

# APS Let's Code!



Please bring your device (iPad/laptop).



rosalita.santiago@apsva.us



<https://bit.ly/APSLETSCODE>



Kenmore Middle School  
200 S Carlin Springs Rd  
Arlington, VA 22204

# APS Let's Code! Hour of Code Event

@APS\_STEM  
@APS\_CTE



Career and Technical Education

## Event Information

December 8, 2022

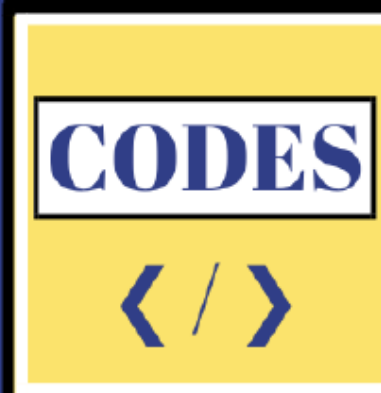
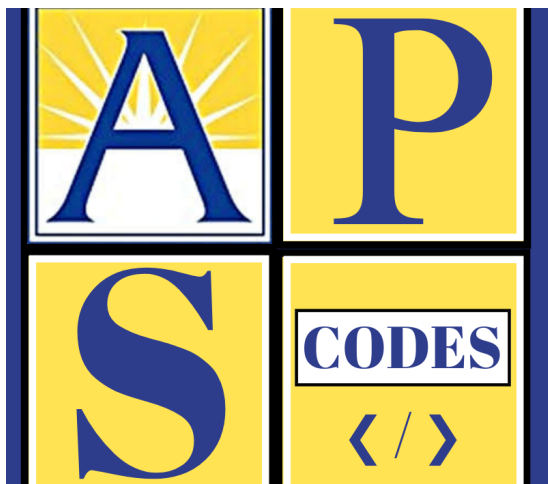
6:00p.m.-7:30p.m.

No Preregistration

Required

All Levels!

PK-12th Grade



# Webb: Unfolding the Universe

NASA's James Webb  
Space Telescope

Informational  
Session

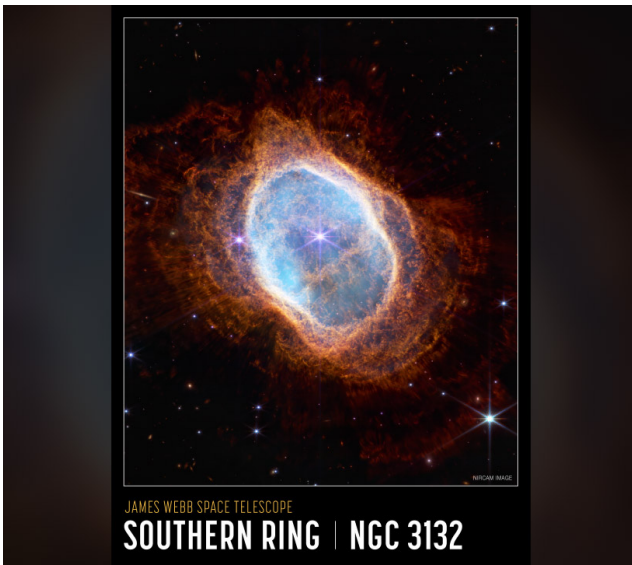
Room: Library  
6:00p.m.-6:35p.m.

