Lyles Science Fair 2019-2020

6th Grade Grading Rubric

Student(s) Name / Class Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Due 2/3/2020

Topic (State the Question)

What are you testing for? What are you trying to prove / find out? Is it a testable question to answer?

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| Topic is specific/clear, testable, and stated as a question | 20 |  |
| Purpose is NOT one of the following: specific/clear, testable, and stated as a question | 15 |  |
| Purpose is NOT two of the following: specific/clear, testable, and stated as a question | 5 |  |
| No purpose is given | 0 |  |
| Overall Total  | 20 |  |

Step 2: Research Background Information

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| Research is related to the project, written in paragraph form, and in student own words | 60 |  |
| Research is Not of the following:related to the project, written in paragraph form, and in student own words | 40 |  |
| Research is NOT two of the following: related to the project, written in paragraph form, and in student own words | 30 |  |
| No research is given | 0 |  |
| Overall Total  | 60 |  |

DUE 2-5-2020

Step 3: Form a Hypothesis

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| Hypothesis is clear, concise, measurable, and answers the purpose/question  | 20 |  |
| Hypothesis is Not of the following: clear, concise, measurable, and answers the purpose/question | 15 |  |
| Hypothesis is NOT two of the following: clear, concise, measurable, and answers the purpose/question | 10 |  |
| No research is given | 0 |  |
| Overall Total  | 20 |  |

Step 4: Materials / Procedure (Experiment)

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| All the Materials used for the project are listed  | 20 |  |
| Some but not all materials are listed | 15 |  |
| Most of the materials are not listed | 10 |  |
| No materials are listed | 0 |  |
| Overall Total  | 20 |  |

Procedure/Experiment

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| Procedure is described step by step and is easily understood by the audience when presented  | 30 |  |
| Procedure is described in paragraph form and is easily understood by the audience or written step by step but not easily understood | 20 |  |
| Procedure is described poorly and unclear | 10 |  |
| No procedure is given | 0 |  |
| Overall Total  | 30 |  |

DUE 2-10-2020

Step 5: Collect Data / Results Analysis

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| The data table/graphs are clearly labeled and title. The data provides information that answers the purpose question. It is quantitative. Student shows proof of multiple trials.  | 30 |  |
| The data table/graphs are NOT clearly labeled or missing a title. The data provides information that answers the purpose question. It is quantitative. Student shows proof of only 1 trial | 20 |  |
| The data table/graphs are NOT labeled and is missing a title. The data provides information that is not relevant to the purpose question. It is quantitative. Student shows proof of only 1 trial | 10 |  |
| No data is shown | 0 |  |
| Overall Total  | 30 |  |

Display Board Proposal

|  |  |  |
| --- | --- | --- |
|  Description | Points Possible | Points Earned |
| The title catches people’s attention.  Locations for all sections are organized and easy to follow.  Locations for Pictures and diagrams that will be used to effectively convey information are presented.   | 25 |   |
|  All but 1 are presented: The title catches people’s attention.  Locations for all sections are organized and easy to follow.  Locations for Pictures and diagrams that will be used to effectively convey information are presented.   | 20 |   |
| All but 2 are presented: The title catches people’s attention.  Locations for all sections are organized and easy to follow. Locations for Pictures and diagrams that will be used to effectively convey information are presented.   | 15 |   |
| Display  proposal is not complete or is very difficult to read and follow. | 10 |   |
| No display board proposal presented | 0 |   |
| Total Points Earned | 25 |   |

Step 6: Form a Conclusion

|  |  |  |
| --- | --- | --- |
| Description | Points Possible | Points Earned |
| Restates the purpose, hypothesis, weather the hypothesis was correct or wrong, and results are used to answer the purpose question and explain why it happened  | 20 |  |
| Missing one of the following: Restates the purpose, hypothesis, weather the hypothesis was correct or wrong, and results are used to answer the purpose question and explain why it happened  | 15 |  |
| Missing two of the following: Restates the purpose, hypothesis, weather the hypothesis was correct or wrong, and results are used to answer the purpose question and explain why it happened  | 10 |  |
| No conclusion is given | 0 |  |
| Overall Total  | 20 |  |

