

Name _____ Per. ____

Science Project Grading Scale

| Add up your points below | Advanced | Proficient | Acceptable | Below Basic | Far Below Basic |
|---------------------------------|---|---|---|---|---|
| Title | Catchy introduction to your project, has your name 5 | Nice, has your name 4 | Okay, but name not near title 3 | Title not about project, or forgot your name 2 | Poor taste, irrelevant 0 |
| Display | Stunning! Appealing to eye. Neat, tidy, & creative. Layout logical and self-explanatory. All text double-matte. 20 | Paper cuts are straight, looks pretty good. Does the job. 18 | OK but some problem here. Disorganized, or cut not straight 16 | Functional but somewhat painful to look at 10 | Frankly, A Disaster 5 |
| Abstract | Objective, procedure, results, & conclusion summarized in careful, precise language 10 | Less clearly written, but all parts present 7 | Some part is missing but overall summary okay 5 | Half done 3 | Very trivial and simplistic 1 |
| Background Research | Includes broad variety and relevant depth necessary for thorough comprehension of topic 20 | Reasonably well researched and focused, contains some details 17 | Adequate, but should be more researched and focused including 13 | Not well researched or focused, needs significant work 8 | Poorly researched and not well developed 5 |
| Question | Idea is truly original, or approached in a novel way, exceeds jr. high expectations. Thorough background research helped generate a sophisticated question. 25 | Evolved from student's own experience, does not reveal the highest degree of scientific understanding 20 | This idea is commonly seen at most jr. high science fairs 15 | Simple, something that could easily be answered 10 | Very simple and trivial 5 |
| Hypothesis | Clear, concise, substantiated by background research, stated as "if-then." What will be changed and what will be measured are stated 10 | Stated as "if-then", but not as precise as advanced level 8 | Not stated as "if-then", but otherwise clear 6 | Unclear 4 | Illogical or nonsensical 2 |

| | | | | | |
|----------------------------------|---|---|---|--|---|
| Procedure & Materials | Clear and thorough instructions for precise data collection, may be bulleted points or numerical sequence. Experiment is excellently designed to control all variables but the experimental variable. Precise description of materials in binder. 20 | Mostly complete but may be missing some steps; good control of variables. Materials listed in binder. 17 | General instructions, but could be more precise on quantity, frequency, scale, type, etc. Materials list is vague 13 | Missing fundamental parts, & / or some variables could have been controlled better; materials list incomplete 5 | Extremely brief and really unclear, or haphazard experimental design that does not control variables. Materials list trivial 1 |
|----------------------------------|---|---|---|--|---|

| | | | | | |
|------------------------|---|--|---|--|--|
| Data Collection | As many trials as possible for accuracy and precision. Physics projects: minimum 20 trials. Life science: minimum 70 trials. Data in logbook and binder labeled with correct units. 20 | Many trials completed, obviously took effort. Data in logbook and binder labeled with correct units. 17 | At least 5 trials for physics, 10 for life science. Data labels may be missing, but data is present in both logbook and 13 | Data unlabeled and missing from logbook or binder 5 | Sloppy, carelessly collected, unlabeled, or completely absent 1 |
|------------------------|---|--|---|--|--|

| | | | | | |
|-----------------|--|--|---|---|--------------------------------|
| Analysis | Numerical data has mean/median/mode, range, st.dev, interquartile range, percent difference. Trendline equation (if appropriate to exp.) written using the indep. & dep. Variables. +5 extra credit: a test of significance. 15 | Most analysis fine but some part missing that could have been done 12 | Some analysis done, but more powerful tools missing 8 | Minor math errors and/or very simplistic (ex: only the mean) 3 | Major mathematical errors 1 |
| Graphs | directly relates to if-then hypothesis; box & whisker used if appropriate. X and Y axes labeled, regular increments on axes, title, and units. All text at least 16 point font on graphs. If possible. trendline 20 | One aspect missing, the rest okay 15 | Two or more aspects of good graphs missing; did not do a box and whisker plot when could have 10 | Missing fundamental parts 5 | Missing 1 |

