Prepare all entries in your notebook through 5b as directed in the syllabus and your lab manual. *Remember to adapt your procedure and tables for your system from the tables below.*

1. **Prior to lab you must complete the following calculations and show one example of each in your notebook:**
   1. amount of stock to use to prepare dilute solution for part A
   2. use Excel calculate all volumes, cation concentrations and Q for table 2 based on the following information:
      1. the cation is the one from your system that gets reduced, if you are not sure, look at Q to help you decide
      2. assume 4 M KCl for reference electrode when calculating Cl- to use in Q,
      3. in Q for the quihydrone system the *concentration of H+ should be squared*
   3. amount of stock to use to prepare half-cell solution for part B
2. *fill in Table 2 columns with #'s from b in* *your notebook*
3. *incorporate amounts of stock to use into your procedure in the appropriate place*
4. **You will want to have your Excel file available to you in lab to create your graph**

**Table 1.** Assignments section 2 Th am.

|  |  |  |  |
| --- | --- | --- | --- |
| group/bin # | who? | system | partner group |
| 1 |  | Ag+/Ag | 3 |
| 2 |  | quinhydrone | 5 |
| 3 |  | Cu2+/Cu | 1 |
| 4 |  | Fe3+/Fe2+ | 6 |
| 5 |  | Ag+/Ag | 2 |
| 6 |  | Cu2+/Cu | 4 |

**Table 2.** Assignments section 3 Th pm.

|  |  |  |  |
| --- | --- | --- | --- |
| group/bin # | who? | system | partner group |
| 1 |  | Ag+/Ag | 3 |
| 2 |  | quinhydrone | 5 |
| 3 |  | Cu2+/Cu | 1 |
| 4 |  | Fe3+/Fe2+ | 6 |
| 5 |  | Ag+/Ag | 2 |
| 6 |  | Cu2+/Cu | 4 |