Audience: 9th-12th  
Grade, Parents, and  
Teachers



**Guest Speaker:**  
**Mrs. Sandra Alba**  
**Cauffman, Astrophysics**  
**Division Deputy Director**

Scan QR code to  
learn more about  
Mrs. Cauffman



# Webb Virtual Reality Experience

Experience Webb Virtual Reality

Interactive Session

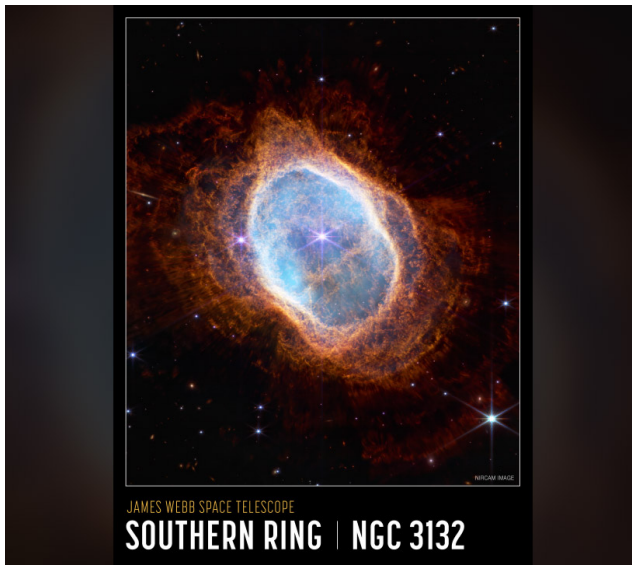
Facilitator: Dr. Quyen Hart, Project Scientist at STScI

Room: 267

6:40p.m.-7:30p.m.

Audience: PK-12th, Parents, and Teachers

Explore the universe like never before in the fully immersive Webb Virtual Reality (WebbVR) experience. The James Webb Space Telescope and its infrared-light perception of the cosmos are simulated using NASA data, along with bonus information and interactive learning experiences. Fly up-close to Webb's beautiful golden mirrors, and look out from its perspective on the universe. Fly through Saturn's rings or join Jupiter's moons in orbit around the gas giant. You may also leave the Solar System behind and visit the stunning Orion Nebula, where a swirling disk of gas and dust is beginning to form planets, or fly through the star fields of a simulated galaxy. Explore our newest environment and point the telescope at targets that Webb has recently observed and see the images in this unique VR environment.



# Callisto Space Tour Interactive Amazon Experience



Interactive Session

Facilitators:  
Amazon

Room: 261  
6:15p.m.-6:45p.m.  
7:00p.m.-7:30p.m.

Audience: 4th-10th  
Grade, Parents, and  
Teachers

Come along with Amazon on an out of this world mission - We will go behind-the-scenes of NASA's Orion spacecraft to discover how voice artificial intelligence (AI) and other experimental technology is heading to the moon as part of Artemis I. Test your knowledge of AI, space travel and more and get some cool Amazon swag while you blast off. (laptop or device required to play)



# Explore Robotics with Bee Bots and Ozobots

Interactive Session

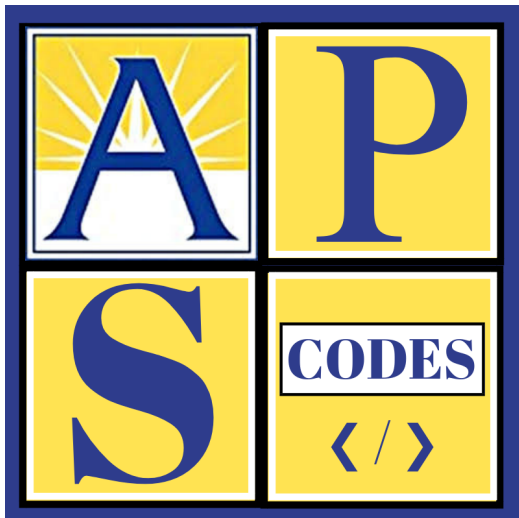
Facilitators: Cathy Wague and Rosa Navas

Room: 279  
6:15p.m.-6:45p.m.  
7:00p.m.-7:30p.m.

Audience: PK-8th Grade, Parents, and Teachers



Young children will learn to communicate a programming code using directional vocabulary and get to try it out on bee looking robots called Bee Bots. Children in upper elementary or Middle School will use programming basics to program a small robot to act as a bowling ball to push down pins. There will be other challenges ready for anyone who wants to push their exploration further.



# Learn to Code Unplugged with Humpty Dumpty Who Always had a Great Fall

Interactive Session

Facilitator:  
Dr. Sharon Gaston

Room: 285  
6:30p.m.-7:30p.m.

Audience: PK-2nd  
Grade, Parents, and  
Teachers



Participants will listen to a read-aloud of Humpty Dumpty Always Had a Great Fall written by Dr. Sharon Gaston. Next, they will play an unplugged, coding game to get Humpty Dumpty to Grandma's farm.



