St. Joan of Arc STEM Family Newsletter

"The main hope of a nation lies in the proper education of its youth."

— Desiderius Erasmus Roterodamus

September 2020

STEM encourages critical thinkers, entrepreneurs, and change-makers, who will lead the nation at the forefront of discovery. Help us inspire our students to change the world!

STEM at Home

Bring the joy of discovery to life in the comfort of home with a variety of exciting digital learning explorations that help students put STEM skills into action. Family members can join in as students get hands-on with ready-to-use activities promoting self-guided learning and career success.
https://stemcareerscoalition.org/parents-and-guardians

Many national and local organizations have websites for children that provide fun and educational activities, games, videos and more. Check out some of the following sites for STEM activities your child can participate in from home.

The NASA Kids' Club
PBS KIDS Lab
Science Kids
STEM-Works
Funology
Extreme Science
Smithsonian Institute

Recent Happenings

Innovation Lab

All grades are doing an intro/review in Google Apps for Education. They will start working on Digital Citizenship in the next week

Grades PK-3 are practicing logging in and submitting work.

Grades 4-8 have completed a scavenger hunt to find out about new features in Google Docs. We will begin working on Google Slides - animations

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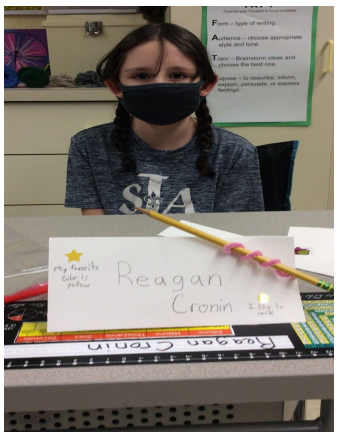
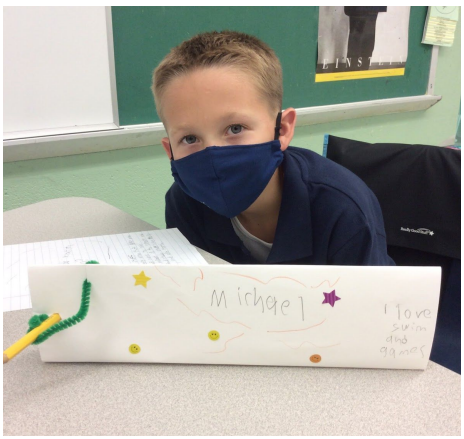
All grades

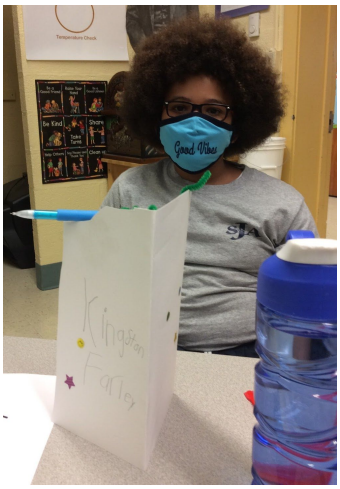
Our remote students are following distance-learning protocols. They are doing an awesome job at this new challenge!

4th and 5th grade

4th & 5th Name Tag STEM Challenge (first day of school)
Students had to plan & create a name tag using the following criteria:
-stand on its own
- at least 6 inches long
- name clearly written
- include 2 things about yourself
-must hold a pencil

