



Sargent

STEAM FAIR 2023

WHO?

All Sargent Students Grades K-5


WHEN?

Thursday, May 18, 2023

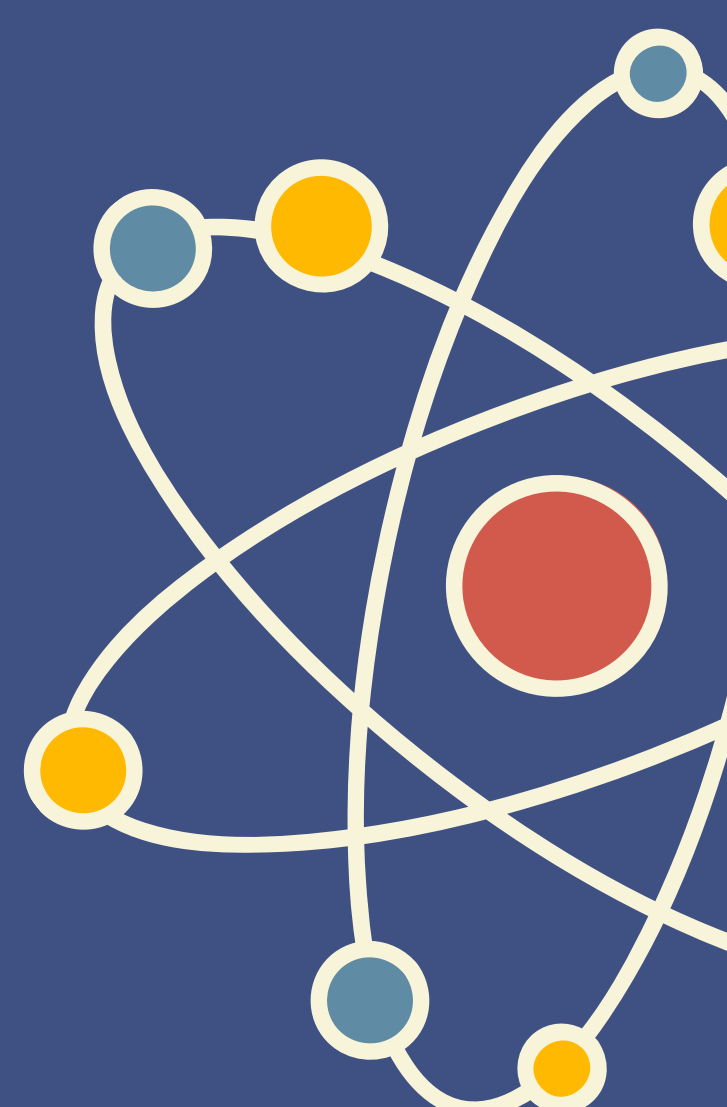
School Hours (Students only), 6-7:30pm (Parents and families welcome)

WHERE?

Sargent Auditorium



Sargent Elementary is hosting our First Annual STEAM Fair! This is an opportunity for all students (K-5) to explore and present about a topic, an invention, an experiment, or any other STEAM related project they come up with. Students are encouraged to use their own curiosity and creativity to develop the project and research!



SARGENT STEAM FAIR APPLICATION

Please fill out the information below and return to your teacher no later than **Friday, 2/3/23.**

CRITERIA & CONSTRAINTS

- All applications must be completed by the student.
- Students will work independently on the projects at home under the supervision of an adult.
- All projects must be presented on a free-standing display board to organize the information.
- Projects do not need to include all five areas of STEAM but should include at least two.
- There will be NO electrical power provided. All electrical projects must be battery powered.
- Students may work with ONE partner of their choice (no groups larger than 2).
- Judging and awards will only take place for projects created by students in grades 3-5.

PROJECT IDEAS

Amazing Art (Grades K-2)

This project opportunity invites you to explore your creativity and curiosity in art/visual arts as it relates to one or more of the other STEAM areas.

- Examples:
 - **Collections** - What can I collect? (leaves, legos, rocks, etc.) How can I organize and display my collection?
 - **Art in our World** – Where do we see patterns in our everyday world and how can we represent them?

Innovative Inventions (Grades 2 - 5)

Find a problem; then imagine a new thing that can solve the problem. If possible, make a 3D model of your invention. If the invention is too complicated to make a model, create a detailed drawing instead. A model does not have to work but must represent your concept.

Give your invention a name and describe how it works. What is its overall purpose? What materials are needed in order to create it? The more creativity and detail, the better!

Scientific Thinking/Experimental Design (Grades 3 - 5)

Experiments are projects that test a hypothesis and identify findings to answer questions or solve problems. The scientific method is a way to ask and answer scientific questions by making observations and doing experiments. The steps of the scientific method are to:

1. Ask a question
2. Do background research
3. Construct a hypothesis
4. Write a procedure (step-by-step experiment plan)
5. Test your hypothesis by doing the experiment
6. Record and analyze your data
7. Draw a conclusion

Students doing an experiment must complete the additional planning page.

Name: _____

Grade: _____

Teacher: _____

Disciplines: SCIENCE TECHNOLOGY ENGINEERING ART MATH
(Check at least 2)

Project Title: _____

Brief Description of Project

What is the purpose of your project and what steps will you take to get to your final outcome?

I read and understand the STEAM Fair application and requirements. I will complete the application, check in with my teacher, and follow all of the rules.

Student Signature: _____

I have worked with this student and find this to be a project that is well-thought-out and planned. I approve the idea and description.

Teacher Signature: _____

I give permission for my child to enter this exhibit in the Sargent STEAM Fair on 5/18/23. I understand that my child will be completing the project at home under my supervision independently or with **one** partner of their choice that I approved.

Parent Signature: _____

SCIENTIFIC THINKING/EXPERIMENTAL DESIGN

Planning Sheet

Please use this planning sheet to further describe your experiment. First, choose a big topic that interests you! With help from your parents or teacher, search the internet for ideas or visit the library to create a big question for your project. Then you will create a hypothesis, which is your prediction of what the outcome of the experiment (answer to the question) will be. List out all of the materials you will use for your project and then create a procedure, which is a list of steps you will take to conduct the experiment.

Sample Project Questions:

- Does the color of light used on plants affect how well they grow?
- Which material is the best insulator of heat?
- Does different type of music affect animal behavior?

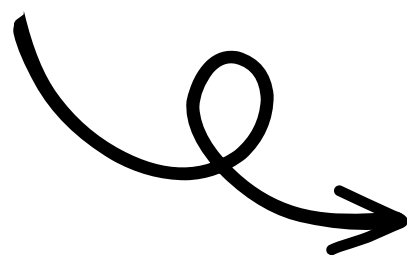
Question: _____

Hypothesis: _____

Materials: _____

Procedure:

Final Display Example



This is YOUR STEAM fair project. However, you may need assistance to find a topic, research, conduct your experiment, draw conclusions, and prepare your final display. Reach out to your teachers and parents for help – just make sure that you do the work!

Start early – don't wait until the last minute!

Projects and experiments require a significant amount of time and preparation – make sure you plan ahead and are not rushed too close to the STEAM Fair on May 18th!