| | | | | | |
|---------------------|--|-----------------------------------|-----------|-------------------|----------|
| Observations | Pictures and written descriptions point to the essence of the project 5 | Helpful pictures and written 4 | Okay 3 | Not so great 2 | Bad 1 |
|---------------------|--|-----------------------------------|-----------|-------------------|----------|

| | | | | | |
|-------------------|---|-----------------------------------|--|--|-----------------------|
| Discussion | Interpretation of data's meaning demonstrates rational, creative, original thinking about causal relationships. Background research referred to when explaining your interpretation of results. Includes possible sources of error and a thorough explanation of uncontrolled | One aspect missing, the rest okay | Two or more aspects of a good discussion missing; or a bit unclear | Simplistic interpretation of results; more at an elementary school level | Very unclear thinking |
| | 25 | 20 | 15 | 10 | 5 |

| | | | | | |
|-------------------|---|---|-------------------------------|--|-----------|
| Conclusion | Says "The data support/do not support the hypothesis"; explains briefly how this conclusion is substantiated by | Missing the statement or justification by previous research | States something unreasonable | Says "the hypothesis was correct" or "I was right" | Very poor |
| | 10 | 8 | 5 | 3 | 1 |

| | | | | | |
|--------------------|---|---------------------------|-------------------------|---------------|---------|
| Application | Medicine, technological, manufacturing, education, artistic, recreation, etc. At least 4 ideas given. | At least 3 relevant ideas | 2 ideas for application | 1 application | no idea |
| | 10 | 8 | 5 | 3 | 1 |

| | | | | | |
|------------------------|---|---------------------------|--|--|---|
| Future Research | More than 4 logical, insightful, clearly explained ideas that could be investigated by a professional with abundant resources | At least 3 relevant ideas | 2 ideas, not very original but they are relevant | 1 relevant idea, or more ideas that are not really connected with your project | Very little connection to your project, not clear |
| | 10 | 8 | 5 | 3 | 1 |

| | | | | | |
|------------------------|---|--|---|---------------------------------------|------------|
| Acknowledgments | Five or more from appropriate sources: written: (author, title, year, publisher, page #s) websites: (address, title, author, date updated, date accessed) people: (name, position/institution, date of communication) | Four from varied sources, or five from limited variety of sources. Proper MLA. | Three sources, may or may not be varied, or more sources but not proper MLA | Two sources, may or may not be varied | One source |
| | 15 | 10 | 5 | 3 | 1 |

| | | | | | |
|--|---|---|---|---|---|
| Mechanics: Grammar, spelling, word choice | No grammar/ spelling errors, ideas very well communicated | Contains a few noticeable errors, ideas fairly well written | Contains several errors, but otherwise understandable | Contains many errors, and ideas not clearly presented | Contains a plethora of errors and ideas not well communicated |
| | 10 | 8 | 5 | 3 | 1 |

| | | | | | |
|------------------------|--|--------------------------------|--|--|-----------------------------|
| Project Logbook | Composition Notebook has Table of Contents, background research notes, planning and thoughts, raw data & observations recorded in an organized manner. 15 | Not as complete as an A+ 13 | Composition Notebook used, but not to its capacity 11 | Much missing, less than 12 pages used 7 | Less than 5 pages used 1 |
|------------------------|--|--------------------------------|--|--|-----------------------------|

| | | | | | |
|---------------|--|------------------------|--------------------------------|---------------------------------------|---------------------------|
| Binder | Table of Contents includes: background research, all parts of project write up, artifacts, pictures, works cited (including people), acknowledgements and thanks. Binder has nice cover. 10 | Decently good job 8 | OK but some problem here. 5 | Major parts absent or incomplete 3 | Seriously incomplete 1 |
|---------------|--|------------------------|--------------------------------|---------------------------------------|---------------------------|

Subtotal This page

Subtotal Page 3

Subtotal Page 2

Subtotal Page 1

(Add them up!)

equals your
Grand Total Score out of 275

- 247-up A
- 220-246 B
- 192-219 C
- 160-247 D

|

|