#### Science Fair Tips for Parents - Some Helpful Dos and Don'ts

Here are some tips and dos and don'ts to keep your sanity, to keep order in the house, and to help your would-be scientists to do a really good project, and perhaps even win an award.

Your willing and exuberant involvement could help your child to avoid a stressful experience, and instead to have an exciting learning adventure. You will both face many questions that must be answered.

# Where will you get the ideas for an interesting and appropriate project? How much time will be needed? How do you start? Where do you get the information? What is the "scientific method"? What are the judges looking for?

Seems overwhelming doesn't it? Help is on the way. Just read on.

The first problem to solve with your child is finding the right project. The internet is great for gathering science fair project ideas. Searching for such terms as "science fair project ideas", "winning science projects" "6th grade science fair projects" etc, is a great way to start. They can even search for project ideas using areas of interest such as "baseball science fair projects" or" tsunami science fair projects."

Here is a list of other dos and don'ts to help make your child's science fair project successful and more enjoyable for both of you:

- DON'T do the research for your student. Let your child find the project that he/she just cannot resist doing.
- DON'T do any of the work for your child, but DO give him/her guidance whenever needed. There are no yelling or short tempers when doing science projects. There are only opportunities for exciting discovery.
- DON'T stress the award factor. The most important aspect of the entire exercise is discovery, excitement and learning.
- DON'T let your child do a project that uses dangerous chemicals, or is otherwise unsafe.
- DO make certain that your child allows enough time from start to finish. Six weeks is a good idea. Some projects take much longer.
- DO make sure that your child follows the "scientific method". This will include such topics as research, problem, hypothesis, experiment and conclusion.
- Do make sure that your child has learned how to make the presentation.
- DO give encouragement, guidance and support.
- DO make certain that the child knows it is his/her project.
- DO give your child the help they need in going to libraries, getting available computer time, making funds available for materials and the like.
- DO volunteer to help with the science fair.
- DO instill a sense of pride and accomplishment to your child for their efforts, but DON'T be afraid to give your child constructive criticism.

Even though scientists and engineers are held in high esteem, America is suffering from a lack of technically trained young people to enter the work force. Science fairs give children an appreciation for the science and engineering fields and encouragement to seek technical careers. Steering your child into successful science fair participation and cheering their efforts is a good step toward their future.

http://www.terimore.com/Science-Fair-Projects-Parents-Tips.htm

## Science Fair TIPS FOR PARENTS

Set your child up for Success



## Your child will be more likely to have a positive Science Fair experience if you follow these tips:

- Be positive about your child's work.
- Be aware of the boy-girl syndrome; girls CAN do science projects also.
- Be aware of the "perfect project" syndrome; allow yourself and your child to make mistakes. Edison made many before he came up with the right answer!
- Be honest with your children: If you don't know the answer, tell your child.
- Look around for ideas: take youngsters to your garden, library, etc.
- Seek out people to help you, friends who could "assist" your child.
- Get books for your children, join and use the public library.
- Collect and save materials; free and inexpensive materials found around the home often work best.
- Work with materials; allow your child to "mess about" with materials without your direction.
- Allow your child time for thinking, exploring, and doing the project.
- Save time especially for repeating the experiment many times.
- Stress "how to" skills, e.g., observing rather than memorizing facts.
- Examine issues with moral consequences, e.g., animals being harmed for experimental purposes.
- Help children to keep a daily log of their research activities.
- Go over the results of your child's research with your child in order to help him/her practice explaining their research.
- Go to the science fair with your child and take pictures of projects that you are all interested in. These will serve as a resource for future research ideas.
- Talk to your child about future science fair projects that they would like to do.

- Keep a log of ideas as they come up throughout the year.
- If the experiment "didn't work," discuss with your child why this is so. Encourage your child to explain the results and ENTER the project anyway!
- REMEMBER, this is a learning experience for you CHILD. Projects should be done and understood by your child. You are welcome to guide.

### http://www.interiorsciencefair.org/parent\_tips.shtml

## **Science Fair Tips for Well-Meaning Parents**

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January means Science Fairs at schools throughout the country, and if you're like most parents, you're probably wondering how you can help your kids without doing their projects for them. We've compiled a few tips to help keep you, your child and your household happy from project planning through presentation night.

**Repeat Your Mantra:** "It's my child's project, not my project. It's my child's project, not my project." The goal of a science fair is to allow children the opportunity to explore scientific methods of discovery, not, as many might believe, to win a prize. As parents, we need to help our kids understand that and we need to keep it in mind ourselves. Offer support and encouragement - never criticism - and the project will be a success no matter who takes home the ribbon.

**Focus On the Science:** For many students, the science fair is their first chance to use the scientific method, an important concept not only for science but for critical thinking and problem solving in all areas. In a nutshell, the scientific method is a standard way of answering a question. The basic steps are as follows:

- *Question:* First your child should choose a question he or she can answer through experimentation or research, such as, "Will my plant grow faster if I water it with plain water or sugar water?"
- *Hypothesis:* Next, your child should guess, or hypothesize, what the answer will be. Have him write down his prediction before beginning experimentation.
- *Experimentation:* This is where your child tests his hypothesis. In the case of our question above, your child could plant two identical seeds, place them in the same location, then water one with plain water and the other with sugar water. Because this requires several weeks to test, make sure your child chooses a question he or she can answer in the time allotted. If your child has extra time, encourage him to repeat the experiment to verify the results.
- *Conclusion:* After experimentation, your child should document his results and draw his conclusion (answer the initial question). Did his experiment prove or disprove his hypothesis? Many children think they've failed if their experiment disproves their hypothesis, but success lies not in guessing correctly. Success lies in discovering the answer to the initial question using the scientific method.

**Help Them Choose a Topic:** If your child needs some assistance selecting a topic, help him explore <u>Science Fair Books</u> or online science fair resource sites. Rather than answering a scientific question through experimentation, students can often use research to answer a question or design a model illustrating a scientific principle. If your child isn't interested in performing an experiment, he or she might be interested in a project such as constructing a <u>model of the solar system</u> or building a <u>solar powered vehicle</u>. Just make sure your child's project is safe and won't create a huge mess at the science fair.

**Be Supportive:** While you don't want to take over your child's project, there are many appropriate ways for you to help. Offer assistance in locating research sources or the materials your child needs for experimentation. Listen to your child's ideas and ask probing questions. Encourage her to share her progress and present her project to the family. Show her you're proud of her efforts. You can also get involved by volunteering to help at the science fair or in your child's class. Whatever you do, you'll show your child you value the work she's doing without taking over control of her project.

**Extend the Learning:** When the science fair is over, don't let your child's enthusiasm wane. Brainstorm ideas for next year's science fair (and keep the list where you can find it when the time comes). Talk about science as it relates to daily life and explore nature together. Seek out projects, kits and games that allow your child to experiment with scientific concepts and continue on the exciting path of discovery.

At Discover This, we get as excited as our children when it comes to their science fair projects, but we're careful to allow them to explore and discover for themselves. We remind our children (and ourselves!) that science is not about winning a prize: It's about exploring the world around us and discovering how things work and why. Science isn't a once a year activity ... it's a way of life!