


Cornell Notes 	Topic/Objective: <b>pH and pOH</b>	Name:
		Class/Period: <b>Chemistry</b>
		Date:

**Essential Question: How can you identify the concentration of an acid or a base?**

<b>Questions:</b>	<b>Notes:</b>
<b>How can you determine if a solution is an acid or a base?</b>	
<b>Ion Product Constant for Water</b>	<b>Equation:</b>
	$K_w =$
	<b>Using <math>K_w</math> to Calculate <math>[H^+]</math> and <math>[OH^-]</math></b>
	At 298 K, the $H^+$ ion concentration of an aqueous solution is $1.0 \times 10^{-5} M$ . What is the $OH^-$ ion concentration in the solution? Is the solution acidic, basic, or neutral?
<b>Calculating pH from <math>[H^+]</math> Concentration</b>	<b>Equation:</b>
	<b>Using <math>[H^+]</math> to Calculate pH</b>
	What is the pH of a solution with an hydronium ion $[H^+]$ concentration of $3.0 \times 10^{-6} M$ ?

Questions:	Notes:
Calculating pOH from [OH <sup>-</sup> ]	Equation:
Concentration	
Relationship between pH and pOH	Equation:
	Using [OH <sup>-</sup> ] to Calculate pOH and pH
	An ordinary household ammonia cleaner is an aqueous solution of ammonia gas with
	hydroxide ion concentration of 4.0 x 10 <sup>-3</sup> M. Calculate the pOH and pH of a typical cleaner
	a at 298 K.
	Calculating [H <sup>+</sup> ] and [OH <sup>-</sup> ] from pH
	What are [H <sup>+</sup> ] and [OH <sup>-</sup> ] in a healthy person's blood that has a pH of 7.40?
Summary:	