

SCIENCE FAIR

ROUGH DRAFT CHECKLIST

The following items are required to be a part of your science fair project, whether you decide to submit a research paper or a project display board as your final product. Use the checklist below to organize your information, then submit a rough draft of this information. Your rough draft is due FRIDAY, NOVEMBER 8th in class. Much of this information should already have been a part of your research plan; and will only need to be refined/updated to be a part of your final project.

- ✓ **PROJECT TITLE** – An interesting title that reflects your research topic
 - Title reflects the topic of research
- ✓ **RESEARCH QUESTION** – A testable question that is the basis of your investigation
 - Includes the independent and the dependent variables within the question (*How does IV affect DV?*)
- ✓ **HYPOTHESIS & PREDICTION** – Together, these should work as an “IF-THEN” statement if you add the words, “If” and “then”...but don’t include the words, “If” or “then”; let them be implied by the reader.
 - Hypothesis should be a testable claim about your topic
 - Prediction should be a statement about the expected outcome
 - Both should be stated as though they are true...whether your results reflect that or not.
- ✓ **MATERIALS & PROCEDURES** – A bulleted list of materials and methods
 - Bulleted list of MATERIALS used (be specific about number and type {no brand names})
 - Numbered list of PROCEDURES followed (be specific; someone should be able to replicate your project by following these procedures)
- ✓ **RESULTS (EVIDENCE)** – This is your ANALYZED DATA that highlights the patterns or relationships that are important in understanding your results.
 - Include GRAPHS/CHARTS/TABLES of results
 - Clearly labeled, include units, easy to read/interpret
 - PATTERNS/RELATIONSHIPS are apparent when looking at the graphs/charts/tables
 - Include PICTURES (if applicable); be sure to cite the photographer, date taken, and subject for all photos
- ✓ **DISCUSSION OF RESULTS (JUSTIFICATION)** – Point out the patterns or relationships in your data that led you to your conclusion, as well as how your results reflect accepted scientific ideas about your topic.
 - Discuss your results. Tell the reader how to interpret the evidence you provided above.
 - Discuss relevant scientific concepts/research that apply to your investigation. (*What does the reader need to know in order to understand your data and reach the same claim as you?*)
 - Mention possible sources of error or interesting/unexpected results.
- ✓ **CONCLUSION (CLAIM)** – This is your claim; your final answer to your research question.
 - Directly answers the research question
 - Supported by the evidence provided above
- ✓ **ABSTRACT** – The abstract is a ONE PAGE SUMMARY of your project, a MAXIMUM of 250 words
 - One page, typed, **250 word limit** (@3 paragraphs), includes the following:
 - Statement of the purpose of the investigation (*Why is it important?*)
 - Summary of the PROCEDURES (*a couple of sentences about what you did...NOT step-by-step*)
 - Summary of the DATA
 - CONCLUSION statement