Lab Notebook

|  |
| --- |
| Conductivity Grading Rubric |
|

|  |  |  |
| --- | --- | --- |
| Lab Notebook |  | /30 |
|  | Format | /5 |  |
|  | Data/Log/Observations | /20 |  |
|  | Signature and Stamp | /5 |  |
| Computer quizzes |  | /70 |
|  | Conductivity questions pt 1 | /22 |  |
|  | Conductivity questions pt 2 | /17 |  |
|  | Conductivity short answer | /25 |  |
|  |  |  |  |
|  | Total computer (will be scaled to 70) | /64 |  |
|  |  |  |  |
| Post lab questions |  | /50 |
| Total |  | /100 |

 |

1. Format – Reference to procedure, data is neat and legible.
2. Data/log/observations – Data clear and legible, all data in ink originally. Be sure to note the principal species are present. (The 6th column on the sample data sheet.)
3. Signature and stamp – student signature and instructor stamp on each page of data.

~~Formal Report~~

1. ~~Title page – Include name, expt title, instructor name, date, and copy the grading rubric from the right onto the page. (I will fill in the scores, you don’t need to do that!)~~
2. ~~Objective – Why are you doing this experiment? What do you hope to learn?~~
3. ~~Introduction – Integrate the information below into a cohesive introduction~~
	1. ~~Name the three principal bond types.~~
	2. ~~Define the following terms and tell what kind of bonding is expected in solutes that are~~
		1. ~~Nonelectrolytes~~
		2. ~~Strong electrolytes~~
			1. ~~What is the meaning of the term “hydration” when used to describe what happens to an electrolyte which is dissolved in water?~~
		3. ~~Weak electrolytes~~
			1. ~~What is meant by dissociation and what is an example of a substances that dissociates?~~
			2. ~~What can be inferred about the degree of ionization or dissociation of a substance that is a weak electrolyte?~~
	3. ~~What is the essential characteristic of a solution that is (Include information regarding its behavior as well as the types of substances which indicate these types solutions.)~~
		1. ~~A nonconductor~~
		2. ~~A good conductor~~
		3. ~~A poor conductor~~
4. ~~Procedure (reference correctly) – Summarize any changes to the experiment or clarify any vague points in the published procedure.~~
5. ~~Discussion - Discuss any errors that may have occurred during the experiment (Contamination? Volume sample? Area Electrode surface touching sample? Concentrations?) and how they may affect your data.~~
6. ~~Conclusions – Did you achieve your objective? Explain briefly. This should be 2 or 3 sentences~~
7. Post lab questions –Answer the questions in blackboard. There are 3 parts to the questions, the 1st 2 are graded by computer and the 3rd is graded manually. The questions for the 3rd part are listed below. Be sure that you have answered them to your satisfaction as you will have only one attempt for part 3.