

St. Joan of Arc STEM Family Newsletter

September 2019

Recent Happenings

Monarch Garden

The SJA Monarch Garden did very well this summer. Thank you to the families who participated in its care. In the next few weeks, the Monarchs will be making their way to Mexico to hibernate for the winter. We are hoping to see some in our garden and would love the opportunity to tag them so they can be tracked.



2nd Grade

Mrs. Simmons' class has created STEM Notebooks to record all of their STEM activities this year. They are very excited about the designing and creating they are going to be doing! We can't wait to hear about them.

RainBarrels



Our rain barrels are working perfectly! Mr. Bill and our students are helping to conserve water by using them to water the plants around campus.

STEM Opportunities in the Community

Sept 19th: Parent & Student Information Night for Destination Imagination at HCC.

Destination Imagination (DI) is a non-profit, volunteer-led, cause-driven organization. Our purpose is to inspire and equip students to become the next generation of innovators and leaders. Annually, we offer seven new standards-based Challenges in STEM, Improv, Visual Arts, Service Learning, and Early Learning. Each Challenge is open-ended and enables student teams to learn and experience the creative process from imagination to innovation. Academic tournaments take place around the world where teams have the opportunity to present their solutions to trained appraisers. Students have fun and gain confidence in their ability to solve any challenge. In working to solve our Challenges, teams learn 21st century skills (creativity, critical thinking, collaboration, communication, citizenship and courage) to build on their unique strengths.

For more information, contact Laura Drake 443-412-2204

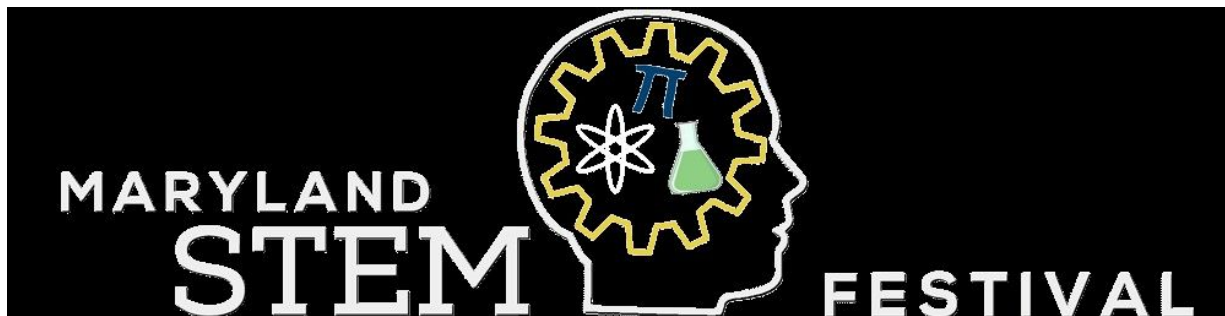
** If someone is interested in coaching an SJA-based team,, please e-mail Mrs. Tokarski (ttokarski@stjoanarc.org).

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.)

From the USA Science & Engineering Festival:

Welcome back to school! This school year, keep kids engaged with our FREE X-STEM video library! Our X-STEM videos are a terrific educational resource for teachers and parents. Students can search our STEM topics and hear from a variety of visionaries exploring conservation, medical research, space travel, math, weather patterns, and much more! Find it here.



- October 12-State Maker's Day
- October 19th-STEM Parade at Bowie State University. Everyone is welcome to attend
- October 26th-Virtual State Wide High School Cyber Competition
- November 2nd-State Star Party
- Find events in Harford County [here](#)

MARYLAND
**STEM
FESTIVAL
2019**



State Wide Star Party!!

Join our celebration of the 50th Anniversary of the Lunar Landing by looking the Sky! Attend a Star Party near you.



November 2, 2019
All Over Maryland

<http://marylandstemfestival.org/>

Eden Mill Programs

Fall programs: http://www.edenmill.org/Fall_2019.jpg

For additional information about programs, please visit:

<http://www.edenmill.org/Programs.html>

On-line preregistration is now available! Just click the link: [Preregistration](#).

