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| **MST 2018-19 Results Paper Rubric**  | **Your grade: \_\_\_\_\_/28** |
|  | **4** | **3** | **2** | **1** | **0** | **Multiplier** | **Points earned/worth** |
| **Data** | All experimental data is included and labeled with units | Some data is omitted or unlabeled | Some data omitted and unlabeled | Key data is omitted | No data is included | ***1*** | **/4** |
| **Visual Presentation** | All data tables are clear and coherent, graphs and other data representations are used appropriately | Data tables are poorly formatted or unclear, or graphs are used ambiguously or inappropriately | Data tables are poorly formatted and unclear, or graphs are used in a way that obscures data | Visual presentation of data actively obscures meaning of data | No tables, graphs or visual data displays provided | ***2*** | **/8** |
| **Statistical Analysis**  | A complete statistical analysis of the data is correctly and appropriately included.  | A statistical analysis of the data is included with small errors. | A statistical analysis of the data is included with major errors. | An attempt is made at a statistical analysis of the data. | No statistical analysis (t-test, ANOVA, etc.) is included. | ***1*** | **/4** |
| **Written Description** | Each set of results is accompanied by an explanation that points out trends in data as well as the main points of the statistical analysis that rationalizes the data. | One written data description missing or explanations do not sufficiently explain data | One written data description missing and explanations do not sufficiently explain data | More than one written data description missing | No written descriptions of data provided | ***2*** | **/8** |
| **Formatting** | Paper is typed, double spaced, with 12 pt. font, 1 inch margins and APA style in-text citations, written in the third person, in passive voice | Missing 1 or 2 of the characteristics of a 4. | Missing 3 or 4 of the characteristics of a 4. | Missing 5 or 6 of the characteristics of a 4. | Missing all the characteristics of a 4. | ***0.5*** | **/2** |
| **Spelling and Grammar** | Paper written following guidelines of professional writing. | 2 spelling or grammatical errors left uncorrected. | 3 spelling or grammatical errors left uncorrected. | 4 spelling or grammatical errors left uncorrected. | 5 or more spelling or grammatical errors left uncorrected. | ***0.5*** | **/2** |

**Rough Draft due: January 17th (RED day) : Bring to class to conduct peer reviews.**

**Final Draft due: January 24th, 2019 via Google Classroom**

**Additional Guidelines for the FRESHMEN MST Results section of the research paper**

 In this section, the purpose is to summarize your data. You present both observations and data with no interpretations or conclusions about what the data means. This is where you tell what the data is (using graphs and charts) (i.e., the trends of the graphs; the minimum, maximum, and ranges of the data). In essence, you are number crunching and putting the data into understandable visuals. This is also where you would do your analysis of data with means, standard deviations, variances, t-test or whatever other applicable analysis test is used) to check for significance. Use the past-tense to describe your results.

 When using tables and figures, each table and figure must be introduced within the text. Make sure to use APA format. All tables must be numbered and have self-explanatory titles so that the reader can understand their content without the text.

For example, Table 1. Percent of red maple (*Acer rubrum* ) seedlings exhibiting visible injury after exposure to water with a pH of 3.6. Assign numbers to tables and figures in the order they are mentioned in the text. Tables and Figures are numbered independently of each other, for example, Table 1 and 2, and then Figure 1 and 2. Tables are labeled at the top and Figures at the bottom. Tables are referred to as tables; all other items (graphs, photographs, drawings, diagrams, maps, etc.) are referred to as Figures.

A. The data collected in the experiment should be complete, labeled and detailed in the appropriate units and significance. All data is organized into charts and graphs with appropriate labels.

B. You will need to organize the presentation of your data in an appropriate manner that will make it understandable and helpful. All graphs and charts need to be numbered and have a statement of relationship or explanation below them with references to them in the body of the paper.

C. You do not need to show your calculations. You should, however, show the results of those calculations. These should be in table/chart form with proper labels. Your calculations need to be correct and recorded to the appropriate degree of significance and accuracy. This would be especially important when using statistics to analyze your data.

D. If applicable to your project, extensive raw data or additional Tables & Figures will go into an Appendix section at the end of your research paper.