WELCOME TO BEAVER CREEK
The Beaver Creek Science Fair will be held on **Tuesday, January 18th, 2021**.

The Awards Ceremony will be held the following evening – **Wednesday, January 19th**.

The Chester County Science Research Competition on **Wednesday, March 9th** is for the Top projects from our 4th & 5th grades.
Our fair is back in person!

All projects must have:

1. Project Title
2. Hypothesis
3. Materials
4. Procedure
5. Results
6. Conclusion
7. Pictures/ graphs
How to Develop a Science Fair Project
So what is Science Research anyway???

Science research is an opportunity for you to investigate an idea that you find interesting!

Research involves gathering a lot of information, asking questions, reading books and exploring your topic on the internet!
But where do I get my project idea?

- The idea for your investigation can come from many people and places.
- Libraries have books that are written to give you ideas for your project.
- Talking with a classmate, teacher or adult may help you develop your idea.
- Simple observing the world around you may help you think of an idea.
- We will not be allowing projects with animal use, potentially hazardous agents, human/vertebrate animal tissue, mold.
Your project **MAY NOT** include:

- CONTROLLED SUBSTANCES
- PATHOGENIC AGENTS
- RECOMBINANT DNA
- HUMAN OR ANIMAL TISSUE
- EXPERIMENTS INVOLVING MOLD
- VERTEBRATES/ANIMAL SUBJECTS
There are websites that list many ideas to research and investigate. Your teacher can help you find the best websites for you.

Putting a twist on another's idea is also a great strategy!

Use that brain!

Use this Link for Ideas and Science Fair Tips and Tricks!
How do I develop my idea into an experiment??

After you have researched and learned everything you can about your project idea, try to think of a way to express your question as a statement that describes what you think will happen.

*For example...I believe...*

*this is your HYPOTHESIS!*
Now, find a way to test that hypothesis!

Now, test your hypothesis with experimentation and collecting data! Make sure that your adult sponsor or teacher (whoever will be helping you) also decides if the experiment is safe or not!

It is **VERY** important to listen to your adult sponsors for safety reasons, and to make sure that you create the best project possible!
You must now have your parent or adult sponsor help you complete the required paperwork.

The following forms are required and must be typed besides signatures:

1. Checklist for Adult Sponsor (1)
2. Student Checklist and Research Plan (1A)
3. Approval Form (1B)
4. Research Plan (after experiment)
5. Abstract (after experiment)

All forms are available on the Beaver Creek Web-site. **ALL INFORMATION MUST BE TYPED ON THE FORMS. ALL SIGNATURES MUST BE FROM THE SPONSOR/NO OTHER SIGNATURES ALLOWED**
BEFORE YOU START YOUR EXPERIMENT……

- Form 1 (ISEF)
  - Checklist for Adult Sponsor
  - One per PROJECT

- Form 1A (ISEF)
  - Student Checklist
  - Includes research plan & abstract
  - One per PROJECT

- Form 1B (ISEF)
  - Approval Form
  - One per STUDENT
 AFTER EXPERIMENT……

Abstract (Document)

- Should be written in a narrative summary form after project is completed
- Includes purpose (why), procedure (how) and the data/conclusions (what)
- Maximum 250 words

Research Plan (Document)

- Question/purpose
- Hypothesis
- Detailed methodology, materials and procedure
- Data analysis
- Bibliography
Your science fair project should help you find the answer to a question you have!

To be sure you got to the answer in a safe way, this paperwork ensures that you and your sponsor have thought out your procedures very carefully and that your sponsor knows exactly what you are going to do.

Safety first always!
Experimentation and Data collection!

When your paperwork is completed and cleared by Miss McGrail or Mrs. Barbarin, you may **START!**

Make sure you are always checking in with your adult sponsor about how your project is going!
The Data you collect will help you to find an answer to your hypothesis. Your data could be in a form of answers to survey questions, measurements of time, distance speed etc. You will want to think carefully about your data. What is it telling you? Does your data agree or disagree with your hypothesis. Accuracy is very important when recording your data!

Use the Scientific Method!- Great scientists use this all the time!

**The steps are:**
- After you think of an interesting topic, gather info or research about your topic.
- Form a hypothesis that describes what you think will happen
- Test your hypothesis or experiment to find out if your idea is true or not
- Collect and analyze the data collected from your experiment
- Share your results in your project!
Keeping a log book is a MUST DO!

One of your most valuable pieces of work resulting from your science fair project will be your log book or journal. This should be a day by day account of your work. Your log book will give you an accurate record of the things you do and learn each day about your research. It will also give the judges a very in-depth look into the time, thought and effort you put into your science fair project.

BE sure to include dates, observations and your thoughts in each entry.
Writing my Abstract

Your abstract is a summary of the work you did while investigating your topic. It should have no more than 250 words and be divided into three paragraphs.

Paragraph one will describe what you were investigating.

Paragraph two will tell how you did your investigation.

Paragraph three will tell what you learned by doing your investigation.
Tips and tricks to have a great project!

- Find a roomy, quiet and safe space to do your project
- Keep accurate logbook detailing all the things you do each day
- Gather your data accurately
- Take pictures of your activities
- Design graphs and other visuals to show your result
- Keep your work organized
- Neatness and accuracy counts!
- **Do not change your project name**
Is Entering the Science Fair All about Winning?

- **ABSOLUTELY NOT!**
- Everyone who enters the science fair is a winner. You have taken information learned in school, developed an idea to explore and worked through a difficult process. You will have grown wiser and more knowledgeable as a student and as a person.
- Sometimes your hypothesis turns out to be true, sometimes it does not.
- Remember, you sometimes learn more when your experiment doesn’t turn out just like you think it will.