

Choosing a Science Fair Project

Questions you should ask yourself:

1. What am I interested in? What subjects do I enjoy?
2. What is the purpose for doing this project?
3. Will I be collecting data from an experiment or a survey? Remember, surveys do not use the scientific method, data must be able to be measurable, and the experiment needs to be able to be replicated by someone else who should get similar results.
4. Is information easily available for this subject?
5. Is this project "do-able"? Do I have the skills and ability to complete this project?
6. What will this project cost to complete? Is there a cheaper way to do this project and still get the same results?
7. What is the size of the project? Will the size make it difficult to display or show? (Look at the Science Fair rules.)
8. How much time will it take to complete this project? How much time do I need to gather results? (Plants may require a long time, several weeks, to get enough data to answer your hypothesis.)
9. Are the needed materials readily available? Can I find everything nearby or do I need to travel to another town or area?

**Remember - don't be afraid to use nearby resources. Business people and experts can be a great source of information. Also, consult books, magazines, newspapers, and other media for possible sources. The local library is a great place to start. Use caution when searching the internet as not everything you find is factual information.

Scientific Method

1. **Purpose**
What are you trying to test or figure out with your project?
What is your goal?
2. **Hypothesis**
Based on your own knowledge, try to make an answer for your questions.
A hypothesis is a statement that states your "best guess".
You will test your hypothesis to see if your answer is true.
3. **Procedure**
 - A. Research
Gather and collect information which will help you answer your question. You can use books, magazines, and personal interviews. Don't be afraid to use experts and/or business people in your community as a source.
 - B. Experiment
Test your hypothesis. Remember to use a control to help you notice any changes. A hypothesis must be proved or disproved.
4. **Results**
List your results. Use facts and precise measurements. Record all information in one place - notebook, data sheet, chart. Use charts, graphs, pictures, and/or notebooks to show your results.
5. **Conclusion**
What did you learn? Even if your hypothesis was proven incorrect, you learned something. Use your results to support your conclusion.

Questions a Science Fair Judge May Ask

Tell me about your project.

checking for all parts of the scientific method to see if they are present and for accuracy of the experiment

Tell me more about...

judge's personal inquiry of interest or possibly highlighting the something in the experiment or exhibit that the student can clarify or complement

could be questioning to gain more information about a potential flaw in the experiment

gives the student an opportunity to show that they actually did the experiment

If you were to do this experiment again what would you do differently?

judge is finding out if the student fully understands the learning process

the student can demonstrate any flaw in the experiment and how this could be corrected

Now that you've completed this project, how do you take this idea to "the next level"? How can what you've learned from this experiment be used in today's society?

allows the student to communicate the true understanding and depth of knowledge of the topic to the judge

the judge can find out more about the student's creativity and ability to solve problems

What else would you like to tell me about your experiment? What would you like to learn more about?

allows the student to give a closure or summary statement to the judge

enhances the student's communication skills, regardless of age or grade

nice way to wrap-up and bring closure to the interview

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