# Binary Code Wearables - The Language of Computers

Interactive Session

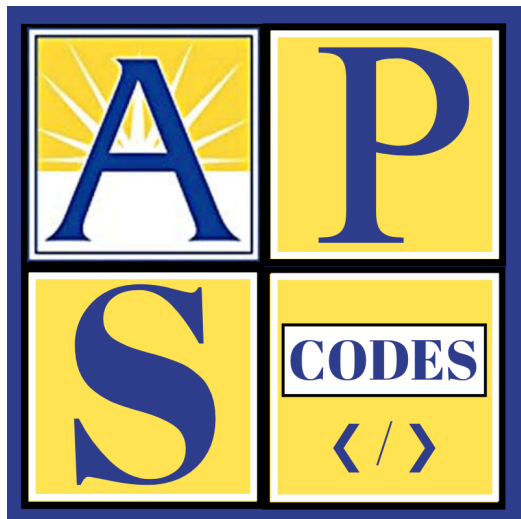
Facilitators:  
Rosie Riveters

Room: 287  
6:30p.m.-7:30p.m.

Audience: 1st-5th  
Grade



Learn about binary, the two “bit” system that forms the basis of computing. Use a binary decoder to translate your initials into binary and use beads to represent them on a bracelet or keychain!



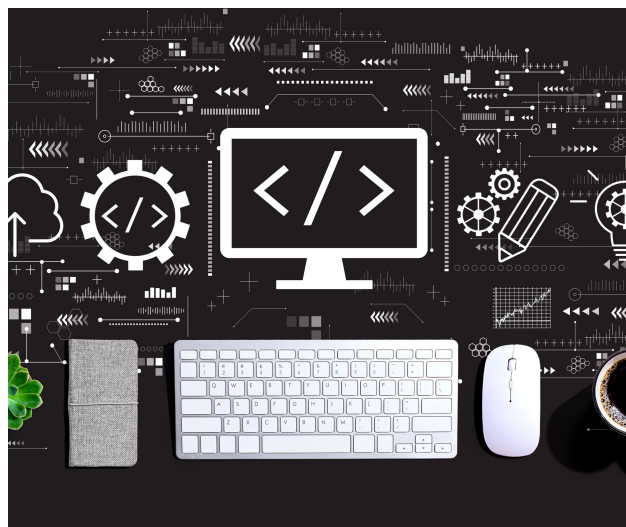
# Sphero Robot Challenges

Interactive Session

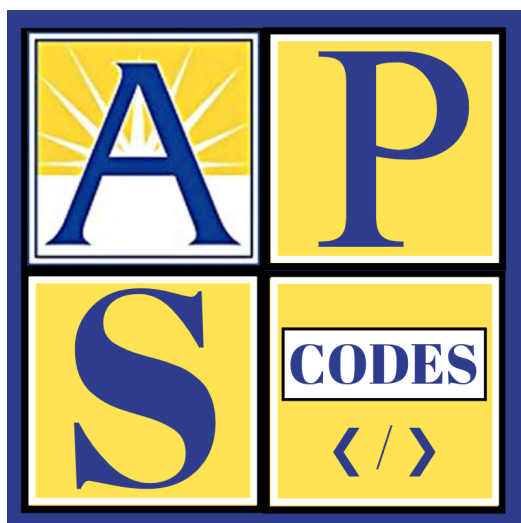
Facilitator:  
Jacqueline Firster

Room: 289  
6:15p.m.-6:45p.m.  
7:00p.m.-7:30p.m.

Audience: 3rd-12th  
Grade, Parents, and  
Teachers



Sphero is a fun baseball-sized, spherical robot. This is a drop-in session where participants can code Sphero through a series of challenges or just play around with the different features. Programmers of all age levels are welcome. Sphero can be coded in Draw, Block Coding, and Python.





