

Science Fair Paper Rubric 2017

	4	3	2	1
Question	<ul style="list-style-type: none"> *The question is creative, answerable, and relates to a scientific concept. *There is a testable variable. 	<ul style="list-style-type: none"> *The question is answerable. *There is a testable variable 	<ul style="list-style-type: none"> *The question and/or variable is partially developed. The connection between the two may be unclear. 	<ul style="list-style-type: none"> *There is no real question and/or variable. It is unclear what is being tested by experiment. Instead of having a testable question, it is more a "maker project"
Hypothesis	<ul style="list-style-type: none"> *The hypothesis is fully developed with scientific thinking. *The hypothesis incorporates scientific principles in the explanation. 	<ul style="list-style-type: none"> *The hypothesis is fully developed with scientific thinking 	<ul style="list-style-type: none"> *The hypothesis is partially developed, though some of the thinking might be vague or unclear 	<ul style="list-style-type: none"> *The hypothesis does not include thinking or there are major scientific flaws in the thinking
Procedure	<ul style="list-style-type: none"> *The procedure is a clear set of steps that can easily be replicated by others. *Diagrams/illustrations are included when necessary. *The procedure includes precise measurements *The procedure is written in the student's own words. 	<ul style="list-style-type: none"> *The procedure is a clear set of steps that can be replicated by others. *The procedure includes mostly precise measurements. *The procedure is written in the student's own words 	<ul style="list-style-type: none"> *The procedure is mostly complete, though steps may be missing or unclear. *There is a lack of clear measurements *Parts of the procedure are not in the student's own words 	<ul style="list-style-type: none"> *The procedure is not written in the student's own words or *The procedure is very unclear and unable to be followed by others.
Results/Data	<ul style="list-style-type: none"> *Results are complete and are clear and organized. They are presented in more than one way (table and graph, table and diagram... that are well labeled) * Analysis shows an understanding of experimental objective * Experiment is repeated multiple times/multiple samples observed & numerical results averaged in analysis. * Metric units used for numerical measurements 	<ul style="list-style-type: none"> *Results are complete and clearly organized and labeled. * Experiment is repeated multiple times/multiple samples observed *Some thoughtful analysis/relating to original hypothesis 	<ul style="list-style-type: none"> *Results are partially complete or confusing to understand 	<ul style="list-style-type: none"> *Most of the results are missing. Results cannot be understood.
Conclusion	<ul style="list-style-type: none"> *The conclusion is fully developed (by including applications to real life) and clearly addresses the original question/hypothesis. *Students discuss what they learned, changed in process & next steps for their research and/or new questions. *Conclusion addresses possible problems with procedure and other interpretations of results/data when applicable. 	<ul style="list-style-type: none"> *The conclusion is developed (with applications to real life) and addresses the question/hypothesis. *There is some discussion of next steps. 	<ul style="list-style-type: none"> *The conclusion is partially developed/weakly related to question/hypothesis *Next steps or connections to real life may be very weak or missing 	<ul style="list-style-type: none"> *There is no conclusion present.
Editing/Format	<ul style="list-style-type: none"> *The paper is free from mistakes in spelling and grammar. *There is an effort to present information clearly and/or creatively. 	<ul style="list-style-type: none"> *The paper is mostly free from mistakes in spelling and grammar 	<ul style="list-style-type: none"> *There are several spelling mistakes and grammatical errors that interfere with meaning 	<ul style="list-style-type: none"> *Many spelling and grammatical mistakes render the paper very hard to understand.