STEP-6 ABSTRACT PAPER PLAN

Research abstracts are used throughout the research community to provide a concise description about a research project. It is typically a short summary of your completed research. If done well, it makes the reader want to learn more about your research. Some students present their research findings at local and national science fairs. Research abstracts are usually requested as part of the application process for science fair presenters. These are the basic components of an abstract in any discipline:

These are the basic components of an abstract in any discipline:

1) Motivation/problem statement:
   Why do we care about the problem? What practical, scientific, theoretical or artistic gap is your research filling?

2) Methods/procedure/approach:
   What did you actually do to get your results? (e.g. analyzed 3 novels, completed a series of 5 oil paintings, interviewed 17 students)

3) Results/findings/product:
   As a result of completing the above procedure, what did you learn/invent/create?

4) Conclusion/implications:
   What are the larger implications of your findings, especially for the problem/gap identified in step 1?
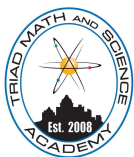
STEP 6 FINAL REPORT CHECKLISTS

Student Name:_____

❑	Does your abstract include a short summary of the hypothesis, materials & procedures, results, and conclusion?
❑	Have you used the proper capitalization and punctuation?
❑	Have you checked your grammar and spelling?
❑	Does your final report include the following key sections:
❑	a. Title Page
❑	b. Abstract
❑	c. Table of Contents
❑	d. Question, variables, and hypothesis
❑	e. Background research (your research paper)
❑	f. Materials list
❑	g. Experimental procedure
❑	h. Data analysis and discussion (including data tables and graphs)
❑	i. Conclusions
❑	j. Acknowledgements
❑	k. Bibliography
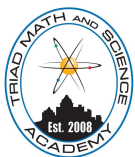
STEP 7 - TMSA STEM FAIR DISPLAY BOARD PLAN
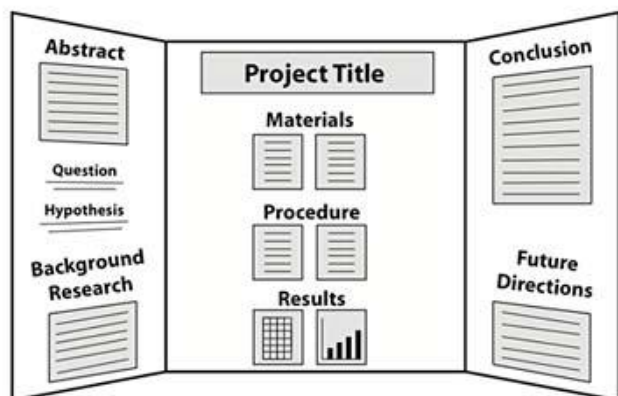
For almost every science fair project, you need to prepare a **display board** to communicate your work to others. In most cases you will use a standard, three-panel display board that unfolds to be 36" tall by 48" wide

- **Organize your information like a newspaper** so that your audience can quickly follow the thread of your experiment by reading from top to bottom, then left to right. Include each step of your science fair project: Abstract, question, hypothesis, variables, background research, and so on.
- U**se a font size of at least 16 points** for the text on your display board, so that it is easy to read from a few feet away. It's OK to use slightly smaller fonts for captions on picture and tables
- **The title should be big and easily read from across the room**. Choose one that accurately describes your work, but also grabs peoples' attention.

- **A picture speaks a thousand words!** Use photos or draw diagrams to present non-numerical data, to propose models that explain your results, or just to show your experimental setup. But, don't put text on top of photographs or images. It can be very difficult to read.

This sample shows how difficult it can be to read text when you print it on top of an image. Don't do it!

- **Check the rules for your science fair.** Here is a list of items that some science fairs allow (or even require) and some science fairs don't require (or even prohibit):

  - Your name on the display board
  - Captions that include the source for every picture or image
  - Acknowledgements of people who helped you
  - Your laboratory notebook (some science fairs want you to have it only during judging)
  - Equipment such as your laboratory apparatus or your invention
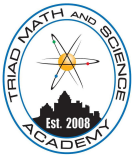
NCSEF Display Regulations

General Requirements

The Intel ISEF Display and Safety Committee is the final authority on display and safety issues for projects approved by the SRC to compete in the Intel ISEF. Occasionally, the Intel ISEF Display and Safety Committee may require students to make revisions in their display to conform to display and safety regulations.

Maximum Size of Project

Depth (front to back): 30 inches or 76 centimeters

Width (side to side): 48 inches or 122 centimeters

Height (floor to top): 108 inches or 274 centimeters
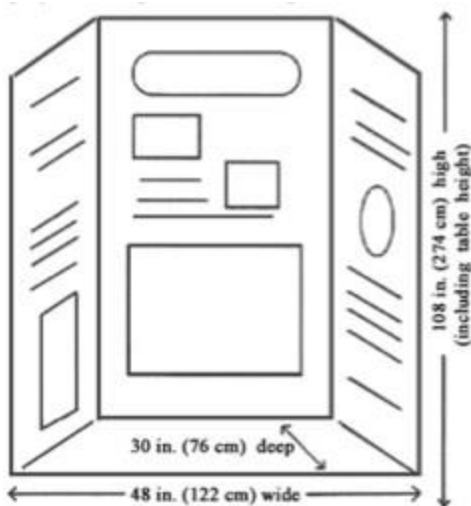
At the NCSEF, fair-provided tables will not exceed a height of 36 inches (91 centimeters).

Maximum project sizes include all project materials, supports, and demonstrations for public and judges. If a table is used, it becomes part of the project and must not itself exceed the allowed dimensions nor may the table plus any part of the project exceed the allowed dimensions.

At the NCSEF, any project with a component that will be demonstrated by the Finalist must be demonstrated only within the confines of the Finalist's area. When not being demonstrated, the component plus the project must not exceed allowed dimensions.

Position of Project

Table or freestanding display must be parallel to, and positioned at, the back of the table.

Required to Be Visible and Vertically Displayed at the NCSEF

a) Original of official Abstract and Certification as approved and stamped/embossed by the NCSEF Scientific Review Committee (Found in your registration packet on site at the State Level Fair) - (At regional fairs, Students will post their abstract without any certification), Abstract can be posted on the board or at the table.
b) Completed NCSEF Project Set-up Approval Form (Received on-site at the Fair)
c) Regulated Research Institutional/Industrial Setting Form (1C) — when applicable
d) Continuation Projects Form (7) — when applicable
e) Photograph / image credits

Required to Be at the Project But Not Displayed at the NCSEF

All forms required for Scientific Review Committee approval including, but not limited to the **Checklist for Adult Sponsor (1), Student Checklist (1A), Research Plan, Approval Form (1B)**, and **Human Subjects (4)**, do