

Are you interested in participating in the Diamond Valley Youth Science Fair?

There are just a few requirements, and a few things you'll need, to participate in the Diamond Valley Youth Science Fair (DVYSF).

1. Do you go to school in the right place?

You have to attend school – or be home schooled – in Diamond Valley or surrounding areas.

2. Are you in the right grade?

The **Diamond Valley Youth Science Fair** has the following age categories:

• **Elementary**: Grade 4-6

• Junior: Grade 7-8

• Intermediate: Grade 9-10

• **Senior**: Grade 11-12

4. Is your project idea suitable for a science fair?

Youth Science Canada, which organizes the Canada-Wide Science Fair, recognizes two types of projects:

- Discovery: Answering scientific questions.
- **Innovation**: Solving problems or improving existing solutions.

If you're in grades 4-6, or, you don't want to compete for the Canada-Wide Science Fair, you could also do:

• **Research:** Tell us all about your favourite subject, don't worry about questions or creating something new.

See: Information for help deciding what kind of project you have.

5. What will you show us on the day of the fair?

On the day of the science fair you will need to have *something* that helps you to tell everyone about what you learned, but what that is exactly is up to you!

At the Canada-Wide Science Fair there are strict requirements for project displays. However, at the DVYSF we're much more relaxed, please see **Information** for more details



Here's what to do:

- Students are encouraged to ask their science teacher if their school is registering for another Youth Science Fair.
- If the school is not going to another Youth Science Fair, then the student should ask their science teacher to support them at their entry to the DVYSF.

Student/Parent Checklist for All Participants:

IMPORTANT: CHECK YOUR DATES

Please ensure that you know the important deadlines and fair dates as shown on the front page or communicated by your school's science fair coordinator. Specific deadlines change from year to year, so please adhere to the posted dates closely.

October 2025

- Along with the DVYSF coordinator at your school or with a parent/guardian at home, make the decision to do a science fair project.
- Register
- Review all of the information for advice on how to do a good science fair project.
- If you plan to use humans or animals in any way, review the Use of Animal or Humans Guidelines-2025 and Policy 2025.
- All students must complete an Ethics and Due Care Form 2A (even if you are doing a research project).
- If you plan to use human subjects, then you must determine the risk associated
 with your project. Projects falling into the 'significant risk' category must complete
 Participation of Humans Significant Risk Approval Form 2B. The DVYSF Ethics
 and Due Care Committee makes the final determination of risk. Follow the
 instructions on the form to send it.
- If you plan to use human subjects in your project, then each subject must read
 and sign the Informed Consent Form 2C before participating. You may be asked
 for these during judging and should keep them in your logbook.
- Gather background information on your science project from libraries, web sites, etc.
- Begin keeping a logbook of your activities and/or experiments (judges will ask to see your logbook).



- Parents should set aside time on a weekly basis to help and coach children with projects, remembering that all the work must be done by the children. Make sure they keep a Logbook of their activities and/or experiments.
- Make sure that you have read all the Entry Rules and Safety Regulations —
 projects must be in compliance with all of the rules and regulations.
- Consider ordering your trifold early as some years they are backordered with some suppliers.

November 2025 - February 2026

- With guidance from the DVYSF coordinator and parents, complete your project.
 Refer to the Student FAQ's page for good ideas on how to do a good science fair project.
- Make sure you start any experiments early so that you can complete your project by mid - February.
- When your project is complete, determine how you will lay out your project on your trifold, as well as any models or artifacts you might plan to showcase with your project.
- Do a final check to make sure you have followed all the Entry Rules and Safety Regulations.
- Make sure your parents read copies of all the Rules, Instructions, and Regulations to participate in the fair.

January 2026

- Please register your project under the following link:
 This must be done by the deadline posted on the DVYSF homepage timeline.
 Typically, the last week in January.
- Ensure you have Ethics approval from the DVYSF committee. Projects without approval by the deadline posted on the DVYSF timeline will not be eligible to setup at the Sheep River Library.
- Please review the <u>Project Description</u> before you complete your registration on the platform.



February

- During February, you need to complete your project, doing any last edits and additions.
- Refer to the timeline posted on the DVYSF homepage. There will be a date
 posted for project registration to be completed. After this date, no further
 modifications to your project will be allowed on the platform. Give yourself plenty
 of time to make sure all edits are complete by this date.
- Again, review the Project FAQ page for advice and information on how to do a good science fair project.

