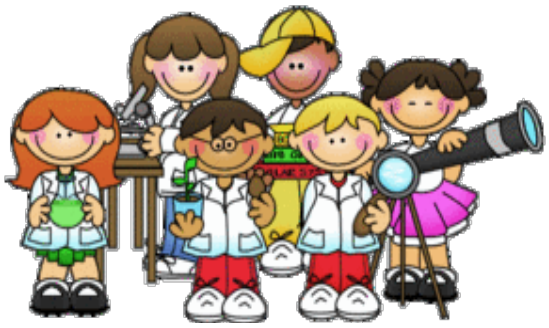
Join us for the 2020 Belmont ES Science Fair!



Who? Belmont Students from Kindergarten through Grade 5.
Individual, group, and family projects are welcome.

Why? Students apply the scientific method to their own interesting idea in a **non-competitive** setting.
Students **HAVE FUN** while developing problem solving and scientific skills.
Student participants receive **free pizza dinner, dessert, and a chance to win a door prize**!
Students are recognized at our **"Knowbel" Prize Ceremony**.
Each participant will **receive a medal***

When? **Tuesday, March 24th, 2020** from 6:30- 8:30 p.m.

Where? Belmont Elementary School Cafeteria and Gym

How? Complete and return the form below or Online **https://belmontespta.org/** Registration is FREE.

Questions? See our FAQ list (on **https://belmontespta.org/**) or
contact Laura J. Sherman (laurajsherman@gmail.com or 301-908-0090)

* We must receive the registration form below by **Tuesday, March 10th** in order to allow time for ordering.

2020 Belmont Science Fair Registration Form

Student name(s):_____

Teacher/grade(s):_____

Parent/Guardian name: _____

Parent/Guardian email: _____

Is this a group project? YES NO (circle one) Name of other students_____

We are also looking for volunteers to act as "Visiting Scientists" to interact with participants regarding their projects: ask questions and promote curiosity, and other volunteers to assist with set up, food, and clean up. Would you be willing to help out?

I am interested in volunteering as a:

(Feel free to volunteer for more than one position!)

_____ "Visiting Scientist"

_____ Gymnasium set-up evening before science fair (Monday March 23rd - move and set tables)

_____ Project check-in and set up (Tuesday morning)

_____ Clean up night of science fair (take down tables)

_____ Food team member

***Please return form via backpack mail marked Science Fair* OR complete form online:** **https://belmontespta.org/**
Please register by Tuesday **March 10, 2020**.

Schedule of Events at the Science Fair

7:30-9:00 a.m. Project drop-off at school

6:30-7:00 p.m. Pizza dinner for student Science Fair participants
7:00-8:00 p.m. Fair open to the public (Pizza available for purchase for public)
Fair participants interviewed by "Visiting Scientists"
8:00-8:30 p.m. "Knowbel" award ceremony

Frequently Asked Questions

Q: How can we fit another thing into our schedule? We are so busy with homework and scouting and soccer. Plus I got a D^+ in high school chemistry!
A: Fear not, participation does not need to take a lot of time or scientific expertise. Just get your child talking about a topic that interests them, try to get them to ask questions about it, and then to think of a couple tests or experiments to try to answer their questions. For the poster, your child can write about the questions they asked, how they tested them, and what they learned. It does not need to be elaborate.

Q: What can't my child(ren) use as part of their project?
A: Due to safety concerns, there are certain things that are NOT allowed for projects including the following:

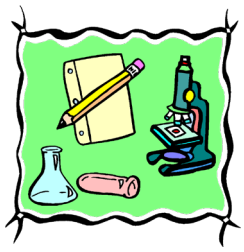
1. NO plug-in electrical cords, but batteries are allowed.
2. NO glass, but battery-operated light bulbs are allowed.
3. NO open flames, poisons, or dangerous chemicals.
4. NO live animals or live insects.
5. NO bacterial, viral, or fungal cultures (grown from human or animal substances).
6. All liquids or potentially messy substances MUST be contained (using trays or plastic containers).
7. Food is not allowed in the Belmont Gym.
8. Experiments to reanimate dead pets (as in *Frankenweenie*) are **strictly forbidden**!
9. Please ask Laura for additional information.

