

Flagler County Public Library Science Fair Resource Guide

Welcome to the Flagler County Public Library Science Fair Resource Guide. You will find a wealth of information and resources to help you succeed. The library is your helpful gateway to information about science projects. Use these resources anytime, anywhere you have an Internet connection and enjoy your science fair! If you need assistance in choosing a topic or researching your project; the Library is here to help. If you need assistance, please feel free to contact the Children's or Young Adult Department at 386-446-6763.

A Science Fair is an opportunity for students to use the skills they have learned in science. A science fair project gives you hands-on experience and knowledge in areas such as biology, chemistry, physics, health, environmental, technology and math. It is an exciting assignment that allows you to use your own ideas or a topic that you develop with your teacher to investigate a scientific problem or question that interests you. You will not only be learning about a specific field of science and acquiring a unique skill in this field, but also getting to know what it would be like to work in this field as an adult.

Importance of Science

Students often increase certain aptitudes after they have taken science throughout their educational career. These skills and abilities often include:

- Gathering information by listening, observing, inquiring, researching and investigating.
- Putting information in order by comparing, contrasting, classifying and organizing.
- Creation by planning, designing, inventing and integrating ideas.
- Manipulative by handling materials/instruments.
- Communicative by transferring information from one person to another.
- Problem-solving by increasing logic and reasoning skills.

Tips for a successful science fair project

- 1. Choose a topic that interests you. There is nothing worse than having to do a project on a topic that does not peak your interest. If you want to have fun, learn, and get a good grade, choose something that YOU want to do. Science encompasses everything within our universe. It should not be difficult to find a topic that fascinates you.
- 2. **Do your own work.** You will not learn anything or feel a sense of accomplishment if you have your parents or partner do the majority of the work. When people ask you questions and you don't know

what to say because you did not do the work, you will be very embarrassed, not to mention the risk of receiving a poor grade for the project.

- 3. <u>Plan your time wisely.</u> There is nothing advantageous about doing your work at the last minute. All kinds of things can and will go wrong.
- 4. <u>Make sure you read and adhere to all your teacher's rules</u>. Read directions carefully, ask questions and have FUN!

Resources

Most teachers will require you to find a certain number of resources to support your project. To accomplish this task, we suggest the following:

- Utilize the databases located in the Library's *Electronic Library*. Offers two excellent on-line resources available remotely 24/7.
- Visit the library. The library has many books available to help you accomplish your goals.
- Encyclopedias
- Non-fiction books and periodicals
- Use other online search engines such as *Google* and *Yahoo*. *Caution: remember when using online search engines that not all information may be accurate. You will need to evaluate if it is **good reliable** information.

Good References	Bad References
Material comes from a credible source	Material is from a source with poor reliability
Information is current	Information is out-of-date
Information is free of errors	Information is prone to errors
Properly cites the original source of all information	Does not cite the source of information
Easy for other people to find or obtain	Difficult for others to obtain

To help you understand the purpose of the Science Fair and getting involved in making your project a success, the following online websites also include information on the Scientific method which is the basis of the program.

The Science Fair:

http://www.all-science-fair-projects.com/science_fair_projects_coach/science-fair-1.html *Discovery Education*:

http://school.discoveryeducation.com/sciencefaircentral/

Research information

Book Series:

Flagler County Public Library carries several science series which will provide you with experiment ideas and information to support your project. They include, but are NOT limited to, the following:

Children's

- Psyched for Science
- SCi-Hi
- Janice Van Cleave
- Simple Science Experiments
- Super Science
- Living Science

Young Adult

- Biology Projects Using the Scientific Method
- Earth Science Projects Using the Scientific Method
- Physics Science Projects Using the Scientific Method
- Team Green Science Projects
- Ace Your Science Projects
- Easy Genius Science Projects

<u>DVD Series</u>: The Science of Disney Imagineering

Science Fair Websites

These resources are meant to help you choose your topic and provide you with some good ideas. But, please do not rely on them for exact experiments. Use your own knowledge and ingenuity to create something unique and interesting.

Discovery Education http://school.discoveryeducation.com/sciencefaircentral/

Steve Spangler http://www.stevespangler.com/

Super Science Fair Center http://scifair.org/

Science Kids http://www.sciencekids.co.nz/

PBS Kids, Dragonfly TV http://pbskids.org/dragonflytv/scifair/

American Museum of Natural History http://www.amnh.org/ology/

Useful keywords for searching:

- Science Projects
 - Science Fair
- - Science Experiments
- Subjects: i.e. plant experiments

Additional Websites

These links are meant to help you find information to support your research and experiments.

Science Learning Network http://www.sln.org/resources/index.html

Discovery Kids http://kids.discovery.com/

Science 4 Kids http://www.ars.usda.gov/is/kids/
Brain Pop http://www.brainpop.com/science/

Dr. Art's Guide to Science http://www.guidetoscience.net/cs/drart/print/docs/drart/home.htm

Internet Public Library for Kids http://www.ipl.org/div/kidspace/

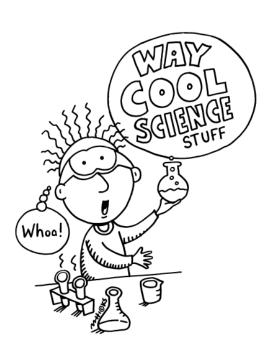
Science News for Kids http://www.sciencenewsforkids.org/category/life/

All Experts http://en.allexperts.com/c/science/
Cosmos4Kids http://www.cosmos4kids.com/
Biology4Kids http://www.biology4kids.com/
Chem4Kids http://www.chem4kids.com/
Physics4Kid http://www.physics4kids.com/
NumberNut http://www.numbernut.com/

Science Fair Safety

After choosing your project make sure you speak with your teacher about how to proceed, what equipment you will need, and how to do it safely. Things to consider are:

- Where will the experiment be performed? Do you need ventilation?
- What safety gear will be used? Should you wear gloves and eye protection?
- Will an adult be present?



PLEASE NOTE:

All external websites are listed for your browsing convenience only. Flagler County Public Library does not endorse nor is it responsible for the content of any of the listed sites.