

Science Fair

Supporting A Child's Scientific Journey Guardian Resource

Guardian's Role

Guardian(s), your child is ready to become a scientist. Are you ready to witness their journey? As a guardian, your job is to oversee the production of the experiment or invention, not to do it for them. Let your child take control of the project, but always be on standby in case they need an extra pair of hands to help man the experiment. Be supportive, offer tips and suggestions, but do not influence them too much. Some things that you may want to help your child with is getting supplies and materials, helping them set up their experiment in a safe zone, and making sure there are no hazardous chemicals that may blow up your house! You can also help with transporting the project on the big day and attend the science fair to provide some much-needed moral support.

This is the perfect opportunity to spend time with your child and get involved in their academic life! Most importantly, have fun together!

Project Ideas

It is always a daunting task to help your child come up with the perfect project idea. You may not know much about the topics yourself; in fact, Science may have been your worst subject. Fear not, the world is your playground for the curiosities buried deep in your mind. Bernard Baruch said it best, "Millions saw the apple fall, but Netwon asked why." With your child, look around your house and through the windows to the world outside. Step out into the backyard or garden, or take a short walk with your



child. Together, wonder about things, ask why something is the way it is, or how something may be affected for better or worse. As you brainstorm casually, tuck the questions away in a safe spot so that later on when your child is deciding on their topic, you can help remind them of things they noticed earlier. It is important to let your child be in charge of the conversation and come up with their own game plan. It is your job to help them plant their ideas and make sure they have all the necessary steps to grow. Once they have decided on the topic and their project idea, you can take the extra steps to research on the topic yourself so that you can make sure they are on the right path.

For more project ideas, please visit the Science Buddies website found here: <u>https://www.sciencebuddies.org/science-fair-projects/science-projects</u>

Helping with the Project

In order to help your child, you need to make sure they are on track and able to finish their project on time. You can do this by creating a timeline in order to help your child track their progress and by reminding them of the steps involved in the scientific method. The combination of the timeline and the scientific method will make sure your child is on track to completing their project. You can also keep track of your child's progression through the scientific method and the timeline by getting them to check in with you every day. This way you will know when a little extra motivation may be needed. The steps of



the *scientific method* are as follows:

- Ask a Question
- Do Background Research
- Construct a Hypothesis
- Test Your Hypothesis (Experimenting)
- Analyze Your Data and Draw a Conclusion
- Display Results

One of the most important things you can do to help your child is to help get them the supplies they need to complete their project. However, make sure your child supplies you with the list. If you simply go and get supplies you may not pick up what they actually need. Most supplies your child will need can be easily found at an office supply store or a department store. Also, try to make the effort to get the supplies quickly once you receive the list in order to allow your child as much time to work on their project as possible.

Remember not to...

As a guardian, it is only natural to want to help your child succeed. Not getting too involved may be difficult, especially if you do have a science background. As much as you want to help remember that you should not be dictating what the notes say. You can be an editor, but make sure you are only correcting spelling and grammar mistakes, not rewriting them. You should also not provide or locate all of the information for your child to use. Helping with a few very specific items is okay, but finding information is when your child really gets to explore the topic that they are interest in and learn more about it. There is a difference between giving your child 10 books or picking up a specific title that your child requested. Also remember not to draw the diagrams. Some of you may be more artistic than your child, but the diagrams need to resemble what your child imagined them to be. This can only happen if they draw them for themselves. Finally, and most importantly, please do not do the project for them! This is your child's chance to shine. Sure, they may not win, but your child may find something that interests them. Maybe they'll continue their research and come up with a first place prize for next year.

Other Helpful Ideas

The seed to your child's project has been planted, and now you can sit back and watch the experiment grow. As with everything in life, your child will feel more value if there is a constant and consistent audience. They know that there will a final audience at the end of the project/Science Fair day, but having you there for extra support will keep them excited and motivated to show someone their growing idea along the way. If the learner is in a younger grade, your child may need help documenting the experiment. Have your camera ready to snap pictures along the way. Closer to the Science Fair date, you can help by giving them advice as to what they may say, or tips on how to present professionally and effectively. Practice doing a mock presentation with them by having them present their project, and then asking them questions you think the judges may ask. Give them feedback for improvements on their presentation and answers. Being with them on the day of the science fair will help them relax and remember all the things you have learned together. And last but not least, have fun!

Next Steps

Once your child's school has held a science fair, some of the learners will likely go on to compete at the regional, and hopefully national levels. As the guardian, you should find out when your regional fair takes place so that your child can have enough time between the school fair and the regional fair. This can give your child time to make improvements to their project. Most regional science fairs tend to be in April, although this is not always the case. To clarify when the regional fair takes place in your region, please visit: <u>https://youthscience.ca/science-fairs/regionalfairs get to compete in the national Canada Wide Science Fair in May! Check below to learn more about potential prize money and sponsors!</u>



Sponsors & Awards

Many organizations sponsor the Canada Wide Science Fair (CWSF) found here, https://youthscience.ca/science-fairs/cwsf/ and they give out specific awards to the science fair projects they feel represent the award to the fullest. These awards can vary based upon individual organizations values, and the specific criteria to their awards. For example, there are awards that deal with renewable energy, while others focus on an excellence in astronomy. So, regardless of your child's project category there usually is an award that can be associated to it! More specifically, Intact Financial Corporation sponsors the "Intact Climate Change Resilience Award", which recognizes learners who present a real-world solution that helps Canadians predict, prevent, manage or minimize the impacts of severe weather. These prize amounts can vary, but Intact's award sponsors \$1,000, \$750, \$500 for senior, intermediate, and junior learners respectfully!

GreenLearning Challenges

Similar to these awards that are sponsored at the science fairs, GreenLearning has their own Challenges where your child's entire class could win upwards of \$1,000 from the help of our sponsors! Once the class has used our free resources then your child's educator can decide if they want the class to submit a Challenge! Each of our six challenges are unique, and allow for innovation and creativity to prosper all while relating to climate change, energy, and green economy! Please visit the link provide to find out more about the rules and regulations of each challenge: https://greenlearning.ca/challenges.