**Study & Identification of an Unknown Weak Acid**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Course\_\_\_\_\_\_Section\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_

Instructional Unknown (UI)

|  |  |
| --- | --- |
| Weight of IU sample |  |
| Volume of IU aliquot titrated |  |
| Concentration of titrant |  |
| pK1(measured) |  |
| pK2(measured) |  |
| pK3(measured) |  |
| pK4(measured) |  |
| Molecular weight(measured) |  |
| Identity of the IU |  |
| Concentration of the IU solution |  |

Unknown Sample

|  |  |
| --- | --- |
|  Weight of IU sample |  |
|  Volume of IU aliquot titrated |  |
|  Concentration of titrant |  |
|  pK1(measured) |  |
|  pK2(measured) |  |
|  pK3(measured) |  |
|  pK4(measured) |  |
|  Molecular weight(measured) |  |
|  Identity of the unknown acid |  |
|  Concentration of the unknown solution |  |

***VERY IMPORTANT: Attach a copy of the spreadsheet generated for the UI and unknown acids. In the first few rows, explicitly show your formulas used to construct the model. (You can simply copy and paste them as text in a text box, for example.)***