Student/Project Registration and Completion

- You must be registered as a participant by November 14th.
- You must have your project registered online by January 9th.
- You must have your Ethics completed and approved by February 13th.
- You must have your project completed by March 1st. After this date, no further changes to your project will be allowed.

Project Set-up/Judging (March 6th/7th)

- Students will come to the Sheep River Library on Friday, March 6th to check in and set up their Trifolds, typically between 12-6pm. Details will be sent out via email mid-February.
- Following project set-up students are assigned to judging teams, therefore ONLY
 projects that check-in and set up on Friday, March 6th will be judged.
- If students are unable to make it on Friday, March 6th they can have parents, peers or teacher's check-in and set up their trifold for them
- Only students who have been selected for judging and who have completed the
 declaration section will be able to check-in, please review these criteria with your
 students.
- Judging will occur in person at the Sheep River Library on Saturday, March 7th.



- If you are selected to be judged for the second round, you will be contacted and assigned a time window for second round judging.
- Students are asked to be at the Sheep River Library for 9am and until 3:30pm on Saturday, March 7th.
- Medal round judging happens in the morning. ALL students will be judged 2-5 times by different judges.
- Award round judging happens in the afternoon, only projects qualifying for an award will be judged in the afternoon.
- There will be a noon break for lunch (please bring your own lunch and a water bottle).

Award Ceremony (March 7th)

- There will be an awards ceremony at the Sheep River Library on Saturday, March 7th at 4:30pm.
 - Typically, students are asked to be at the Sheep River Library between
 9am and about 3:30pm.
 - Medals and floor awards will be presented to students at their projects
 - Students who cannot make it to the awards ceremony should arrange for someone to pick up their trifold and their medal.at 4:30 pm



2025/26 Timeline

Date	Description
Oct 15th	Participants Registration Opens
Nov 14 th	Project Registration Closes
Jan 6 th	Project Registration Opens
Jan 9 th	Project Registration Closes
Jan 13 th	Judging Registration Opens
Feb 13 th	Ethics must be completed and approved
March 1 st	Project must be completed
March 6 th	Project Setup at the Sheep River Library
March 7 th	Medal Round and Award Round Judging



Important message about Plagiarism and Academic Misconduct

Plagiarism is a growing, serious problem in the academic world. The Diamond Valley Youth Science Fair is reminding students and coordinators of the importance of acknowledging everyone who contributed to individual projects. This includes not only ensuring the completeness of the project's literature references but also giving credit to the people whose ideas and assistance were used in the project's design and execution. A failure to adequately credit external sources will negatively impact judging scores, and in extreme cases, could result in project disqualification. We encourage you to read the **Policy Section 8**: Academic Integrity.

Our Supporters

We thank all of our financial supporters and volunteers. We could not do it without you.



CALGARY YOUTH SCIENCE FAIR RULES and INSTRUCTIONS

MUST BE READ AND UNDERSTOOD BEFORE SIGNING THE ENTRY FORM

All students must complete the **Ethics and Due Care Form (2A)** for approval from the DVYSF Committee. Please ensure the Basic Project Information is completed first. The DVYSF Committee will determine if your project involves significant risk and informs you if you need to fill out Form 2B. All projects complete 2A only some projects will be required to complete 2B.

- If your entry involves surveys or otherwise uses human subjects, each person in your study must read and sign an **Informed Consent Form (2C)**. These forms should be kept in your Logbook.
- Questions regarding any aspect of the fair should be directed at your COORDINATOR.
- Entries are limited to GRADE 4 & ABOVE.
- An individual may be involved in only one project.
- Group projects may consist of only TWO STUDENTS.
- No project previously entered in Youth Science Fair may be re-entered unless it has been drastically modified.

Your project must comply with DVYSF Entry rules and Ethics and Safety Regulations. You confirm that these have been read and understood by you and by your parents when you complete the declaration section on the DVYSF Project registration.



SAFETY REGULATIONS

MUST BE READ AND UNDERSTOOD BY STUDENTS, PARENTS AND COORDINATORS.

General Safey

- 1. Caution should be taken with all sharp edges or corners on prisms, mirrors, enclosures, glass and metal which can be made safer with appropriate covering.
- 2. Dangerous moving parts (belts, pulleys, gears etc.) should be guarded and sharp edges covered.

Fire Safety

3. Highly inflammable materials (i.e. gasoline, matches, sulfur etc.) must be used with appropriate adult supervision.

Chemical Safety

4. Toxic, flammable, or corrosive chemicals used in a project should be discussed with the coordinator prior to their use in the project.