Q: Why do I need to register?
A: This information helps us to plan (e.g. number of tables, amount of pizza) and to order the Belmont ES Science Fair medals.

Q: Can my kids work together or with a friend?
A: Absolutely! Family or group projects are welcome. Please complete the online registration form individually for each student. This allows us to prepare certificates and medals for each student. Indicate that the students are working together on a group project on your registration form.

Q: How can I help?
A: We can always use help putting on the science fair. We're looking for parents to assist with set-up/decoration, take down, food sales or to serve as a "visiting scientist" (i.e. prepare comment cards on some of the projects displayed the night of the fair). Please indicate your preference on the registration form.

Q: What if I have other questions?
A: Contact **Laura J. Sherman (laurajsherman@gmail.com or 301-908-0090)**



How To Do a Science Fair Project

1. Think of a Question (or a set of related questions). This should be a question that you think you can answer by doing experiments, making observations, or reading more about it. It can be from everyday life, or from a scientific subject about which you are interested in learning more. The rest of your science fair project will be your way of trying to answer this question.

2. Come up with your hypothesis: If you think you know the answer to your question, then your expected answer is called a HYPOTHESIS. Your question may not necessarily have a simple "yes" or "no" answer.

3. Establish your methods: Your METHOD(s) is how you try to find the answer to your question. First find out as much as you can about your topic. Then plan what experiment you are going to do to answer to your question. Keep a notebook (or written notes) of your work.

4. Collect your data and analyze it: DATA COLLECTED are the objective observations, such as numbers that result from measurements that you made. Write these in your notebook. Also, photographs could be considered part of your data. Analyze your data by making tables, graphs, or diagrams.

5. Results: Your data analysis will lead you to decide on the RESULTS of any experiments or observations that you have made. This is where you turn any numbers, tables, graphs, diagrams and notes into one or more sentences that state what happened.

