



# S

Ms. Pope's self-contained science students have been exploring concepts of electricity through engaging hands on project based challenges developed to inspire curiosity and creativity in electrical circuitry. Students in her science lab were first introduced to key foundational concepts of simple and parallel circuits followed by a thorough investigation of reasons why some materials and or objects conduct electricity, while others do not exhibit such properties. Once students illustrated essential understandings of electrical circuitry and the significance of inclusion or exclusion of insulators and or conductors in electrical circuits, students were challenged to apply their understandings of series and parallel circuits to designing and developing diverse simple and parallel circuits from a different materials and objects; inclusive of fruits and vegetables. An extension of their understanding and application of electrical circuitry were further explored through snap circuits which lent students engaging opportunities design, prototype and test group engineered designs.



# T

Technology students in sixth grade have been building projects on the SCRATCH platform. SCRATCH is a visual based block coding language that prepares and challenges students to think and advance their computational development and understandings of visual block based programming and project development. Seventh graders have been developing HTML and CSS project in a proprietary IDEs (Integrated Development Environment) to expand their understandings and application of HTMLS and CSS to their mock up websites projects. In addition, seventh grade students are immersed in completing a Digital Game Development course through CS4ALL. In addition, technology students at Parkside Preparatory Academy have been making final adjustments their innovative digital projects for entry into the Brooklyn borough wide 2019 NYCDOE BetaNYC-CS4ALL Hack League completion to be held in Brooklyn Borough Hall in March 2019.



# E

This semester, students in Ms. Gasowski's class engaged in learning the fundamentals of electronic circuitry through hands on challenges that further enriched their conceptual understanding of how electrons travel through parallel and series circuits. At the start of the unit students learned about the properties of electrons, their movement and distinctive charge. Next they created a simple circuit and peer assessed their observations. Once the general foundational principles of circuit development, they began to explore differing mediums through which electrons can flow. Following the engineering design process, students were first challenged to illustrate their understandings of electron flow through designing a simple, then a parallel circuit, concluding in the creation of electromagnets.



# A

In art classes students are engaging in redesigning their cultural crests. Cultural crests are experts of integral cultural distinctions that uniquely represent significant student identified aspects of their diverse cultural backgrounds. Through the creative design process students' diverse cultural identities were explored and shared in a creative space. Students engaged in research objectives that afforded them opportunities to pursue their name etymology and onomastics of the origin of where their proper names originated from. Through this activity students were able to share and uncover cultural similarities and differences. In addition they were challenged to incorporate component of graphic design where integrated topography with images.



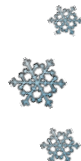
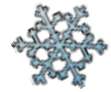
# M

During the Winter Session, novice musicians had the opportunity to successfully assemble and disassemble instrument and mouthpieces; demonstrate proper playing posture; demonstrate proper embouchure for tone development; and musicians can play Concert B-flat, C, D, E-flat, F, and G. Intermediate musicians had the opportunity to review their Concert B-flat scale, explore dotted quarter note followed by one eighth note rhythm patterns, differentiate between legato and staccato articulation and continue to master reading and performing in 6/8 time signature. In the Winter Session, musicians had many opportunities to expose their talents. On Dec. 08, 2019, the Panther X-Plosion Marching Band performed at the Community School District 17 Talent Show. On Dec. 19, 2019, PPA put on their first Winter Music Festival where it featured our talented students. It featured dance ensembles, solos and duets, musical solos and duets, pieces from the PPA Honor Band and PPA Marching Band. On Jan. 12, the PPA marching band had the opportunity to perform at College Awareness Assembly, at Parkside Preparatory Academy.

Ms. Dawes is employing the Stock Market Game (SMG) to assist her students in building fundamental understandings of investing while providing them with real world cross curricular content application. As part of the SMG, students are participating in a writing competition that involves the selection of an ESG ( ) issue, research of companies that are currently involved in specific ESG issues and a speculation long-term investment in researched companies. Through this game, students also get an opportunity to research other stocks, bonds, and mutual funds to add to a hypothetical financial portfolio to increase ESG impact and long-termed financial returns. Ms. Dawes's students are also participating in the 2019 Capitol Hill Challenge Market Game Challenge sponsored by State Senator Yvette Clarke.



# PPA'S EMERGING SCHOLARS IN STEAM



Captioned are samples of Parkside Preparatory Academy's best and brightest; inquiring, exploring, developing innovative solutions, and setting aside time to celebrate their collective achievements.

At Parkside Preparatory Academy, the STEAM Team is dedicated to equipping our students with extended opportunities that serve to develop their 21<sup>st</sup> century career readiness skills.

The STEAM Team is an initiative at Parkside Preparatory Academy to advance our school's mission through a robust and interdisciplinary collective of colleagues that instruct STEAM (science, technology, the arts and mathematics) subjects and collaborate to provide rigorous instruction that incorporates notable and unique and engaging opportunities that extend PPA students' understanding and application of foundational STEAM concepts beyond the classroom.

Parkside Preparatory Academy's Administration & Leadership:  
**Principal Spencer, AP Castro, AP Hayles & AP Alcindor**



## Winter Ed. STEAM Team Contributors:

- Ms. Pope**, Science Department
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- Ms. Gasowski**, Science & Engineering
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- Ms. Dawes**, Math Department

**STEAM Team Editor: Ms. Theobald**

Editor's Note: *Thank you STEAM Team for your continued dedication and collective contributions to our 2<sup>nd</sup> published newsletter. Go STEAM Team Go!*