



Westmount PS

4th Annual

## Science Fair

Thursday, April 19<sup>th</sup>, 2018

6:00 - 7:30pm



more info at: <http://wsm.wrdsb.ca/>

**What is it?** A voluntary, extra-curricular event that gives students a chance to have fun preparing and presenting a project for their friends and family.

**When is it?** The Science Fair will be held on *Thursday, April 19<sup>th</sup>, 2018, from 6:00-7:30pm.*

**Who can participate?** This event is open to students in grades JK through grade 6. Each student participates at their own level - enthusiasm and a desire to learn and create are the essential requirements!

### **How does it work? What do I have to do?**

- Choose a topic: Students can choose a topic for their project from any of the four areas: science, technology, engineering, or math
- Work on your project: Projects are carried out and prepared entirely at home.
  - Parents are encouraged to help their children with their projects at an appropriate level. *The bulk of the project should be completed by the student,* but parents can give encouragement and practical assistance.
- Present your project:
  - The Science Fair is a non-competitive event – one of our “judges” will visit each project simply to give students a chance to officially present their work and answer some questions about it.

**Why should I participate?** Mostly because it’s FUN! This is a wonderful opportunity for students to increase their knowledge, problem-solving ability, and presentation skills. In addition, students will build confidence, work cooperatively with others, and experience the satisfaction of project completion. Students can explore topics that uniquely interest and excite them, fostering a love of learning and creativity!

**So where do I sign up?!?!** A registration form for students to sign up for the event will be sent home shortly. At that time, students signing up will be asked to indicate the topic or title of their project.

**So... start thinking!**

**Will you create an invention?**

**Do an experiment?**

**Present your research?**

**Want to find out how something works?**

**What do you love to learn about?**

**Ready, set, go... start planning!!!**

## **Westmount PS Science Fair**

### **Further Information**

#### **Practical Considerations:**

- No classroom time will be allotted for projects – all work is completed outside of school hours.
- Cardboard display backers (poster boards) will be provided to each student for their presentation.
- Tables for presentation will be provided by the school in the gym.
- Students will set-up their projects in the gym the morning of the Science Fair. Students are responsible for transporting and setting up their projects, with help from parents/caregivers as needed.
- Electrical outlets will be available upon advance request. Students must provide their own extension cords and power bars if needed.
- In the interest of safety, the following are NOT permitted: live animals, hazardous chemicals, live electrical wires, flammable liquids, or open flames. Please check with one of the contacts below well in advance if you have any questions about safety considerations.
- Examples of ways parents can help: brainstorm ideas, supervise or assist in gathering information and materials, help in carrying out an experiment, assist in constructing an invention or assembling the display, aid in transporting the project to and from school.

**Questions** can be directed to:

Christine Carmody: [christine.b.carmody@gmail.com](mailto:christine.b.carmody@gmail.com)

or Principal Carolyn Griffiths, Westmount Public School

## Science Project Information

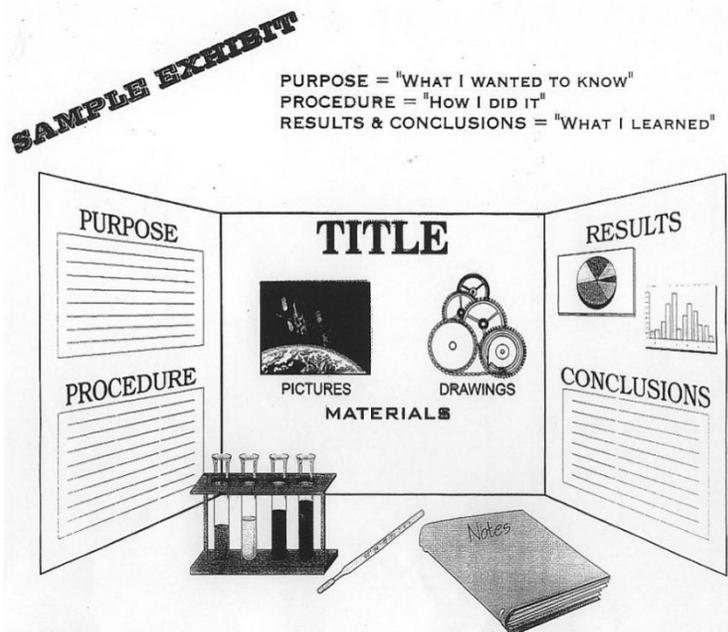
Science projects can be wide-ranging in topic and approach. In general, they are a chance to investigate the world around us through hands-on projects or research studies. The presentation of the project should be structured, however, and most will fall into one of two general domains:

- **Experiment:** An investigation undertaken to test a scientific hypothesis
- **Study:** A collection, analysis, and presentation of data and information to reveal evidence of a fact or a situation of scientific interest

For experiments, the following procedure is suggested, also known as **The Scientific Method**:

- Ask a question to which you would really like to know the answer. Which paper towel is strongest? What is the best way to make compost? How does a computer work? The possibilities are endless. This is known as **The Purpose** or **What You Wanted to Know**.
- Use your research skills to look for the answer to your question. Write or draw ideas that you found. Conduct your experiment or construct your working model. The **Procedure**, or **Method**, whatever it happens to be, tells us **How You Did It**.
- The **Results** and **Conclusions** tell us what happened when you did your experiment, what you found out, and **What You Learned**. You can keep a notebook to help remember the things that you learned.

You will need to plan and construct your display for your project (see diagram – this is only one example, many variations are acceptable). Include your name, grade, and class, topic or title, information about your experiment or study, along with your notebook (if you kept one) and any pictures, drawings, models or displays of objects that help demonstrate your project. Building the display provides the chance to develop and demonstrate construction, artistic and written skills. Be sure to use attractive lettering and carefully check for correct spelling and neat printing. Computer generated material may be used.



