

Scientific Paper Checklist

Cover Page (2)

- _____ Title informative, specific and concise (1)
- _____ Authors first and last names (1st author/investigator, last author/principle investigator) (1)

Table of Contents (include page numbers) (1)

Abstract (2-3 sentences for each) (overall summary of whole research) (4)

- _____ summary of objectives (background information or past studies that led to this study)
- _____ summary of methods
- _____ summary of results
- _____ summary of conclusion/discussion

Introduction (4)

- _____ summary of pertinent literature on topic (general knowledge to specific) (footnote references)
- _____ research problem identified clearly
- _____ rationale for study (reason why you wanted to do this research)
- _____ hypothesis (educated guess) gives answer to problem

Materials and Methods (4)

- _____ informative and specific (what your doing, where your doing it, when doing it, how your doing it)
- _____ materials used
- _____ methods of collection of data
- _____ diagrams and/or explanations of set up, flow charts

Results (6)

- _____ qualitative (descriptive) and quantitative (numbers) data (1)
- _____ data tables (Tables) (3)
- _____ tables labeled as "tables" and graphs labeled as "figures" (1)
- _____ summary of findings using text (explain what happened in graphs & tables, save why for discussion)(1)

2 Graphs (8)

- _____ labeling of axis (units)
- _____ points plotted accurately
- _____ appropriate title (The Effect of *X-axis* upon the *Y-axis*)
- _____ legend/keys/explanation of tables or figures

Discussion (8)

- _____ support or reject original hypothesis and why? (1)
- _____ interpret results using evidence(stating actual data by citing figures, tables & references)(2)
- _____ explain major findings, patterns or trends in the graphs or tables (2)
- _____ suggest explanations of conflicting, problematic or unexpected results (reason for error)(1)
- _____ further investigations you could or might want to do (1)
- _____ what you learned and how this relates to 3 of the Nebraska State Science Standards (1)

_____ References and Acknowledgements page (1)

- _____ Typed, 12 font, arial, double spaced, 2 returns after each heading (1)

Followed 6 writing traits (6)

- _____ Ideas & Content - purpose is clear, knows about the topic, paper is memorable and uses lively, important details, main idea is well developed
- _____ Organization - writing is carefully organized with effective and varied transitions; introduction grabs the reader's attention; ending is satisfying or surprising; events, details, and paragraphs are clearly placed where they belong
- _____ Voice - writer's personality comes through the writing in a special way, voice suits his/her audience and purpose, voice is lively and shows confidence
- _____ Word Choice - writing contains a variety of strong and carefully selected words, words create strong detailed pictures in the reader's mind
- _____ Sentence fluency - Creative sentences of different kinds, lengths, and flow, making the writing enjoyable to read
- _____ Conventions - few errors in capitalization, punctuation, spelling, and grammar, easy to read

_____ Total out of 45 points