Electrical Safety

- 5. Use the lowest voltage possible.
- 6. Use only CSA approved appliances and extension cords, with a grounded 3 prong plug. The cords must be in good condition.
- 7. All non-current-carrying metal parts must be grounded.
- 8. Where practical, a pilot light should be installed to indicate on/off.
- 9. Lasers may be used in a project with appropriate caution.

Biological Safety

- 10. Use of live animals or microbiological cultures must follow guidelines available at cysf.org.
- 11. Any project that involves observation of or experimentation on an animal (or animal tissue samples) or humans must meet the "GUIDELINES FOR THE USE OF HUMAN SUBJECTS AND ANIMALS".
- 12. The use of human tissues, blood, saliva, urine, feces, mucus, semen, teeth etc. is absolutely forbidden (see possible exception for grade 10-12 students under guidelines for use of human subjects and animals).
- 13. Projects using human beings as subjects in their studies must use the "<u>INFORMED CONSENT FORM</u>" with their subjects. Completed forms should be stored in the project's logbook.

Radiation Safety

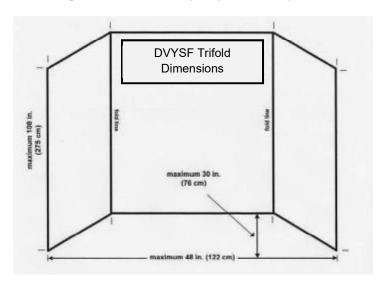
14. Experiments working with radioactive materials or radiation-producing equipment must follow the regulations established by the RADIATION HEALTH BRANCH (Occupational Health and Safety, Government of Alberta, Edmonton).

BACKBOARDS/TRI-FOLDS

ALL PROJECT BACKBOARDS (TRI-FOLDS) MUST COMPLY WITH THE FOLLOWING

SIZE RESTRICTIONS WHEN SET UP ON THE DISPLAY TABLE:

- 1. Front to back (measured on the table): maximum 76 cm (30 inches)
- 2. Side to side (measured on the table): maximum 122 cm (48 inches)
- 3. Bottom to top (of the tri-fold): maximum 275 cm (108 inches)
- 4. Floor to top (including table): maximum 366 cm (144 inches)
- 5. The ideal trifold display board to use in our fair can be ordered from a couple of sources depending upon what school board you are part of. When laid flat on the floor the outside dimensions are 60 inches by 96 inches (152.4 cm by 243.8 cm).
- 6. Depending on your school board, you may need to place an order through an approved supplier.
- You can purchase the tri-folds (display panels) from the Calgary-based company,
 "Science Is". Schools can email or phone their orders to George Pastrik
 [pastirik@science-is.com; (403) 547-4422)]





INFORMATION

Here are some internet sites that may be helpful.

- Science Buddies www.sciencebuddies.org
- Scotch Discovery Education www.scotchsciencefair.com
- Cyber-Fair http://www.isd77.k12.mn.us/resources/cf/welcome.html
- EXPERIMENTAL SCIENCE PROJECTS; An Intermediate Level Guide http://www.isd77.k12.mn.us/resources/cf/SciProjInter.html
- National Student Research Center E-Database of Student Research: Science Index http://youth.net/nsrc/sci/sci.index.html
- Science Fair Idea Exchange http://www.halcyon.com/sciclub/cgi-pvt/scifair/guestbook.html
- Science Fair Internet Resources
 http://www.lib.lsu.edu/sci/chem/internet/science_fairs.html
- Science Fair Project Resource Guide http://www.ipl.org/youth/projectguide/
- Science Fair Projects: A Resource for Students and Teachers
 http://www4.umdnj.edu/camlbweb/scifair.html
- Science Projects http://www.scienceprojects.com
- Super Science Fair Support Center http://www.scifair.org



Presentation- Helpful Hints

- Review Timeline.
- Sketch a rough layout on a piece of paper before pasting up your display.
- Photograph each step of your procedure.
- Come up with a catchy title and display it prominently.
- Include all required categories and content on your display.
- Tell the story of your science project in a logical, easy-to-read manner.
- Arrange items from left to right, from top to bottom.
- Space elements evenly across your layout, to achieve a balanced, consistent look.
- Use black or dark colors for type in a font that is easy to read.
- Make type large enough to read from four feet away.
- Label all graphs, charts, and tables.
- Write descriptive captions for photos.
- Proofread and double and triple check all text before placing it on your display board.
- Be creative!