# ACC Team Culinary

Interactive Session

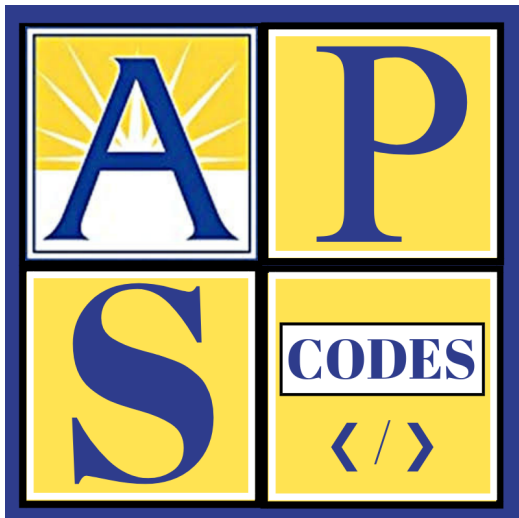
Facilitators: ACC  
Team Culinary

Room: 293  
6:30p.m.-7:30p.m.

Audience: PK-12th  
Grade, Parents, and  
Teachers



The ACC Team Culinary are going to do their demo for their model cucumber, tomato, and jicama salad. Learn about the similarities between Coding and Cooking!



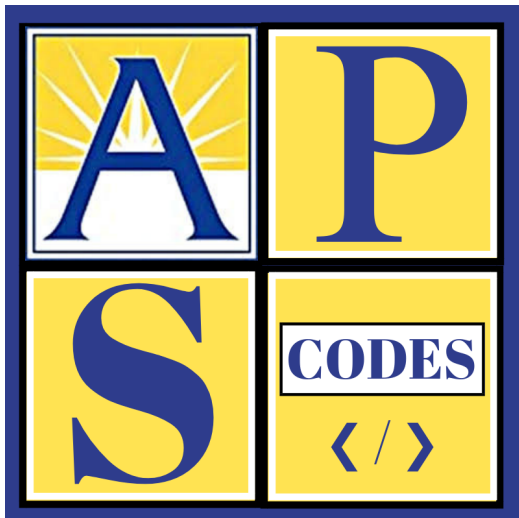
# Intro to C.S. with Micro:Bit

Interactive Session

Facilitators:  
NOVA SySTEMic

Room: 269  
6:30p.m.-7:30p.m.

Audience: 4th-12th  
Grade, Parents, and  
Teachers



**NOVA**  

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**SYSTEMIC**

In this 45 min session the participant will learn about the pocket size microelectronic created by the BBC and Microsoft that brings software and hardware to life. To create fun filled activities with coding skills for all using LED's, Sensors, and much more all presented by NOVA SySTEMic.



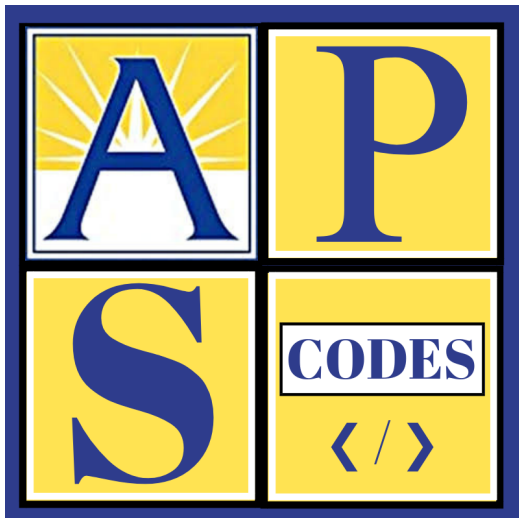
# Coding in Spanish

Interactive Session

Facilitators:  
Wilfredo Padilla

Room: 251  
6:30p.m.-7:30p.m.

Audience: K-3rd  
Grade, Parents, and  
Teachers



¡Las actividades de codificación desconectadas son una excelente manera de presentar la codificación a los estudiantes antes de que aprendan a codificar usando tecnología!



# theCoderSchool McLean



## Interactive Session

Facilitators:  
theCoderschool  
McLean

Room: 265  
6:15p.m.-6:45p.m.  
7:00p.m.-7:30p.m.

Audience: 1st-10th  
Grade, Parents, and  
Teachers

Let's learn to code!  
Join a Code Coach from  
theCoderSchool for an  
interactive coding  
lesson.