Harford County Library Programs

The libraries in Harford County do a great job of offering STEM programs for all ages. STEM programs are free and open to the public and lead by skilled library staff and/or experts in the field. Please be sure to visit <https://hcplonline.org/leaprograms.php> to look at the programs.

Exciting News

STEM Club
JOIN THE STEM CLUB!

Upcoming Club Dates
First Mondays 3:15-4:30

Sept 23rd	-parent meeting
Club Dates:	
Jan 6	Feb 3
Oct 7	Mar 2
Nov 4	Mar 30
Dec 2	May 4

An afterschool program

science, technology, engineering, and math

with exciting hands-on activities in

For all students in grades 1-8

Sign up with Mrs. Tokarski!
ttokarski@stjoanarc.org

SJA is excited to announce that we will have an after-school STEM Club this year. It will be run by the Parent STEM Club with Mrs. Tokarski serving as an advisor. Students will have an opportunity to participate in stimulating and challenging STEM activities and explore related careers. Our goal is to have a club that supports your child's awareness of, interest in, and preparation for STEM careers, and that they develop friendships with peers in a supportive and nurturing environment.

The club will be open to all students in Grades 1-8 and will meet the first Monday of each month (with the exception of April- that month's meeting will occur on March 30th) from 3:15-4:30pm. Although it would be more beneficial, members of the club will not need to attend every session. Some month's meetings may require a small fee to cover materials. Prior to the monthly meeting, a permission slip for that specific date containing that month's activity will be distributed. Students planning to attend will need to return the slip prior to the meeting date.

We will have a brief meeting for parents of those who are interested Tuesday, September 23rd at 3:30pm in the science lab.

Please return the form available [here](#) or in the Family Update if your child plans to attend the October meeting.

CAREER DAY



What do you want to be when you grow up?

St. Joan of Arc School will hold Career Day on Friday, October 11th. Students will have the opportunity to see and hear about a number of career opportunities. Presentations will be made to small groups of children and displays will showcase different occupations or company's line of work.

Parents - If you, or someone you know, would like to present on Career Day, OR you can volunteer to help organize, set up, or clean up, please contact Roxanne Robin via email at roxxyfdr@yahoo.com or 985-713-4729.

SJA STEM Family Night

On November 6th, 2019, St. Joan of Arc will be participating in the Maryland STEM Festival by having a STEM Family Night from 4-6pm.

STEM Family Night is an evening of hands-on science activities, math activities, and engineering design challenges, programming, and robotics games for students and families to complete together. It covers different STEM topics and makes connections to exciting STEM careers. Our 7th and 8th grade students will be providing the stations for the evening and our 6th graders will be serving as STEM Family Night Ambassadors. We hope to see you there!

Contact Mrs. Tokarski (ttokarski@stjoanarc.org) if you have any questions.

For High School Students

The 2019-2020 Conrad Challenge has officially launched. It invites students (ages 13-18) to create innovative solutions to real-world challenges, while preparing for success in a global workplace.

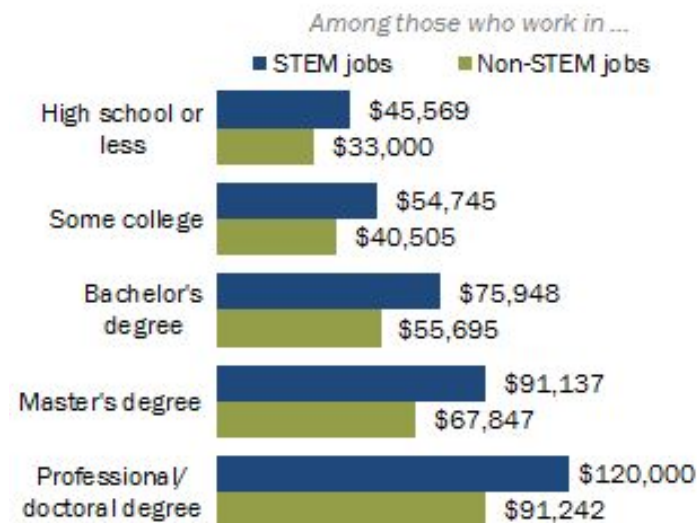
[Learn more.](#)

Interesting Fact

STEM workers enjoy a pay advantage compared with non-STEM workers with similar levels of education. Among those with some college education, the typical full-time, year-round STEM worker earns \$54,745 while a similarly educated non-STEM worker earns \$40,505, or 26% less. And among those with the highest levels of education, STEM workers out-earn their non-STEM counterparts by a similar margin. Non-STEM workers with a master's degree typically earn 26% less than STEM workers with similar education. The median earnings of non-STEM workers with a professional or doctoral degree trail their STEM counterparts by 24%.