Ways to Find a Science Fair Project Idea

- 1. Look at lists of science categories and pick one that you are interested in, then narrow that down to a project. (Example: say you pick psychology, then narrow it to the differences between boys and girls, then to a topic like "Do boys remember boy-type pictures (footballs) better than girl-type pictures (flowers)?" (Two lists of categories attached.)
- 2. Use your experiences. Remember a time you noticed something and thought, "I wonder how that works?" or "I wonder what would happen if..." then turn that into a project. Check the science section of the school library. Browse and look at book titles, then look inside the ones that look interesting to you. Also, the internet has a ton of great ideas. Before you decide to tackle a super awesome project, have a talk with your parents to decide if the project is possible.
- 3. Think about current events. Look at the newspaper. People are hungry in Africa because of droughts a project on growing plants without much rain, which types grow okay with little water? Or the ozone hole over Antarctica how can we reduce ozone? a project on non-aerosol ways to spray things. Or oil spills. How can we clean them up? a project on how to clean oil out of water.
- 4. Watch commercials on TV. Test their claims. Does that anti-perspirant really stop wetness better than other ones? Can kids tell the difference between Coke and Pepsi if they don't know which they are drinking? How much sugar is in your beverage?



Science Fair Ideas!

Look at sample projects, look at this list, look at projects in books or projects from last year's science fair; then add your own question, your own idea to them.

Don't just use these ideas. Take these ideas and add something of your own.

For example, change "Are dogs colorblind?" to "Are cats colorblind?" Or look at another of the five senses of dogs and test their sense of taste...

Choose some of these:

- What material is the best insulator?
- Are dogs colorblind?
- Do soap bubbles last longer on warm or cold days?
- Are hot air balloons different from blimps?
- What is the best method, other than heat, to melt ice?
- What effect does oil have on water plants?
- What would happen to the weather if the earth was a cube?
- Do goldfish chemicals they sell you really help the fish adapt to the new aquarium?
- How can a tomato plant be grafted to a potato plant?
- How is sound obtained from a compact disk?
- How does a nuclear reactor work? How does it look?
- How is two-year old talk different from ours?
- How does burning gasoline make a car move?
- How do we tell how far away a star is from earth?



- What soils are best to build a house on?
- How do plants react to different kinds of music, different light, colors, and different neighboring plants?
- What is the best way to dispose of paper?
- Do plants move?
- Does music have an effect on animal behavior?
- Does music have an effect on plant growth?
- Which kinds of food do dogs (or any animal) prefer?
- Does the color of food or drinks affect whether or not we like them?
- Which paper towel is the strongest?
- What is the best way to keep an ice cube from melting?
- What level of salt works best to grow brine shrimp?
- Can the food we eat affect our heart rate?
- How effective are child-proof containers and locks?
- Can noise levels affect how well we concentrate?

 □ Does acid rain affect the growth of aquatic plants?
- What is the best way to keep cut flowers fresh the longest?
- Does the color of light used on plants affect how well they grow?
- What plant fertilizer works best?
- Does the color of a room affect human behavior?
- Do athletic students have better lung capacity?
- What brand of battery lasts the longest?
- What type of food molds the fastest?



- Does having worms in soil help plants grow faster?
- Does gravity affect how plants grow?
- Does the color of hair affect how much static electricity it can carry? (Test with balloons.)
- How much weight can the surface tension of water hold?
- Can people really read someone else's thoughts?
- Which soda decays teeth the most?
- What light brightness makes plants grow the best?
- Does the color of birdseed affect how much birds will eat it?
- Do natural or chemical fertilizers work best?
- Can mice learn? (You can pick any animal.)
- Can people tell artificial smells from real ones?
- Does age affect human reaction times?
- What is the effect of salt on the boiling temperature of water?
- Does shoe design affect an athlete's jumping height?
- What grass seed grows the fastest?
- Can animals see in the dark better than humans?

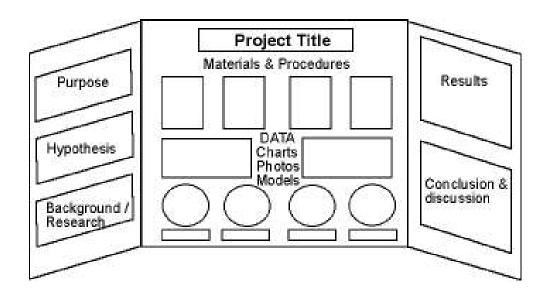


Sample Timeline for Science Fair Project

Timeline (before the science fair)	Activity				
7 weeks	Decide on topic and develop question or solution				
6 weeks	Background research on topic				
5 weeks	Determine materials and purchase items				
5-4 weeks (depending on project)	Set up project display supplies				
3 weeks	Shop for project display supplies				
2 weeks	Prepare project display				
1 week	Prepare oral presentation				
1 day	Deliver presentation display to school				
0	Science Fair Day				



