

Hilldale School Science Fair Rubric for 4-8th Grades

200 points total

Please read all pages carefully. This is how your project will be graded.

Area Points	20	16	14	12	10
Purpose	Clear, concise, and grammatical; there is a measurable outcome. Written as a single question.	Unclearly stated or incorrect format; however, there is a measurable outcome.	Wordy or unclear; some misspellings or ungrammatical parts; however, there is a measurable outcome. Format is incorrect.	Wordy and unclear. Several misspellings and ungrammatical parts. Format is incorrect.	No clear, measurable outcome. Format is incorrect.
Background/ Research	Provides sufficient information so that someone not familiar with the topic can understand the relevance and background of the experiment. Defines all important terms including manipulated variable & responding variable. Identifies all preliminary observations including size of area tested, weather, previous behavior, etc. Identifies many constants. Is written in paragraph form in the report. Any diagrams are neat and clearly labeled.	Provides most of the information needed for the uneducated audience member. If diagrams are included, they are missing some pertinent labels. Defines most important terms. Is written in paragraph form. Few or no grammatical mistakes.	Missing one piece of essential, observable information that could have been measured or found. Defines most of the important terms. Is written in paragraph form. Some grammatical mistakes.	Missing more than one piece of observable, relevant information that could have been measured or found. Defines only some of the important terms. Is written in paragraph form. Many grammatical mistakes.	Missing essential information; provides little or no background information. Does not define the terms OR is not written in paragraph form. Many grammatical mistakes.
Hypothesis	Hypothesis directly relates to the problem and makes a definite measurement prediction. Is written in "If...Then" format as a single sentence.	Not clearly stated; Still relates directly to the problem. Is written in "If...Then" format, but includes additional words or multiple sentences.	Student attempts rationale for the guess; includes speculation that should be discussed in the conclusion. Not in the correct format or contains more than one hypothesis.	Student does not make definite number estimate or includes vague ranges such as: "a lot" or "a little more than the other one" or "about 100." Not in the correct format.	Hypothesis does not relate directly to the problem. Not in the correct format.

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Materials and Procedures	Student lists all materials. Clearly describes how test will be conducted and how materials will be used; makes an attempt to control variables that will affect test or student includes a control.	Not concise; Lists all the materials and steps of the procedure. Some misspellings or ungrammatical parts. Still makes an attempt to control variables or includes control.	Does not control an obvious, relevant variable; and/or no control group OR does not list all the materials or steps of the procedure.	Does not relate to specific measurement in the problem and/or hypothesis. Does not list all the steps or materials of the procedure.	Describes a procedure which is not long enough or in enough detail to adequately test the hypothesis. Procedures mention additional materials that were not listed as materials.
Data	Table(s) or chart(s) are clearly labeled; Each table or chart has a proper title. Legends, photos, and diagrams (if any) should be properly labeled. Observations (if any) should be written clearly and grammatically in paragraph format (for report). Only raw data is included (no analysis).	Missing a relevant label or title for a table, chart, axis, legend, photo, or diagram. OR includes analysis in this section (should only be raw data only).	Missing part of table or chart, and more than one label. Does not contain data from more than one trial.	Data is not related to the variable discussed in the purpose and hypothesis.	Data is not in table or chart format or is not represented visually at all. (Data must have been determined - just not represented - to receive any credit).
Results	Graph of data is clearly presented with properly labeled axes. Appropriate scale, grid lines, and units are used. Trends or patterns in the data, graphs, and/or charts are identified and clearly and concisely explained (in paragraph form in the report). Identifies and explains the relationship between the variables and interprets observations from the experiment. Grammatically correct.	Misses one major pattern in the data, but otherwise explains the results OR does not identify the relationship between the variables. Axes and units are properly labeled and indicated. A few grammatical errors.	Misses one major pattern in the data, but otherwise explains the results AND does not adequately identify the relationship between the variables. Axes and units are missing or not properly labeled. Some grammatical errors.	Graph of data is missing, but analysis is done in sentence format. Misses more than one major pattern in the data and does not adequately identify the relationship between the variables. Or does not interpret the observations from the experiment. Many grammatical errors.	Does not interpret or explain observations or data adequately. Does not identify any patterns or if no patterns are found does not explicitly indicate as such. Does not adequately interpret observations from the experiment. Many grammatical errors.

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Conclusion	Clear, grammatical explanation of why hypothesis was right or wrong (accepted or rejected); reasonable interpretations or relationships are pulled from the results; includes discussion of improvements or how to better test the hypothesis. Relates results of experiment to bigger picture (what it teaches us, etc.). Includes a summary of the problem, background information, and results and how they relate to the conclusion.	One generalization or interpretation is not clearly supported by the results. Summary is lacking information critical to conclusion. Some grammatical errors.	Does not include a discussion of what hypothesis would be if test were repeated OR does not include how this relates to the bigger picture.	Does not fully explain why hypothesis was right or wrong AND does not provide a summary of relevant information.	Does not relate to the hypothesis or problem.
Area Points	30	24	21	18	15
Oral Presentation	Clear, smooth, grammatical presentation which covers all seven steps in enough detail that most questions are answered in the presentation.	Some verbal junk or incomplete sentences, or corrections of what was just said, i.e., "no, no, no I mean..."	Inadequate explanation of the testing process.	Student is unable to answer questions from teacher or audience.	Student is unable to explain conclusion or problem.
Display Board Overall	Board is neat, colorful, clear, and concise. Font is large enough to read from a distance. It is labeled correctly, and items are placed on board correctly according to the guidelines. It is visually interesting. There are no grammatical errors.	Board is somewhat colorful and clear. Font size is too small. Language is somewhat wordy. Board is neat. Labels and placement are correct. There are 1-2 grammatical errors.	Board has erasure or pencil marks which can be seen from afar. Board is somewhat neat. Board is somewhat colorful and clear. Language is wordy. Labels and placement are correct. There are 1-2 grammatical errors.	Board is sloppy, not clear, and not colorful and/or wordy. Board has one label or placement issue. There are a few grammatical errors and the language is wordy.	Board is sloppy, not clear, and not colorful. Board has more than one label or has placement issues. There are many grammatical errors.