Finally, practice **talking about your project (oral presentation)** so that you can tell others about it at the Fair! On the day of the Science Fair, people will come to look at your project and ask you questions, and a judge will ask you to tell them about it. You'll also get to check out the work of all the other students participating in the Science Fair!

**PARENTS PLEASE NOTE:** Your child must bring their project to the gym for set-up on the *morning of Thursday, April 19th, 2018.*

**Science Project Ideas** are truly endless! Choose something that really interests you. Here are a few examples:

<ul style="list-style-type: none"> <li>•How Does the Heart Work?</li> <li>•Hovercrafts</li> <li>•Hydro Electric Dam</li> <li>•How Do Bike Shocks Work?</li> <li>•Fishing Line Strength</li> <li>•Do Bridges Stay Up?</li> <li>•Fingerprints</li> <li>– What Do They Tell Us?</li> <li>•How Do Braces Work?</li> <li>•How Do You Make Paper?</li> <li>•How is a Photograph Made?</li> <li>•Wolf Communication</li> <li>•What Do Seeds Need to Grow?</li> <li>•Making Colours</li> <li>•How Alligators Swim</li> <li>•What is Inside a Telephone?</li> <li>•Laughter is Good Medicine</li> <li>•Simple Motor</li> <li>•Hummingbirds</li> <li>•How Butterflies Protect Themselves</li> <li>•How is Butter Made?</li> <li>•Solar Energy</li> <li>•Will the Titanic Rot Away?</li> <li>•How do Animals Talk to Each Other?</li> <li>•Icebergs and How They Form</li> <li>•Lunar Eclipse</li> <li>•What Causes a Volcano to Erupt?</li> <li>•The Digestive System</li> <li>•How is Honey Made?</li> <li>•Why Do Things Fizz?</li> <li>•Lasers</li> <li>•Quick Rust</li> <li>•What Is The Eye of the Hurricane?</li> <li>•How Do Planes Fly?</li> <li>•Do Animals Talk?</li> <li>•Uses of Water</li> <li>•Patterns in Nature</li> <li>•Use of Our Teeth</li> <li>•Recycling</li> <li>•Vaccines</li> <li>•Animal Homes</li> <li>•Nests</li> </ul>	<ul style="list-style-type: none"> <li>•The Life of a Tree</li> <li>•Musical Instruments</li> <li>•A Healthy Meal</li> <li>•Sound</li> <li>•Whales</li> <li>•Parts of a Building</li> <li>•Animal Colourings</li> <li>•Our Eyes and How We See</li> <li>•The Four Seasons</li> <li>•Viruses</li> <li>•Predicting Weather</li> <li>•How Computers Are Used</li> <li>•Making Batteries</li> <li>•Canada’s Natural Resources</li> <li>•What is Inside Fruit?</li> <li>•Parts of a Leaf</li> <li>•Prehistoric Animals</li> <li>•Where do Beavers Live?</li> <li>•Good or Bad Insects</li> <li>•Whistles and Flutes</li> <li>•Why are Zebras Striped?</li> <li>•Metals That Conduct Heat</li> <li>•The Human Heart</li> <li>•How Does a Tooth Decay?</li> <li>•How do Greenhouses Work?</li> <li>•Filtering Water</li> <li>•What is the Best Wing Design?</li> <li>•Kites</li> <li>•Tropical Fish</li> <li>•Fresh Water Fish</li> <li>•Algae</li> <li>•How Strong is a Spider’s Web?</li> <li>•What Affects the Strength of Concrete?</li> <li>•Build a Hygrometer</li> <li>•Build a Clock</li> <li>•Are Manufacturer’s Claims Truthful?</li> <li>•What is Physical Fitness?</li> <li>•How Does a Wind Turbine Work?</li> <li>•What is Protein?</li> <li>•Wind Chill</li> <li>•World Population</li> <li>•Gravity</li> </ul>	<ul style="list-style-type: none"> <li>•Calendars and Time</li> <li>– Why do we have leap years??</li> <li>•Reptiles</li> <li>•Your Backyard Ecosystem</li> <li>•Melting Rates of Ice</li> <li>•How Does Frost Form?</li> <li>•And many, many more!</li> </ul> <p>Internet resource:</p> <p><a href="http://web.mit.edu/afs/athena.mit.edu/org/i/invent/">http://web.mit.edu/afs/athena.mit.edu/org/i/invent/</a></p> <p><a href="http://constructionmanagementdegree.org/blog/2010/100-awesome-engineering-projects-for-kids/">http://constructionmanagementdegree.org/blog/2010/100-awesome-engineering-projects-for-kids/</a></p> <p><a href="http://www.education.com/science-fair/engineering/">http://www.education.com/science-fair/engineering/</a></p> <p><a href="http://faculty.washington.edu/chedler/fair.html">http://faculty.washington.edu/chedler/fair.html</a></p> <p><a href="http://www.juliantrubin.com/sciencefairprojectsaz.html">http://www.juliantrubin.com/sciencefairprojectsaz.html</a></p> <p><a href="http://www.sciencemadesimple.com">http://www.sciencemadesimple.com</a></p> <p><a href="http://www.scienceclub.org//kidproj1.html">http://www.scienceclub.org//kidproj1.html</a></p> <p><a href="http://www.spartechsoftware.com/reeko/">http://www.spartechsoftware.com/reeko/</a></p> <p>The <b>Public Libraries</b> also stock a great selection of books on science fair projects and science! For example:</p> <p>Kramer, Stephen P. <i>How to Think Like a Scientist: Answering Questions by the Scientific Method</i>. New York: Thomas Y. Crowell, 1987.</p>
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