Help with the Display Board



Display Board

When you plan your science fair board, remember this is a case in which you CAN judge a book by its cover. Make a small sketch of where everything will go. Lay it out before you glue anything down to make sure it looks good. When you set up your board, put things together in an order that makes sense. Design what the "center" of your board will be. This is where everyone will look first. Will it be the title or pictures? Everything else should be placed around this. If you do a really good job at completing your display, everyone will stop to look at your project. However, if you do a messy job, no one will take the time to discover all the fascinating research you have done or look at the results of your wonderful experiment or invention.



Project Display Checklist:

Problem	Titel	Results		
(or question)	Name(s), Grade(s), Teacher(s)			
Hypothesis	Materials Data (charts,	Complyation		
	graphs, tables)	Conclusion		
Background	Procedure (or Experiment	Acknowledgements:		
research	or Investigation) – Use a	Sources, links, other		
(with citations)	step-by step format.	citations		



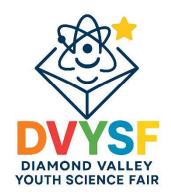
The Scientific Method is an organized way of figuring something out. There are usually six parts to it:

- 1. Purpose What do you want to learn? An example would be, "Do plants grow better under different colored lights?" or "Do girls have faster reflexes than boys?"
- 2. Research- Find out as much as you can. Look for information in books, on the Internet, and by talking with teachers to get the most information you can before you start experimenting.
- 3. Hypothesis After doing your research, try to predict the answer to the problem. Another term for hypothesis is 'educated guess'. This is usually stated like "If I...(do something), then ... (this will occur.)"
 An example would be, "If I grow plants under green light bulbs, then they will grow better than plants growing under red light bulbs?"
- 4. Experiment The fun part! Design a test or procedure to confirm or disprove your hypothesis. In our example, you would set up a plant under a green light bulb and a plant under a red-light bulb and observe them for a couple of weeks. Also, set up a plant under regular white light to compare to the others. If you are doing this for a science fair, you will probably have to write down exactly what you did for your experiment step by step.
- 5. Analysis Record what happened during the experiment, also known as "data."
- 6. Conclusion Review the data and check to see if your hypothesis was correct. If the plant under the green light bulb grew better, you proved your hypothesis; if not, your hypothesis was wrong. It is not "bad" if your hypothesis was wrong, because you still learned something.

ETHICS AND DUE CARE FORM

Form 2A

This form must be filled in for all projects that involve the use of animals or humans in any manner whatsoever. For details on use of animals and humans in a project see <u>Determination of Project Risk</u> — your project needs to meet both our regulations and the national regulations. <u>This form must be sent before any experiments begin</u>. Entrants/Coordinator will be contacted once this form has been reviewed.



Exhibitor's Name(s)		(s)	Exhibitor 1				Exhibitor 2			
Exhibitor'	's Email(s)								
Phone No	umber(s))								
School										
School P	hone Nu	ımber								
Coordinator's Name		Name				Coordinator's Email				
Exhibit	Title	•					•	•		
Grade	Level		Where	e will experimen	ts take place?					
Human p	articipan	its? YE	s no	(circle one)	Animal experim	nent?	YES NO	(circle one)	Animal species:	
If you circled "yes" for human participants, you must now assess the risk factor of your project. Final determination of risk will be made by CYSF.										
		Read	Determin	ation of Projec	t Risk, determine	e if your p	roject is "Low"	or "Significant	"Risk, then circle one box below.	
Low Risk	2. Ple 3. Ple	ase send o	send this form send copy of your survey form (if applicable) send copy of your Informed Consent Form 2C cable).			Significant Risk	 Please send this form Please send Significant Risk Form 2B Please send copy of your survey form (if applicable) Please send copy of Informed Consent Form 2C Please send copy of your Letter of Information. 			
Purpose of your experiment										
Brief description of your experiment										
I hereby certify that the information given above is correct and to the best of my knowledge the above project complies with the guidelines for use of human subjects and animals supplied to me by the Society.										
Signature of Coordinator			Sigr	Signature of Scientific Supervisor (if applicable)						
Signature of Exhibitor 1 S						Sign	Signature of Exhibitor 2			
Signature of Parent of Exhibitor 1						Signature of Parent of Exhibitor 2				

Email it to: steam@dvyf.ca.