**Calculating The pH of Products of a Neutralization.**

 **If you know the volumes and the molarities of an acid and a base you can solve the pH of the mixture (products).**

 **Example:**

**NaOH + HCl 🡪 H2O + NaCl**

**.2 L .5L**

**x 2.0 M x 1.0 M**

**.4 moles OH- .5 moles H+**

 **.5 moles H+ (HCl) neutralizes all .4 moles OH- (NaOH) leaving .1 moles H+ left.**

 **So, new Molarity of H+ is:**

 **.1 moles / .7 L = .14**

 **Total volume**

**pH = -log (.14) = .85**