STEM Fair Participants/Elements of a Successful Project

1. Required Forms:

Prior to all experimentation, you will need to print the most current **CUSEF Forms. Find links at the bottom of this page: https://provo.edu/teaching-learning/stem/stem-fair/**

Make sure you print the correct one: Elementary(5th-6th grade), Junior (7th-8th grade) and Senior (9th-12th Grade) division forms.

Each project is different; read through the forms carefully.

Some projects require approval from a Scientific Review Committee (SRC), the SRC is a team of Scientists/Engineers who will double check your STEM Fair Plan and make sure that your project is legal and safe. SRC's take a few days up to a month to approve a project, plan accordingly.

2. Project Data Book/STEM Journal:

A STEM project journal is your most treasured piece of work. This can be a notebook, paper in a three-ring binder or any similar place where you can take accurate and detailed notes. Good notes show consistency and thoroughness to the judges and will help you in writing your final research paper.

3. Abstract

An abstract will be placed at the beginning of the project, but it's always written **<u>LAST</u>**. You are required to write a (maximum) 250 word one-page abstract for your project. Find links at the bottom of this page for extra help and instructions for writing an abstract: https://provo.edu/teaching-learning/stem/stem-fair/

4. Research Paper:

A research paper will need to be printed and placed with your STEM fair required forms and your project journal. Include the following events in your paper. _I strongly recommend that you download and print the STEM/Science Fair and Engineering Fair Student paperwork, it provides more detailed instructions._

a. **Title Page**
   i. Include Project Name, Name of student(s), School, School District, Date.
b. **Table of Contents** (basically this list, but with added page numbers.)
c. **Introduction:** a short description of why you chose this project, why it was of interest to you, what led you to pick this project.
d. **Project Question**
e. **Hypothesis/Independent Variable/Dependent Variable**

f. **Research**
g. **Materials**
h. **Procedures**
i. **Data Table**
j. **Graph**
k. **Conclusion**
l. **References**

5. **Poster Setup/Visual Display:**

You want your poster to attract and inform. Make it easy for interested spectators and judges to assess your study and the results you have obtained. Make the most of your space using clear and concise displays. Make headings stand out, and draw graphs and diagrams clearly and label them correctly. Leave your glassware and chemicals at home.

Display Hints:

a. Make sure the display reflects the *current year's work only*. If you built on last year's project include that data in your STEM journal.

b. **A Good Title**
    Your title is an extremely important attention-grabber. A good title is informative and gives an idea of what the project is about. One word titles are generally too short and should be avoided. The title should make the casual observer want to know more.

c. **Take Photographs**
    Many projects involve elements that may not be safely exhibited at the fair, but are an important part of the project. You may want to take photographs of important parts/phases of your experiment to use in your display. Photographs or other visual images of human test subjects must have informed consent.

d. **Be Organized**
    Make sure your display is logically presented and easy to read. A glance should permit anyone (particularly judges) to locate quickly the title, experiments, results and conclusions. When you arrange your display, imagine that you are seeing it for the first time.

e. **Eye-Catching**
    Make your display stand out. Use neat, colorful headings, charts, and graphs to present your project. Home-built equipment, construction paper, and colored markers are excellent for project displays. Pay special attention to labeling graphs, charts, diagrams, and tables. Each item must have a descriptive title. Anyone should be able to understand the visuals without further explanation.

f. **Correctly Presented and Well-Constructed**

Be sure to adhere to the size limitations (Tri-Fold Poster 36" x 48") and safety rules when preparing your display. Make sure your display is sturdy, as it will need to remain intact for quite a while.

Titles should be informative and give an idea of what the project is about.
Generally one word titles are too short and should be avoided.

Project Question	Science Fair Title	Conclusion
	Materials Procedures	
Hypothesis		
Independent Variable Dependent Variable	Data Table Graph	
		References
Research		

Titles should be informative and give an idea of what the project is about.
Generally one word titles are too short and should be avoided.

Need Defined	Engineering Project Title	Conclusion
	Design Instructions Preliminary Design	
Research	Build & Test Rebuild & Test	References

If you are interested in printing a professional poster instead of gluing onto a poster board please be aware that most printing locations require a 24-48 hour processing time (some may

even need up to a week to process the request.) You do not need to print on the actual cardboard. Instead, print a paper poster (preferably laminated) and use heavy duty binder clips to hold the poster to a science fair board. Students who travel to international STEM events will need their poster to be printed this way for travel purposes.