STEM workers tend to earn more than similarly educated non-STEM workers

Median annual earnings of full-time, year-round workers ages 25 and older with positive earnings



Note: Figures based on 2016 dollars. Some college includes those with an associate degree and those who attended college but did not obtain a degree. Professional degree includes those with an M.D., DDS, DVM, LL.B. or J.D. Doctoral degree includes those with a Ph.D. or Ed.D. STEM stands for science, technology, engineering and math.

Source: Pew Research Center analysis of 2014-2016 American Community Survey (IPUMS).

"Women and Men in STEM Often at Odds Over Workplace Equity"

PEW RESEARCH CENTER

Source: <https://www.pewresearch.org/fact-tank/2018/01/09/7-facts-about-the-stem-workforce/>



As part of our STEM school status, we need to have an active **Parent STEM Committee**. Responsibilities include running the after-school STEM Club, helping with STEM project ideas, securing speakers/presenters from various STEM careers. We are seeking additional members and a chairperson for this committee. Parents, grandparents, and/or community members are welcome to be a part of this. The committee can set their own meeting times/locations. Please e-mail Mrs. Tokarski (ttokarski@stjoanarc.org) and/or Mrs. Bahr (vbahr@stjoanarc.org) if interested.

A meeting will be held Monday, Sept. 16th at 3:30pm in the Science Lab.

After-School STEM Club

The Parent STEM Committee will be leading an after-school STEM Club on the first Monday of every month beginning on Oct. 7th.

Parent STEM Committee Mission Statement:

The Parent STEM Committee provides enrichment by sharing career and achievements through learning experiences which expand student interest in STEM careers. The committee will actively participate in providing teachers and students with STEM learning opportunities both inside and outside of the school day.

Goals:

- Facilitate an after-school STEM Club's bi-weekly or monthly meetings to engage students in STEM activities/projects.
- Solicit qualified presenters who will engage students in various STEM experiments, projects, and explorations during the school day.

Committee Chair's Responsibilities:

- Ensure that meeting minutes are submitted to SJA admin.
- Arrange meetings as needed

Parent/Community Volunteer needed to be an advisor to the eCybermission Team.

eCYBERMISSION is a web-based science, technology, engineering, and mathematics (STEM) competition for students in grades six through nine that promotes self-discovery and enables all students to recognize the real-life applications of STEM. Teams of three or four students are instructed to ask questions (for science) or define problems (for engineering), and then construct explanations (for science) or design solutions (for engineering) based on identified problems in their community. Students compete for State, Regional, and National Awards. The U.S. Army Educational Outreach Program is committed to answering the Nation's need for increased national STEM literacy and to expanding STEM education opportunities across the country to open doors to new career paths for American students that lead to a brighter tomorrow.

A team of 3-4 middle school students can be registered anytime and the competition ends February 26, 2020.

Students will pick a Mission Challenge from the following:

- Alternative Sources of Energy
- Environment
- Food, Health & Fitness
- Forces & Motion
- National Security & Safety
- Robotics
- Technology

They will use the "Mission Folder" online to enter research and showcase their team collaboration

More information can be found [here](#).



Did you know... Bay Plates helped pay for your child's outdoor experience?

Your child's outdoor learning experience was funded in part by the Chesapeake Bay Trust, a nonprofit organization that provides grants to schools so that children like yours can learn in their natural world. The Trust is funded by sales of Maryland's Protect the Chesapeake license plate which each year allows more than 80,000 Maryland students to get outside and learn through hands-on experiences. To find out more about the Bay plate, please visit www.bayplate.org. Bay plates only cost \$20 and you can change to a Bay plate anytime to help support additional field trips for Maryland students. Chesapeake Bay Trust bayplate.org cbtrust.org 410-974-2941