- Game Development in  
Scratch (30 mins)

Or

- Intro to Python (30  
mins)



# Coding and Robotics for Early Learners

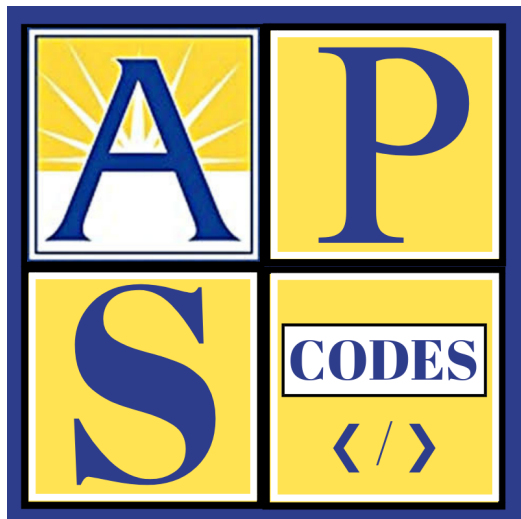
Booth Session-Interactive

Facilitators: Robo Wunderkind

Cafeteria

6:00p.m.-7:30p.m.

Audience: PK-12th Grade, Parents, and Teachers



Robo Wunderkind is on a mission to bring the WOW back into the classroom and empowering students with 21st century skills. Students will use developmentally appropriate, color logic, block modules to build and code their own robots. We will introduce administrators, teachers, and students to this STEAM program that helps teachers integrate coding and robotics into the core curriculum and offers students the opportunity to engage in the engineering process, coding, and robotics as early as the age of 5.



# Literacy & STEM

Booth Session

Facilitator:  
Dr. Sharon Gaston

Cafeteria  
6:00p.m.-6:30p.m.

Audience: PK-12th  
Grade, Parents, and  
Teachers



Dr. Sharon Gaston understands the power of literacy and its effects on all that we do. She has been an educator for thirty years and has written and illustrated her own alphabet books, plays and a series of character education fables such as Clean Your Own House, Misery Loves Company and Brenda Bee Wannabe, which were inspired by stories her mother used to tell her when she was a child. Dr. Gaston believes that learning through the arts is a fun and interactive way for children of all ages to understand and remember new concepts that are presented to them.



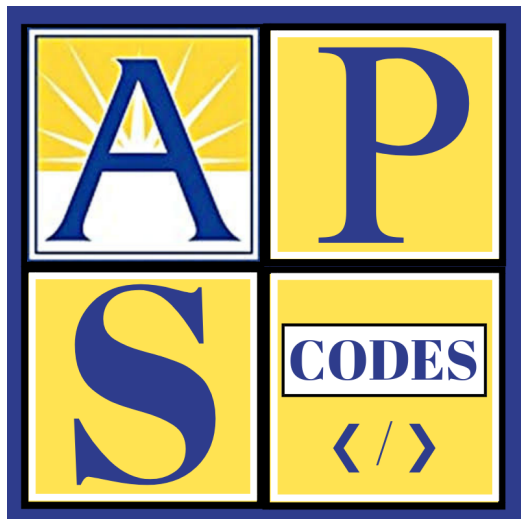
# Luki Lab Toys

Booth Session-  
Interactive

Facilitators:  
ACC Students

Cafeteria  
6:00p.m.-7:30p.m.

Audience: K-8th  
Grade, Parents, and  
Teachers



Luki Lab is an innovative toy company based in Southern California. Our diverse team of artists, designers, and inventors are dedicated to creating unique play experiences designed to expand a child's world.

Pinxies and Dexor : With a STEM authentication, kids will learn to expand their imagination, play creatively, solve problems, and hone early construction skills.

Treasure Diver and Submarings: These fun games work by using a very cool principle of science called "Bernoulli's Principle," which is related to fluid dynamics, or the movement of fluid. In the case of these games, the fluid used is water.