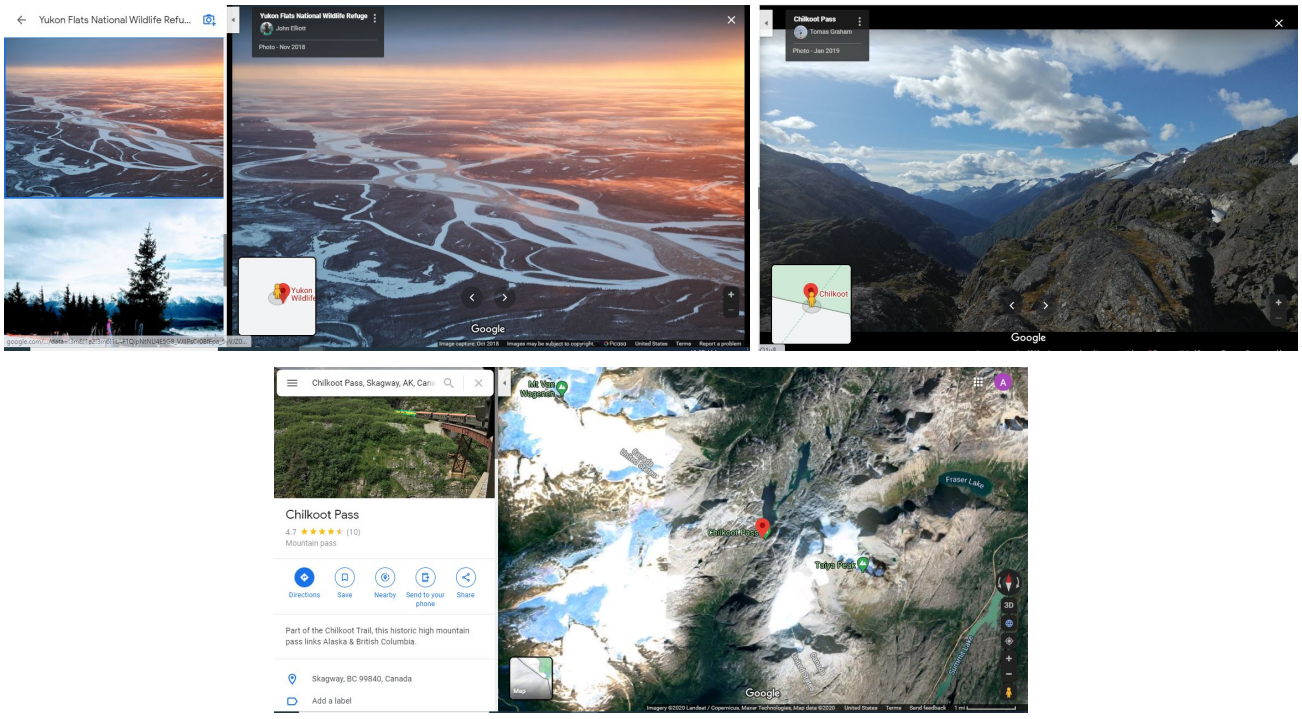






Middle School

This week, 6th grade began reading the short story To Build a Fire by Jack London which is a Man vs Nature story that features a freezing wilderness of Alaska. There are many geographical excerpts within the story that London inserts like the Yukon Trail, Henderson creek, the Bering Sea and the Chilkoot Pass. To demonstrate the distance the main character is traveling on foot in three feet of freezing snow and ice in negative temperatures, Ms. Kopp will be taking our class on a virtual tour/field trip through this part of Alaska in Google maps.



All middle school students are designing and making memes that have their new vocabulary words in them.

STEM Opportunities in the Community

Challenge Island Programs

Challenge Island offers a wide array of exhilarating, collaborative STEMtastic programming for kids ages 4 to 14+. Our action-packed options include afterschool enrichment classes, in-school field trips, camps, parties, and much more! No matter what kind of Challenge Island program you choose, you can be sure it will be a blockbuster hit!

Now, kids can experience the magic of Challenge Island®, the world's #1 STEAM program, from the safety and comfort of home. All Home Island Virtual Camps, Field Trips, and Enrichment Classes are taught live by certified Challenge Island® teachers. Children interact with their peers throughout all of our programs.

More info and registration here.

2020 Maryland STEM Festival Art Contest

The 2020 Maryland STEM Festival and Art Contest theme is Manufacturing and Design.

The contest runs from April 7th through September 10th.
Requirements:
• Art must be an original work from a Maryland student.
• Students must be in grades K - 12.
• Homeschool students may participate
• Artwork must be no larger than 14 inches x 11 inches
1. Art can be represented the following media: drawing and painting (e.g. pencil, charcoal, pastels, colored pencils, oil paints, acrylics, water media, mixedmedia/collage)
2. Art can be photographs and or computer generated
Each entry must include:
• Artist's first and last name
• E-mail address
• Grade, School
• Title
• Two sentence description of the artwork and its connection to Manufacturing & Design
Images of the entries and questions should be e-mailed to mdstemfestart@gmail.com.
Entries must be received by September 10th. Winners will be asked to send their original artwork for display. Art work may be picked up after the Festival.

The prizes and number of winners for each category are as follows:
First Prize: $50 Amazon Gift Card (1) , Second Prize: $25 Amazon Gift Card (2), Third Prize: $10 Amazon Gift Card (3)
Winning entries will be posted online on 10/1 and displayed from 10/25-11/1 in the Maryland Senate Office Building in Annapolis.

Eden Mill Programs

The nature center and historic grist mill museum are open, by SCHEDULED APPOINTMENT ONLY, Monday- Friday from 8:30-4.

The park grounds are open, but social distancing must be maintained.

All Eden Mill Nature Committee programs have been canceled for 2020 due to the Covid-19 pandemic. Check out our Facebook page for fun nature-themed activities you can do at home!

STEM Saturdays at Microsoft

Teachers, students, and parents are welcome to drop by their local Microsoft Store to participate in these learning experiences. Projects are designed for 11- to 14-year-old students but can easily be completed by younger students with parental support. (*The closest one is in Christiana Mall.)

Harford County Public Library

For High School Students

Biomedical Engineering Innovation

Biomedical Engineering Innovation (BMEI) is a fully online course with hands-on labs that introduces biomedical engineering to high school students by (1) modeling biological systems and designing experiments to test those models and (2) introducing engineering principles to solve design problems that are biological, physiological, and/or medical. Students will model human efficiency, the arm, and the cardiovascular system. Students are expected to use the informational content being taught in math, physics and biology and to apply this knowledge to the solution of practical problems encountered in biomedical engineering.

Click HERE or contact BMEI for more information.

STEM in the News

According to the U.S. Department of Education, “All young people should be prepared to think deeply and to think well so that they have the chance to become the innovators, educators, researchers, and leaders who can solve the most pressing challenges facing our nation and our world, both today and tomorrow. But, right now, not enough of our youth have access to quality STEM learning opportunities and too few students see these disciplines as springboards for their careers.” Introducing curricula and educational programming focusing on science, technology, engineering and mathematics is intended to help better prepare students in these areas of learning and create practical applications for how these lessons apply to the real world. STEM education is designed to encourage students to pursue these subjects as well as innovation and research in their education and career paths. This focus will help prepare future generations to best handle our world’s biggest problems.