

# How Much Help is Helpful?

Parent involvement is a key factor in student success for any science project.

One thing you can do at home is help the child to find an appropriate question for his or her investigation. We have distributed information on the kinds of questions that make better Science Fair questions and you may use this to help you in your search for a question, The main thing is to help the student choose a topic that will keep his or her interest over the lengthy time period that it will take to complete the project.

In the search for a question for investigation research will be necessary. Something else that can be done away from school is a visit to your local library. If your child has an interest in, for example, cars then he or she should find out all they can about cars from books, encyclopedias, periodicals and the internet. This research will probably help to generate or to narrow the scope of their question.

While some students will be able to perform their investigations in school, much may have to be done in the home. Parents and other responsible people in the home can help out by making sure that the children are performing the their experiments in a safe manner, following all safety guidelines.

When all data has been gathered and your young scientist has reached a conclusion, one final step is the preparation of an oral presentation. Students will be asked to explain all phases of their investigation to their teacher, their classmates and eventually to judges. You can help your child to prepare for this part of the Science Fair Project by allowing him or her to make a presentation to you. It is important that the student be able to answer questions about their project so you will want to generate questions for your child also. Make sure that your child is ready for anything a judge might ask about the project.

While parents and other adults in the home can be of the greatest help to a student who is doing a Science Fair Project, they must be very careful not to offer so much assistance that the student begins to lose the learning value of the project. As adults who care about kids we feel uncomfortable seeing them struggle with something, especially when we can easily offer help. Still, struggling with a problem and reaching a

solution on their own is one of the very best learning experiences that can result from any school assignment.

First of all, while we want to help a child choose an investigation that is safe, and that they can be successful with, we must try to be sure that we do not guide them overly in their choice of topic. It is the child who will have to do all the work and they will be much more motivated to put forth an effort if the investigation is one of their own choosing.

During the investigation you will want to monitor how the child performs to make sure he or she operates in a safe manner and that the data they collect is accurate. If you find yourself wanting to take over, don't. If the work is beyond the student's ability, then they will need to modify their experiment. The child's investigation should be something they can do with a minimum of supervision and concern about safety.

One way to help a child is through guiding questions. For example, suppose a child is making a measurement with a ruler but is using the ruler incorrectly. They might be starting, instead of at zero, at the one-centimeter mark (a common mistake). Rather than take the ruler from the child to demonstrate the correct method for measuring you might want to simply ask the child, "At what number are you supposed to begin on the ruler when you measure?"

In the end, a project which is the result of the efforts of the child alone, while it may not look as neat as we would like, will be a much greater learning experience for the student than if we, the adults, have too much of a hand in the work.