# MyPy Coding: Computer Science For Kids By Kids



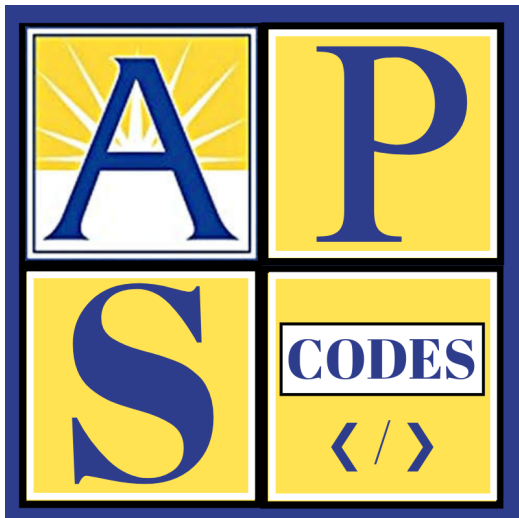
**MyPy Coding**  
Python For Kids By Kids

Booth Session-  
Informational

Facilitators:  
MyPy Coding

Cafeteria  
6:00p.m.-7:30p.m.

Audience: 2-8th  
Grade, Parents, and  
Teachers



MyPy Coding provides free, one-on-one, online weekly coding lessons to students in grades 2-8. We offer comprehensive lessons in Scratch, Python, and Web Development and equip students with a fundamental skillset of Computer Science skills, which will serve them well after their time in school.





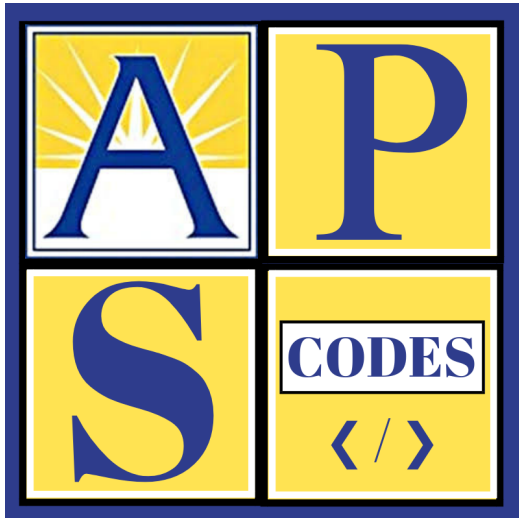
# Amazon Future Engineer

Booth Session

Facilitators:  
Amazon

Cafeteria  
6:00p.m.-7:30p.m.

Audience: K-12th  
Grade, Parents, and  
Teachers



Come visit the Amazon Future Engineer Booth and discover their STEM programs and free virtual learning experiences that are helping millions of students discover careers of the future.



# VR/AR

Booth  
Session-Interactive

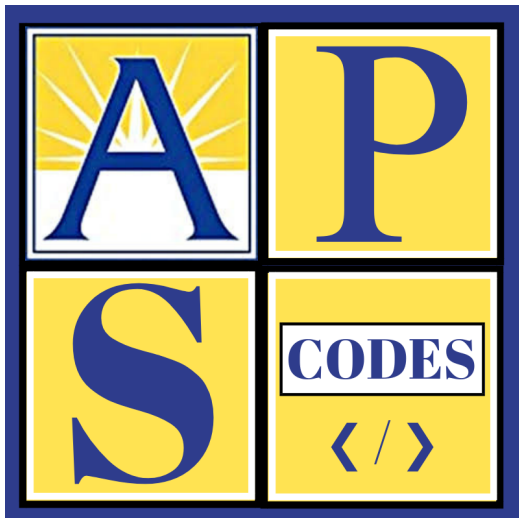
Facilitator:  
Charles Randolph

Cafeteria  
6:00p.m.-7:30p.m.

Audience: K-12th  
Grade, Parents, and  
Teachers



Virtual Reality (VR) and  
Augmented Reality (AR)!  
These groundbreaking  
technologies have burst into  
the world of  
education. This “Hour of  
Code” session will show you  
basic skills and  
understandings of VR/AR  
and how the technology can  
be used in your classrooms.



