Base