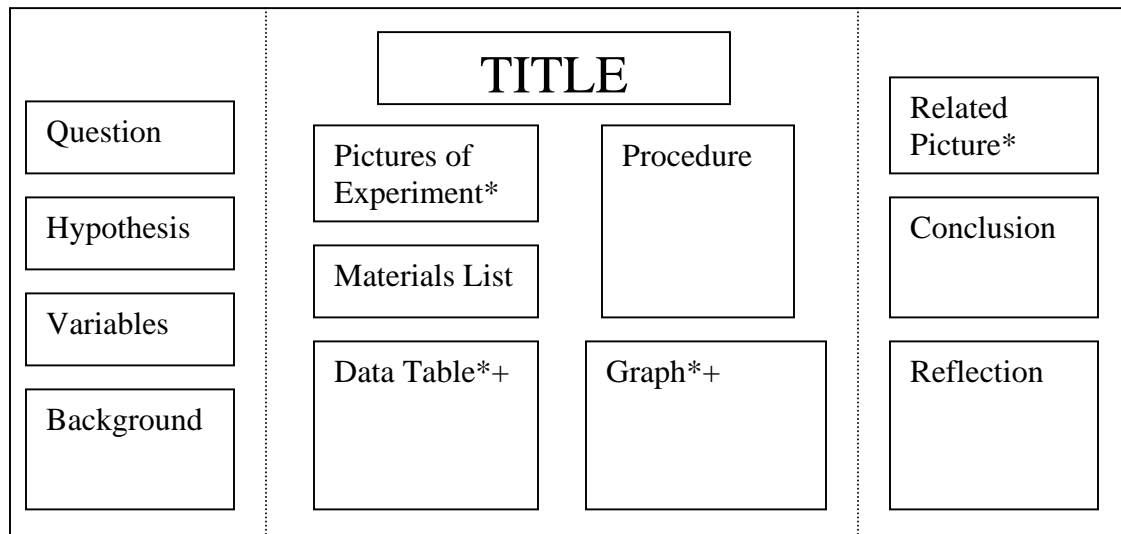


STUDENT SCIENCE FAIR OUTLINE

1. Each student must sign the “Science Fair Rules and Regulations Agreement.”
2. All projects must be experimental (not a report, model, survey, or demonstration).
3. All topics must be approved by your teacher.
4. All Science Fair project boards should follow this layout:



Signed “Rules and Regulations Agreement”
on the back

5. No names or identifiable pictures will appear on the front of the Science Fair board.
6. An agreement indicating that all the work was original and done by you will be attached.
(Most students complete the project individually. Teams consisting of two General Education students can earn a maximum of 80% credit, while teams including a student receiving Special Education or ELL services can earn up to 100% credit.)
7. Text should be typed (or neatly handwritten). The title should be in a 72 pt. font or larger, subtitles in a 36 pt. font or larger, and text in approximately a 16 pt. font. All text should be neat and easy to read.
8. *Visuals should be neatly hand-drawn, computer generated, or photographed by the student. Most visuals should be around 8.5 x 11 inches and easy to see from a distance of 10 feet or more. You are strongly encouraged to use 4 or more colors.
9. No animals, bugs, living things, etc., without teacher approval.
10. Each section that you attach to the board using glue-stick should have a construction paper border behind it to make it stand out.
11. Please feel free to make your board more aesthetically pleasing by adding decorations *that pertain to your project*. Use 4 or more colors ☺
12. Complete your project on time! Early projects that are accepted by the teacher will receive a 5 point bonus. Late projects or presentation will be penalized 5 points per day, up to a 20 point penalty. Any necessary make up presentations need to be made outside class by appointment. *Students who do not turn in projects will receive 0 points and risk failing the second semester of 8th Grade Science.*

Science Fair Project Expectations

(Refer to the Scoring Rubric for further details)

- 1) QUESTION- The question should ask, “How does (*your manipulated variable*) affect (*the responding variable*)?” Make sure your inquiry question is *feasible*, the necessary materials are easily accessible, that the experiment will be safe, and that the response can be measured *quantitatively*.
- 2) HYPOTHESIS- Write a prediction with your reasoning. The hypothesis should be a sentence in the following format: If (*manipulated variable*), then I predict (*about the responding variable*), because (*your logical reasoning for thinking what will happen*).
- 3) VARIABLES- List and label the *Controlled Variables* (variables that you will keep constant), *Manipulated Variable* (the ONE variable that you change to cause and test an effect), and the *Responding Variable* (the ONE effect that you will measure and the data you will record).
- 4) BACKGROUND INFORMATION- In the 1st paragraph, explain the scientific topic and how it relates to the middle school GLEs. In the 2nd paragraph, describe why you are interested in the question you are asking, and how you came up with the idea. (Some students think of the question first and then find the corresponding GLE. Other students start with the GLE and then think of an experiment to learn more about it. Either way can work.)
- 5) MATERIALS- List each item and the quantity needed. Include measuring tools, supplies, and safety equipment. You will need to get your own supplies. However, you may also borrow from the school if we already own what you need. (Make sure you take a picture of all of your materials before you begin your experiment or you will be hand drawing them later.)
- 6) PROCEDURE- Number and describe the steps in your experiment. You should completely outline each step of the procedure of the experimental part of your project so that anyone would be able to repeat your experiment. Describe how you will change the manipulation, how to measure the response, and when to record the data. Specify at 3 trials per experiment. (Make sure you take pictures as you conduct your experiment or you will be hand drawing them later.)
- 7) DATA TABLE- Before you start experimenting, in your notebook, set up a well-organized data table with units. Metric units are preferred. Record all quantitative data in the table in your notebook. Also record qualitative observations if appropriate.
- 8) GRAPH- Neatly visualize your data on graph paper or on a computer. Use a bar graph, line graph, pie chart, or scatter plot as appropriate. Make sure the numbers in your data table match the display in your graph. Remember to include the appropriate units, as well as a title and labeling.
- 9) CONCLUSION- Was your prediction correct? What was the answer to your inquiry question? For each of the extreme manipulated conditions, what was the average response? How does additional data further support your conclusion? Use specific numerical data from your table. What overall pattern or trend describes how the manipulation affects the response?
- 10) REFLECTION- What did you enjoy about the project? What were the successes and problems? What were the surprises? Did the data make sense? (Why or why not?) What new questions do you have? What ideas do you have for further exploration of the topic?
- 11) AGREEMENT– Complete the agreement that is presented to you. This is a promise that you did your own work. This is not your parents’ assignment, so while their support is welcome, you should still do the work by yourself. Put the agreement on the back of your poster, with your signature. No names or other identifying information should be on the front of your board.
- 12) ON TIME PERFORMANCE – Early acceptable projects will receive a 5 point bonus. Late projects or presentations will be penalized 5 points per day, up to a 20 point penalty. Any make up presentations will be by appointment only.
Students who do not turn in projects will receive 0 points and risk failing the second semester of 8th Grade Science.