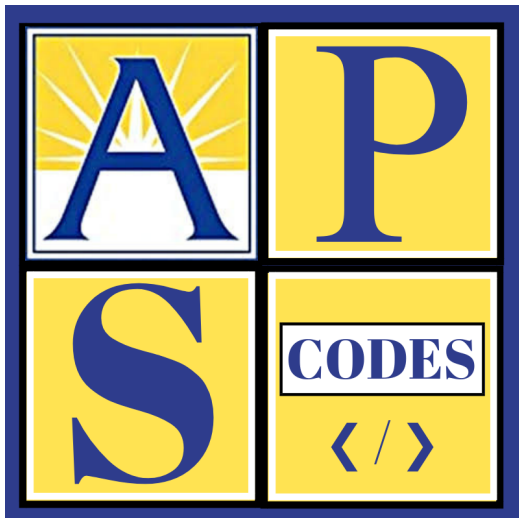
# CTAE Office

Booth  
Session-Interactive

Facilitator: CTAE  
Staff

Cafeteria  
6:00p.m.-7:30p.m.

Audience: PK-12th  
Grade, Parents, and  
Teachers



Career and Technical Education

Come visit the Career and  
Technical Education Booth and  
discover their programs!

For more information:  
<https://www.apsva.us/ctae/>



# Entrepreneur of the Year

Booth  
Session-Interactive

Facilitator:  
Tiffany Norwood

Cafeteria  
6:00p.m.-7:30p.m.

Audience: PK-12th  
Grade, Parents, and  
Teachers



Tiffany Norwood is a long time tech entrepreneur who licensed her first code 30 years ago. Tiffany will bring her code and story. She will share her experience in the computer science world as a founder of several tech companies.



# Challenge Island Greater Alexandria

Booth  
Session-Interactive

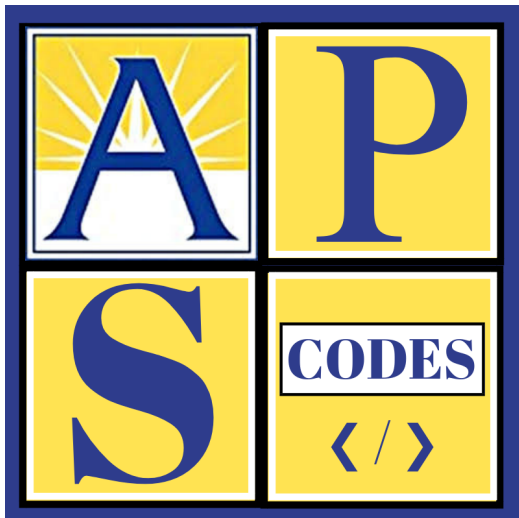
Facilitator:Challenge  
Island Greater  
Alexandria

Cafeteria  
6:00p.m.-7:30p.m.

Audience: PK-12th  
Grade, Parents, and  
Teachers



Challenge Island Greater  
Alexandria - Where  
Engineering Meets Imagination  
Challenge Island is a hands-on,  
project based STEAM program.  
Home of the official STEAM  
TEAMS® and STEAM Building®

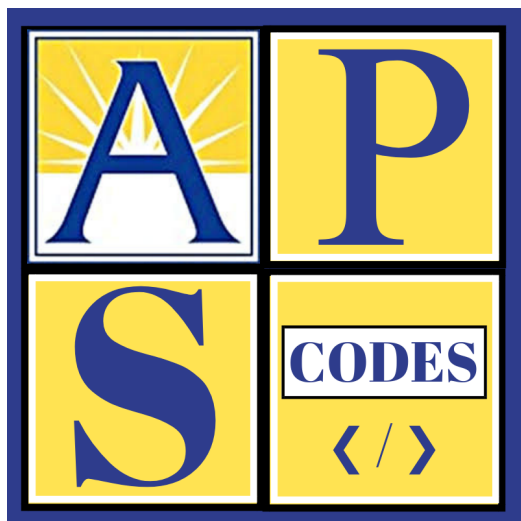


# Door Prizes

We will issue raffle tickets at the beginning of the event and draw the winning ticket at the end of the event.

**Cafeteria**  
**7:35 p.m.**

Audience: PK-12th  
Grade, Parents, and  
Teachers



Career and Technical Education

Random Drawing

Door Prize

(attendees must be  
present to win)

at 7:35p.m. in cafeteria.

