

GSHS SEAL OF EXCELLENCE IN STEAM RESEARCH PAPER RUBRIC

Name _____ Title of Project _____

Paper Formatting and Citations

Indicator	Exemplary	Meets Proficiency	Approaching Proficiency	Developing Proficiency	Score
Manuscript	No errors 4	Two or fewer errors 3	Four or fewer errors 2	Five or more errors 1	
Citations and References in APA format	In-text citations and references are present, accurate, and correctly formatted for referenced research. 4	In-text citations are mostly present, accurate, and correctly formatted. 3	Limited in-text citations are present, partially accurate, or incorrectly formatted. 2	No in-text citations or works cited. 1	
Use of Sources	Abundant selection supporting resource material is appropriate, current, and relevant. 4	Some supporting resource material, which is appropriate, current, and relevant. 3	Limited supporting resource material, which is partially appropriate, current, or relevant. 2	No supporting resource material or materials which are inappropriate, outdated, or irrelevant. 1	

Subtotal Score _____

Name _____ Title of Project _____

Paper Mechanics and Style

Indicator	Exemplary	Meets Proficiency	Approaching Proficiency	Developing Proficiency	Score
Sentence Fluency	Sentences well-build, strong and varied structure makes it easy to read. 4	Text flows, sentences somewhat varied, relatively easy to read. 3	Sentence structure awkward rather than fluid, reader must slow down. 2	Writing difficult to follow or read, many run-ons, fragments, choppy sentences, minimal variety in style, length. 1	
Writing Conventions (Capitalization, Spelling, Word Choice, Grammar)	Strong control of standard writing conventions, few errors. 4	Reasonable control of standard writing conventions, some editing necessary 3	Limited control of standard writing conventions, errors starting to impede readability. 2	Little or no control of standard writing conventions, extensive errors impede readability. 1	
Organization	Purposeful structure helps reader follow writer's thinking. Strong lead-conclusion that provides closure. Thoughtful transitions clearly connect ideas. Design helps reader process ideas-main idea stands out. 4	Organization makes it fairly easy to follow discussion. Functional lead and conclusions. Helpful transitions often suggest connections. Overall design works-writer sometimes dwells on trivia or skims over complex ideas 3	Reader can follow story/discussion if attentive. Lead formulaic or misleading, conclusion formulaic or abrupt. Transitions sometimes missing or mechanical. Structure may be formulaic or confusing-pacing rushed or sluggish. 2	Hard to follow, even with effort. Lead or conclusion missing formulaic, or misleading. Transitions unclear, missing, or not helpful in linking ideas. Significant reorganization needed- pacing feels random. 1	

Subtotal Score _____

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Paper Content

Indicator	Exemplary	Meets Proficiency	Approaching Proficiency	Developing Proficiency	Score
Introduction	Clearly stated, introduces the topic of the paper and the main points to be discussed. Explains background information, presents the research problem or questions with rationale. 4	Clearly stated, introduces the topic of the paper. Provides background information and presents the research problem or questions. 3	In the introduction, the topic of the paper and the research problem or questions are stated, but need to be clarified or refined. 2	The topic of the paper and research problem or questions are unclear or not stated. 1	
Research Design and Procedures	Testable hypotheses or predictions are clearly articulated. Research design is appropriate to the research problem/questions. Procedures are described in paragraph form, outlined sequentially, and adequately detailed. 4	Testable hypotheses or predictions are stated. Research design is mostly appropriate to the research problem/questions. Procedures are described in paragraph form, sequentially, and detailed. 3	Hypotheses are not testable or incomplete. Research design needs improvement to address the research problem/questions. Procedures are not described in paragraph form (e.g. bulleted list) or not sufficiently detailed. 2	No hypotheses or predictions are stated. Research design is not appropriate to the research problem/questions. Procedures are not described or inaccurate. 1	
Results/Data	Data are presented clearly and cleanly, in tables or graphs as appropriate. Data are labeled and titled. 4	Data are presented clearly, in tables or graphs as appropriate. Data are labeled and titled. 3	Data are presented, but are unorganized and difficult to follow. 2	Data are not presented or inaccurate 1	
Data Analysis	All calculations are shown and results are correct and labeled appropriately. 4	Most calculations are shown and results are correct and labeled appropriately. 3	Some calculations are shown and results are mostly labeled appropriately. 2	No calculations are shown OR results are inaccurate or mislabeled. 1	
Conclusions	Conclusions indicate whether the hypothesis	Conclusions indicate whether the hypothesis was	Conclusions describe what was learned in the	No conclusions are presented or are not related to the	

PCHS STEM Honors Research paper rubric

See Research Plan/Project Summary instructions (page 2, item #3 of [Form 1A](#)) for more information on research paper.

	was supported. Claims about interpretation of the data are supported by evidence. Explanations or solutions proposed are based on evidence. Sources of experimental error or limitations are presented and their possible effects are discussed. Ways to reduce error and limitations are proposed. 4	supported, based on data. Explanations or solutions proposed are based on evidence. Sources of experimental error or limitations are presented. Ways to reduce error and limitations are proposed. 3	experiment, but are not based on data. Experimental errors may be mentioned, but are not described. 2	investigation. 1	
Content Understanding	Report reflects an overall accurate and thorough understanding of all included S, T, E, and M content and concepts. 4	Report reflects an overall accurate understanding of most included S, T, E, and M content and concepts. 3	Report reflects a limited understanding of all included S, T, E, and M content and concepts. 2	Report reflects a misunderstanding or lack of included S, T, E, A, and M content. 1	

Subtotal Score _____

Paper Formatting And Citations Subtotal _____

Paper Mechanics and Style Subtotal _____

Paper Content Subtotal _____

TOTAL SCORE _____ / 48