Science Fair Additional Resources

Science Fair Safety and Guidelines

Safety First

1. Think 'safety first' before you start.
2. Never eat or drink during an experiment and always keep your work area clean.
3. Wear protective goggles when doing any experiment that could lead to eye injury.
4. Do not touch, taste, or inhale chemicals or chemical solutions.
5. Respect all forms of life. Do not perform an experiment that will harm an animal.
6. All experiments should be supervised by an adult.
7. Always wash your hands after doing an experiment, especially if you have been handling chemicals or animals.
8. Dispose of waste properly.
9. A project that involves drugs, firearms, or explosives is not permitted.
10. A project that breaks local, state, or federal laws is not permitted.
11. Use the Internet with caution. Never write to anyone without an adult knowing about it. Be sure to let an adult know which websites you will be visiting, or have an adult help you search.
12. If there are dangerous aspects of your experiment, like using sharp tools or experimenting with electricity, have an adult help you or have an adult do the dangerous parts.

Guidelines

1. Your display and log book will be turned in on the due date.
2. Only one student per entry. You cannot work in a team of two.
3. Your project should be an experiment. Collections, inventions, or models are not permitted.
4. Judging will include proper use of the scientific method.
5. Your display must be free standing since they will not be near walls.
6. Your display may have 3-D items mounted on the board. Remember that your board has to be able to stand by itself. Try not to mount something expensive that you bought. Make sure you have things mounted securely so they do not fall off. Do not mount any food or organic materials.
7. Do not bring the materials of your experiment as part of the display or plan to perform the experiment live.
8. No recording or transmitting devices are permitted as part of the display.
9. Exhibits not taken home by the deadline will be discarded.
10. All decisions of the judges and science fair committee are final.

Choosing a Field of Science

Name _____

A project starts with a good question. Before you can write a question you need to pick a subject or topic that you like. There are different fields of science to choose from.

Life science: This field of science includes topics about all animal, plant, and human body questions. Life science also includes studying behaviors, so it is a perfect category to try taste tests or animal behavior training. Remember that it is against Science Fair safety guidelines to intentionally hurt an animal during an experiment.

Physical science: If you like trying to figure out how things work, then this is the field of science for you. It includes topics about matter and structure, electricity, magnetism, sound, and light. You might question, "How does it work? or "Will it still work if I do this to it?" Physical science also includes the composition of matter and how it reacts. Physical science experiments may have bubbling and oozing going on. For example, you might want to find out what acids and bases are. It is a perfect category to try to mix things together to see what will happen.

Earth science and space science: These fields of science cover a variety of topics that deal with the earth and objects in space. Experiments may test weather, geology (the study of everything that makes up the earth, like rocks, fossils, and volcanoes), or the study of all that is in space (including stars, sun, and planets). Remember that your project must be an experiment, so collections and models are not acceptable.

Think about the field of science that you are most interested in and that you would like to learn more about.

My favorite field of science is _____ .
(Life Science, Physical Science, Earth Science, or Space Science)

Choosing a Topic: Answering Questions

Name _____

Another way to come up with a topic is to think of something you have seen (like a paper airplane flying across a room) and ask yourself an "I wonder what would happen if . . ." question (I wonder what would happen if I made the airplane out of cardboard. Would it fly farther?).

I wonder what would happen if I: _____

I wonder what would happen if I: _____

I wonder what would happen if I: _____

I wonder what would happen if I: _____

Research

Name _____

Complete a separate page for each source.

Bibliography Information

This source is a ☐ book ☐ magazine ☐ newspaper ☐ website ☐ person
☐ other _____

Author's or Interviewee's name _____

Book/article/website title _____

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