Dear Parents,

The Science Fair is an event where science comes alive, thanks to the ideas and research of our students! It is open to all students in grades 3 - 8. Students in grades 4 - 6 are required to participate, while it is optional for those in grades 3, 7, & 8. To help introduce third graders to Science Fairs, students will work in pairs to complete a science fair project step-by-step. This will be done totally in class. Although these projects may be displayed at the Science Fair, they will not be eligible for competition or judging. It is our hope that students take their new knowledge and apply it to a project for the fair.

Although this is an annual event at STFX, we are excited to announce a few changes that will allow our students to have more voice and choice in their projects. New this year are a couple of additional options for presenting the information learned in the areas of Science, Technology, Engineering, and Math. Also new this year, are times set aside during the school day so that students can do research and work on their projects.

The following are choices available for your scientist to choose from. **(Please note: If your child is hoping to be selected for the Big Bang Catholic STEM Fair hosted by CSCOE on April 13th, they will need to do one of the first two choices.)**

Scientific Method Project: Some of the most important discoveries have come about as a result of questioning why things are the way they are. That is how science begins! In order for scientists to investigate and answer questions about the natural world around them, they have to follow a series of steps called the scientific method. It's kind of like a road map that scientists use in order to understand how things work and why they work the way they do. A traditional science fair project includes following the steps of the Scientific Method.

Engineering Design Process: Do you love to create or invent things? Are you a problem solver? The Engineering Design Process is used to solve countless problems and create innovative, cutting-edge solutions. Solutions we use in our everyday lives. From bicycles to cars to yes, even our smartphones. The process isn't exclusive to complex problems, technology, or engineers. In fact, it can be used to tackle almost any task! Whether it is planning a vacation, a DIY project, or even creating art.

These next three projects are also excellent choices, ***however do not qualify for participation in the Big Bang STEM fair****:*

Research Paper: Is the thing that you love about science something, like dinosaurs, that can't be experimented with? Do you have a role model in the Science world? If your chosen area of science does not "fit" under either the Scientific Method or Engineering Design Process, perhaps a research paper is something you would like to do. Although a display board is not required for this, you will need to make sure that you "know your stuff" so that you can answer questions asked by the judge(s).

Infographic Display: Are bright, colorful graphics appealing to you? Maybe you would like to design an infographic display. An infographic is a collection of imagery, data visualizations like pie charts and bar graphs, and minimal text that gives an easy-to-understand overview of a topic. Infographics use striking, engaging visuals to communicate information quickly and clearly. Your display could be presented on a display board or digitally.

Design Your Own Project: Is there something else that you would like to do to demonstrate your learning in the area of science, technology, engineering or math? Don't be afraid to present your idea to your teacher. Great scientists are always looking for new ways to share their knowledge.

A different information packet with more details for each type of project can be found on the school website under **Resources/Links**.

All Projects (no matter which one is chosen) require the following three things:

1. **Project Notebook:** This notebook holds all your thoughts, research, and plans, connecting everything you do for your project. It's like a diary for your science adventure and judges might ask you about what's inside.

2. **Oral Presentation for Judge(s):** Don't worry if you're nervous about talking to judges. They're like friendly scientists who are curious about your project. Just relax, smile, and have a good time. You're the expert, and you had fun doing your project.

- Tips for your presentation:
    - Dress nicely and speak clearly to show confidence.
    - Introduce yourself and explain why you chose this topic.
    - Share your research question and your hypothesis.
    - Talk about what you learned and the sources you used.
    - Describe your project and the steps you took.
    - Show any pictures and materials you used.
    - If possible, mention testing your experiment at least three times.
    - Highlight your tables and charts.
    - Explain your data and any surprises.
    - Use scientific words like Problem, Hypothesis, Procedure, Results, and Conclusions.

3. Resources (At least 3 resources are required, one must be a book) 

Type of Resource: _____

Website: http://_____

Author: _____
Title: _____
Publishing Company: _____
Location of the Publishing Company: _____
Date of Publication: _____

Type of Resource: _____

Website: http://_____

Author: _____
Title: _____
Publishing Company: _____
Location of the Publishing Company: _____
Date of Publication: _____

Type of Resource: _____

Website: http://_____

Author: _____
Title: _____
Publishing Company: _____
Location of the Publishing Company: _____
Date of Publication: _____

Your support is vital for your child's project success. Here are some simple guidelines for your role in their science fair project:

- **Choose a Feasible Project:** Help your child pick a project that can be completed within the given timeframe.
- **Gather Materials:** Assist in finding research sources, building supplies, and display materials for the project.
- **Offer Support:** Be there to help and encourage your child during project work.
- **Help keep a consistent pace:** Encourage your child to work on the project consistently, avoiding last-minute rushes.
- **Safety First:** Ensure your child follows safety procedures throughout the project.
- **Display Board:** Help your child transport their project and display board to and from school on the day of the Science Fair.

We look forward to partnering with you for this learning adventure! Please let us know if you have any questions.

Mrs. Gutridge - MS Science
Mrs. Maloney - 4th Grade Science, 3rd Grade B Science (Zumbusch)
Mrs. Hillemeier - 3rd Grade A Science
Mrs. Zumbusch

Important Science Fair Deadlines and Dates

November 2, 2023	Science Fair Information Packets sent home. Information on each type of project can be found on the STFX School website in the Parent Resources Section.
November 15, 2023	Science Fair Project Forms Due. Please complete and return to your child's teacher.
Week of November 25, 2023	Students will be given time in class to work on their topic. They will have access to websites and materials that can be used for research. (Note there is not a specific date for this, as schedules vary, but some time during this week will be designated for research.)
Week of December 18, 2023	Students will be provided time during this week to work on their project in class. They should come prepared so that their class time is used wisely.
Week of January 2, 2024	Students will have the opportunity to check in with their science teacher regarding their chosen project. (Students are able and encouraged to share any questions or concerns they may have at any time during these couple months.)
Week of January 16, 2024	Students will be provided time during this week to work on their project in class. They should come prepared so that their class time is used wisely.
Week of January 22, 2024	Students will be allowed time during this week to practice the presentation portion of their projects, so that they gain confidence with sharing their findings with the Science Fair judges.
January 25, 2024	**STFX Science Fair**
April 13, 2024	Big Bang Catholic STEM Fair at Visitation High School in Mendota Heights. (Registration for this Fair will be open from February 4th - March 10th. More information will be sent out for this as soon as it is available.)

INDIVIDUAL SCIENCE FAIR REGISTRATION FORM

Due **Wednesday, November 15, 2023**. Please complete and return this form to your teacher.

Name of Student: _____ Grade: _____

Science Teacher: _____

My Project is: (Check One)

_____ A Scientific Method Project - I love to experiment!

_____ An Engineering Design Process - I'm excited to get building!

_____ A Research Paper - Writing research papers is awesome! They help me learn so many cool things!

_____ An Infographic Display - I can't wait to share my learning in a bright and colorful way!

_____ Design Your Own Project - I like to think outside the box!

My Proposed Project Title is: _____

_____.

Description: _____

_____

_____

_____

_____.

I have reviewed the Science Fair information with my child, _____, (Print Name of Child) and we understand the requirements for a successful Science Fair Project. I also agree to assist my child in completing each part of the project in a timely manner.

Student's Signature: _____ Date: _____

Parent's Signature: _____ Date: _____