

What is the Elementary STEM Expo?

The elementary STEM Expo is not a competition, but instead is a learning experience for those participating. Participation is voluntary.

The Elementary STEM Expo is a student-centered educational experience with the primary goal of promoting innovative use of science, technology, engineering, and mathematics to solve real world problems. Related project objectives include helping students understand the difference between an experiment and other types of scientific investigation, learning how to set up an experiment using controls and variables, interpreting data, recognizing the need for repetition and replication, and learning how to use appropriate reference materials to support scientific understanding and defend conclusions.

- When is the Wards Creek Elementary STEM Expo?
The event will take place Wednesday, March 12, 2025, during school hours (exact times TBA).

What does a STEM project look like?

Students are encouraged to be creative and to design, build, and experiment with topics that interests them. Projects may be completed in the traditional scientific method experiment format or the engineering design process. Ideally, projects should be geared toward the use of science, technology, engineering, and mathematics to solve real world problems. Challenge students to be original!

If you need project ideas, you can visit: <https://sciencefaircentral.com/>

Here are links to two student project stories that model the project process: [Wi-Fi router](#) & [EZ baby saver](#). Students are encouraged to use science and/or engineering with a new real world application approach, rather than copying an experiment off the Internet (Student projects should not be copied from the Internet.)

- Students are required to use the STEM Expo Project document. Two versions of the STEM Expo Project Planner are provided; one that is geared for students completing a project following the scientific method and one that is geared for students following the engineering design process.
- Students will be given time during their STEM rotation to do research, brainstorm, plan, and conference about their progress with Mrs. Vergara. However, all experiments or prototype building for the project must be done at home with adult supervision.
- Although this is not a competition, students have a chance to be selected to represent our school at the district's STEM Expo in April (three from 5th grade, two from 4th grade, and 1 from 3rd grade).

What is most important?

Safety is of the utmost importance and parents must take measures to ensure their children are safe as they work on STEM projects at home. All possible safety concerns associated with student STEM projects should be considered at each step of the process. There is no such thing as being too safe.

STEM Open Lab days and times

You don't have to wait until your next STEM class to come into the lab to do research, brainstorm, and plan ideas, or just conference with Mrs. Vergara.

If you have a quick question, you can stop by the STEM lab in the morning from 7:50 am – 8:40 am or in the afternoon from 2:15 pm – 2:30 pm. You can also come in during open STEM lab hours if you have permission from your classroom teacher.

Open STEM lab schedule:

12:40 pm – 1:30 pm Wednesday, January 8

1:35 pm – 2:30 pm January 23, February 6, February 24, March 10

9:50 am – 10:20 am January 15

10:10 am – 10:50 am January 30, February 13, March 3

Please email Mrs. Vergara with any questions or concerns:

Ximena.vergarapaulhiac@stjohns.k12.fl.us

Wards Creek Elementary STEM Expo Commitment Form

Please sign and return/email this commitment form directly to Mrs. Vergara by January 20.

I have read and discussed with my student, _____,
(Student's Name)

the commitment that participating in the WCES STEM expo entails and we're excited to be a part of it.

- We understand that this is not a competition but a learning experience.
- We understand that students will be given time during their STEM rotation to do research, brainstorm, plan, and conference about their progress with Mrs. Vergara. However, all experiments or prototype building for the project must be done at home with adult supervision.
- We understand that safety is of the utmost importance and a responsible adult will assist and ensure the student's safety as they work on the STEM project at home.
- If choosing to work with a partner, we understand that this can be challenging, but we have figured out all the logistics involved.

Student name _____

I'm working individually (check one) _____ Yes _____ No

If no, please write name of project partner _____

Classroom teacher _____

Grade _____

Student Signature _____

Date _____

Parent Signature _____

Date _____

Parent's Email _____