



Workshops

Workshops #1

We got off to a strong start with our September workshops. We are happy to announce that most of our chapters are meeting in person this year, according to school district mandates. The Norristown and Upper Darby chapters are starting out with virtual workshops, but we hope to be meeting in person in the near future. Scholars led off the Program by committing to improving their grades by setting Improvement Goals. They will accomplish their goals by dedicating study hours for math, Science, and English/Language Arts, taking personal responsibility for their academic growth.

Workshops #2

Scholars got started on their science projects, selecting research topics and filling out and submitting their Research Plans. They are all anticipating and working hard toward the YMWIC Annual Science Expo on March 3, 2021 where they will present and defend their research projects to their families and the community.



Workshops #3

Our 3rd and 4th grade **Future Stars** Scholars, under the watchful eye of STEM Educator Heather Leamon, built bridge structures out of pipe cleaners and cotton swabs and wooden sticks. They learned engineering basics while creating bridge bases that could stand up and bear weight, overcoming structural problems that arose along the way.

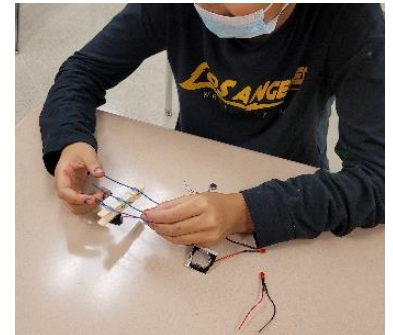
Pluto 5th and 6th graders learned about Geology and Rock Layers with STEM Educator Eric Doe, using crushed candies to represent layers of the earth. They learned that Geology is the branch of science that covers the earth's physical structures and substances, its history and all the process that act upon it. Mr. Doe also introduced the Geological Time Scale to them, a tool scientists use to study the earth, by studying rock strata layers and fossil records to organize its history.



In some chapters, along with STEM Educator Wanda Allaire, **Pluto** Scholars enjoyed learning what fractals are and that they appear everywhere in nature. They worked on creating Sierpinski triangles and discovered the math behind it. They then took the triangles to 3-dimensions to create fractal tetrahedrons, and tied in the math behind it. The Scholars had fun and found out how useful fractals can be in the world.

Workshops

7th and 8th grade **Neptune** Scholars studied circuitry, creating robotic "bugs" that could light up, vibrate, and walk. They used different components to create one item: a battery for power, LEDs for light, a motor for motion, and wires and tape to connect them all to the clothespin "body". They discovered that the next time, they want to add an on/off switch. STEM Educator Naomi Hampson wanted to demonstrate to Scholars that building stuff and robotics should be fun, not scary.



Our high school **Jupiter** and **Saturn** Scholars joined their parents for a presentation by our College and Career Educator, Angela Smith, on Navigating the College Application Process. She discussed college applications, application fees, and helpful apps and web resources. She gave them tips on financing and saving for college, explaining the different types of college loans, as well as different ways they can reduce college costs.

Ms. Smith encouraged families to start early when applying for college scholarships, letting them know that there are scholarships available for students as young as age 13. She stressed that applying for and obtaining college scholarships is long, hard work, but very much worth it in the end!