Due 2-14-2020

Final Display Board

|  |  |  |
| --- | --- | --- |
|  Description | Points Possible | Points Earned |
| The title catches people’s attention.  All sections are organized and easy to follow.  The text is large/neat enough to be read easily.  Pictures and diagrams used to effectively convey information.  Proper Spelling and capitalization was used. | 100 |   |
| Display includes a title. Display is divided into sections that are easy to follow.  Text is large/neat enough to read. Pictures and diagrams are used effectively. Proper spelling and capitalization was used. | 75 |   |
| Display is complete, but is difficult to follow and/or read. | 40 |   |
| Display is not complete or is very difficult to read and follow. | 20 |   |
| No display board presented | 0 |   |
| Total Points Earned | 100 |   |

Written Research Paper Due 2-14-2020

|  |  |  |
| --- | --- | --- |
|  Title | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Title accurately describes the experiment and is centered on page | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Name,School, Class Period,grade are at top right corner  | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible for Title |   | \_\_\_\_\_/ 6  |
|   |   |   |
| Table of Contents | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Highlights all of the major sections of the paper with page numbers items are found on | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible for Table of Contents |   | \_\_\_\_\_\_ / 3 |

|  |  |  |
| --- | --- | --- |
|  Introduction | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Introduction sentence is catching and sets scene for paper | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Hypothesis clearly states the expected outcome.  If \_\_\_\_\_\_\_\_\_ the \_\_\_\_\_ because\_\_\_\_\_\_\_\_\_\_. | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Explanation of what prompted the research | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Explanation of why this experiment is relevant and important to the intended audience | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Explanation of what hope to achieve through project | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Points for Introduction |   | \_\_\_\_\_\_\_\_\_\_/15 |

|  |  |  |
| --- | --- | --- |
|  List of materials | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Essential materials listed with appropriate units/amounts | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
|   | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Procedure | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Steps listed in sequential order including appropriate measurements and units when necessary.  Including any relevant safety information | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Procedure in complete and written in a manner that the reader could repeat the experiment | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Includes multiple (3) trials for each variable or demonstrates the importance of adequate sample size | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |

|  |  |  |
| --- | --- | --- |
|  Procedure | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| If there are independent and dependent variables in the experiment, they are identified | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Explanation of the management of outside variables in the experimental procedure. (How were other variables kept constant?) | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Method of observation and data collection are clear. | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| No grammar or spelling errors (try to write in third person with no pronouns) | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible for Procedure |   | \_\_\_\_\_\_\_\_\_\_\_/21 |

|  |  |  |
| --- | --- | --- |
|  Conclusion | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Briefly summarize results  | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Conclusion wraps up the paper | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| No new information was introduced | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Stated if hypothesis was correct / not correct and why | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible for Conclusion |   | \_\_\_\_\_\_\_\_\_\_\_/12 |

|  |  |  |
| --- | --- | --- |
|  Bibliography | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| 3 or more sources listed correctly2 (NON-Internet) | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| 2 of 3 sources are not from internet (book, newspaper and so forth) | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible for Bibliography |   | \_\_\_\_\_\_\_\_\_\_\_/ 6 |
| Stated if hypothesis was correct / not correct and why | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Data Collected |   |   |
| All data displayed in the form of a chart with correct labels and proper titles | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Relevant Data displayed in the form of a graph with proper labels (Titles for graphs and tables, axes labeled, correctly scaled) | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible for Data Collected |   | \_\_\_\_\_\_\_\_/ 6 |

|  |  |  |
| --- | --- | --- |
|  Paper Format | 0=Missing 1=Poor 2=Fair 3=Excellent | Total Earned / Total Possible |
| Neat, readable and double spaced | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| No Grammar or spelling errors | 0    1 2    3 | \_\_\_\_\_\_\_\_\_\_\_/ 3 |
| Total Possible Paper Format |   | \_\_\_\_\_\_\_\_\_\_\_/ 6 |
| Total Possible for Conclusion |   | \_\_\_\_\_\_\_\_\_\_\_/12 |
| Turned in On Time |   | \_\_\_\_\_\_/22 |
|   |   |   |
| Total Possible Overall (Entire Paper) |   | \_\_\_\_\_\_\_\_\_\_/ 100 |