Y13 – pH and Buffers

	La Niata	D - 1 - 1
this module you are expected to be able to	In Notes	Revised
Define the terms		
 Acid and Base in terms of Brønsted-Lowry 		
 Monobasic, dibasic and tribasic 		
 Weak/Strong in the context of an acid. 		
Identify acid-conjugate base and base-conjugate acid pairs.		
 Recall the reactions of acids with oxides, hydroxides, carbonates and metals, including ionic equations. 		
Calculate pH from		
○ [H ⁺] from a strong acid		
○ K _w and [OH ⁻] from a strong base		
O K _a and [HA] from a weak acid K [114] 1631 from a weak acid		
○ K _a [HA] and [A ⁻] from a buffer solution		
• Calculate pK _a		
Understand how K _a is related to the strength of a weak acid.		
 Explain the action of a buffer solution in terms of equilibrium, when [H⁺] is increased and 		
decreased, and how this causes pH to remain more or less constant over a small range of pH		
 Draw pH titration curves for a combination of strong and weak acids and bases. 		
·		
Explain why indicators change colour in terms of equilibrium.		
Select suitable indicators for an acid-base titration.		

Pre-test Evaluation

I have	
Updated my yellow book notes	
Ensured I understand all of my notes	
Looked on the open drive for additional work	
Asked my teacher for guidance	
Confidence rating	I'm doomed! = + ++ I am the BOSS!