9.2 Concentration and pH Notes

Concentration

Low Concentration

High Concentration

Measured in \_\_\_\_\_\_\_\_\_\_\_\_\_

Written like this: [OH-] or [H3O+]

pH Scale

How to Calculate pH

pOH

pH

H3O+

Concentration

OH-

Concentration

Why do they use *negative* log?Practice Problems

\*You should be able to move between any 4 of the above values.

You have a solution where the pH is 4.5; find pOH, [OH-], and [H3O+].

Is this solution an acid or a base?

You have a solution where the pOH is 2.5; find pH, [OH-], and [H3O+].

Is this solution an acid or a base?

You have a solution where the [OH-] is 3.3 x 10-12M; find pOH, pH, and [H3O+].

Is this solution an acid or a base?

You have a solution where the [H3O+] is 2.5 x 10-3M; find pOH, pH, and [OH-].

Is this solution an acid or a base?

You put 0.550 moles of HCl (a strong acid) into distilled (pure) water and end up with 2.4 L of solution; find pH, pOH, [OH-], and [H3O+].