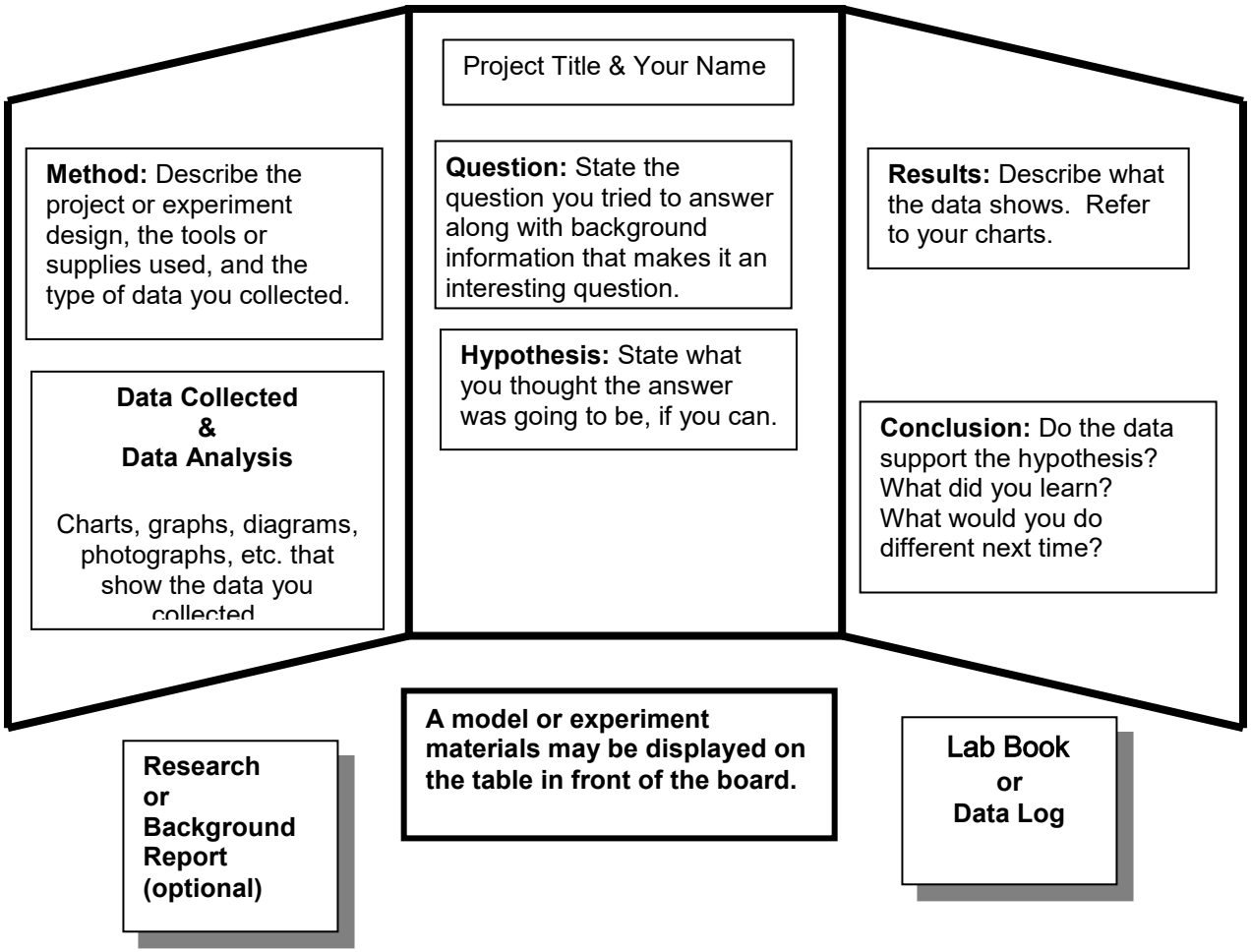
6. Conclusion: The CONCLUSION is where you compare your results (what you learned) with what you had expected to learn (your hypothesis). It could be simply a statement of whether or not your hypothesis was correct, along with any other results that you did not expect. Try to discuss here only the most important parts of what you learned. This is also where you can discuss what things you would change if you were going to do this project again.

EXAMPLE SCIENCE FAIR PROJECT
(Don't use this one – think of one yourself)

TITLE (and QUESTION): Do plants care what kind of water they drink?
HYPOTHESIS: Yes: Purified water makes plants grow quicker.
METHOD: Water one plant with bottled water (purified). Water an identical plant with tap water (not as pure). Measure each plant's height once per day for two weeks.
DATA: Show pictures and list height measurements made every day for two weeks.
RESULT: After two weeks, the plant that had bottled water measures 3 inches taller than the plant, which had tap water.
CONCLUSION: Plants grow better with more pure water. Next time I would be more careful to give each plant the same amount of water each day, since maybe this influenced my result.

Example Science Fair Project Display

(Project Board can be purchase at Michael's or similar stores)



Your display board will typically be 48 inches wide and 32 inches tall. It will need to fit on a table area of three feet by two feet.

Plan out on paper what information you will put on your project board. Be neat!

1. Decide what text, pictures, charts, or graphs will you need to explain your project to an interested audience.

2. Write your text and prepare your visual aids such as drawings, graphs, charts, etc. to be mounted on the project board. These may be either hand-written or prepared on a computer.

3. Check yourself to make sure that your exhibit is self-explanatory. This means that someone should be able to look over your display and understand what your project was, how you gathered your information, and what that information showed, even if you're not there to answer questions. The best way to check this is to show it to someone else.

4. Be ready to tell someone about your project! We want to hear about your good work!