

Welcome to the 9th Annual Long Valley Science Fair

Sponsored by the *Long Valley Junior Women's Club*

IMPORTANT INFORMATION

Location: Long Valley Middle School

Date: Saturday, March 17, 2018 (snow date March 18)

Time: 9am – 12pm *Arrive 8:30-8:45am to register and set up.*

Registration: January 4 – January 31, 2018... but it's never too early to start planning your project!

HOW TO REGISTER

1. Start thinking about your project early... Remember to do something you are interested in and keep it simple.
2. You must review all of the [Safety Rules](#).
3. Visit the [Long Valley Junior Women's Club website](http://www.lvjuniors.org) (www.lvjuniors.org) for the link to online registration. It will be available starting January 4. Have a parent or guardian review and fill out the permissions section.
4. Once you submit the form and the committee reviews the project, your parent/guardian will receive a confirmation email.
5. Partners must also submit a registration form. Each partner must submit their contact info, project title, and parent permissions. Only one partner is required to submit the rest of the project information.
6. Contact us by email at lvsciencefair@gmail.com with any questions or technical issues. All Science Fair communications will come via email, to the email address you submit in the Registration form.
7. If you need to change any information on the registration form after submission, please contact us at lvsciencefair@gmail.com.

FREQUENTLY ASKED QUESTIONS

Who can participate?

The Fair is open to all 4th – 8th grade Washington Township residents. Residents who are homeschooled or attend schools outside of Washington Township are also welcome and encouraged to enter!

Can I work on a project with a partner?

Yes, up to three students may work together on one project.

Can I work with a friend or sibling in a different grade?

Yes! Partners may be in different grades, but please be aware that the project will be judged at the highest grade level. This means that a 7th grader and 8th grader working together will be judged at the 8th grade level.

How do I pick a project?

Choose something you are interested in and go from there. Think about a question you can ask, and what type of experiment or test you can do to answer the question. For example, if you like cooking or baking, you could choose a recipe containing eggs and test different egg substitutes to see which gives the best texture and taste. Or, if you like basketball, you could test which angle to the backboard gives the highest percentage of successful shots. You can visit the library or look on the internet for ideas to get you started. Remember that a science fair project is about asking questions and performing an experiment to prove or disprove a hypothesis. Simply doing a demo or making a model of a volcano isn't quite a project until you add an experiment, for example - what kind of acid (vinegar, lemon juice, etc.) makes a volcano erupt the longest.

One great website is <http://www.sciencebuddies.org>.

Another good website is <http://www.makeitsolar.com/science-fair-information/index.htm>.

What should I have on my display?

We strongly encourage you to follow the Scientific Method for both your project and your display, because it is part of the judging criteria. Here is a link that explains in more detail how the scientific method works: <https://www.sciencebuddies.org/science-fair-projects/science-fair/steps-of-the-scientific-method>.

The steps of Scientific Method are to:

1. Ask a Question
2. Do Background Research
 - Keep a list of any books or websites you use and list them on your display
3. Construct a Hypothesis (an educated guess of what will happen in the experiment)
4. Test Your Hypothesis by Doing an Experiment
 - Try to make your experiment a “fair test”, where you only change one test condition at a time and keep all other conditions the same.
 - Take lots of notes and pictures during your project!
5. Analyze Your Data and Draw a Conclusion
6. Communicate Your Results

What if I performed my experiment and it didn't work? Should I withdraw from the Fair?

Sometimes the best experiments are those that failed, or did not turn out the way you expected! If you think you made a mistake, you might repeat the experiment if you have time (you should still include any failed data points in your presentation). If not, then maybe you learned something interesting and unexpected from the experiment, and that would be your conclusion. Things that may have gone wrong or may have affected the results (these are called “sources of error”) are actually great topics to discuss with the judges. It's all part of the scientific method!

Check out this discussion on ScienceBuddies.org for more tips:

<http://www.sciencebuddies.org/blog/2010/03/science-fair-project-troubleshooting-guide.php>

How much space do I have for my display?

A tri-fold display board is recommended for displaying your project (these are commonly available at Walmart, Staples, Target, etc.) The area you will have for display purposes is approximately 3 ft x 3 ft. Anything you have to display must fit on the table. There is no room for displays on the floor or at the end of the aisles. Please let us know if you need electrical access for your display.

How is my project judged?

You will be visited by multiple judges, who will each look at your display and ask you questions about your project. In general, the judges will (1) look at how you use the scientific method (see question above “What should I have on my display?”) (2) ask you a few

questions to help them understand what you did and what your conclusions are, and (3) look for a neat, organized display that tells the complete story of your experiment.

You may find it helpful to review the actual judging criteria sheets that the judges will be using to evaluate your project. Links can be found alongside the Science Fair information on our website.

What should I do before and after my judging period?

You need to be stationed at your project during the judging period. You will find out on the day of the Fair the window of time during which you will be judged. Before and after your judging period, you are free to view the other projects, visit the exhibits, or have a snack. During your judging period, you are free to leave your position if all three judges have already spoken with you.

Is food available at the Fair?

The Long Valley Junior Women's Club sells food and drinks during the Fair. There is also a Kids' Corner with complimentary light snacks and water for children and coloring pages for younger siblings.

What do I do with my project after the Fair?

You must take your project home with you at the conclusion of the Fair. Arrangements will be made with your school and the Washington Township Public Library for display in the weeks after the Fair. Please look out for an email with more details closer to the date of the Fair.

If I have a question not listed here, who can I contact?

You may send all questions to lvsciencefair@gmail.com.

SAFETY RULES - PROJECTS

Please note that the committee will review your project to ensure your safety and that of others. We will ask for you to choose a different project if it does not meet the guidelines.

- No animals may be harmed in any experiment.
- Do not mix cleaning agents such as bleach and ammonia – this may create hazardous fumes.
- No experiments may be done using household current or car batteries. You may use household batteries or battery-operated laptops.
- No flames should be used or produced.
- Experiments may not involve explosions.
- Only non-toxic chemicals should be used.
- Experiments may not involve human or animal waste.
- If you are using human subjects, like friends and family, to observe behavior, such as in a taste test or shooting a basketball, you need to make sure no one will get hurt (emotionally or physically).
- You may use electricity or batteries to power your experiment (e.g., light bulb, electronic device, etc.) We have limited electrical outlets for display purposes. You must let us know if you need power, either in your registration form or by emailing us at lvsciencefair@gmail.com.

SAFETY RULES – DISPLAY AT THE FAIR

Items ALLOWED at the Fair

- Water less than ½ gallon
- Household battery-operated systems and laptops
- We have limited outlets for use if needed in your display, but you must let us know ahead of time
- Live plants or cut flowers
- Glassware is allowed but it should be secured, or plastic equipment should be used/displayed if possible.

Items NOT ALLOWED at the Fair

- Any chemical or item which could be hazardous to the public is prohibited from display.
- Live animals, chemicals, explosives, or large amounts of water.
- Dry ice.
- Gas cylinders or compressed gasses.
- Open flames, torches or burners.
- Any medicines, such as aspirin or cold medicines are not permitted. You may display the empty bottles.

- Petri dishes with samples in them. Photographs may be displayed instead.
- Any potentially hazardous or toxic samples. For example, if you are growing mold on food – take photographs to show instead of bringing the actual spoiled food.
- If you are unsure about any item, please ask us before you plan your project or display (lvsciencefair@gmail.com)