

THE STEAM MACHINE



Mary Gage Peterson Elementary's Monthly STEAM Update

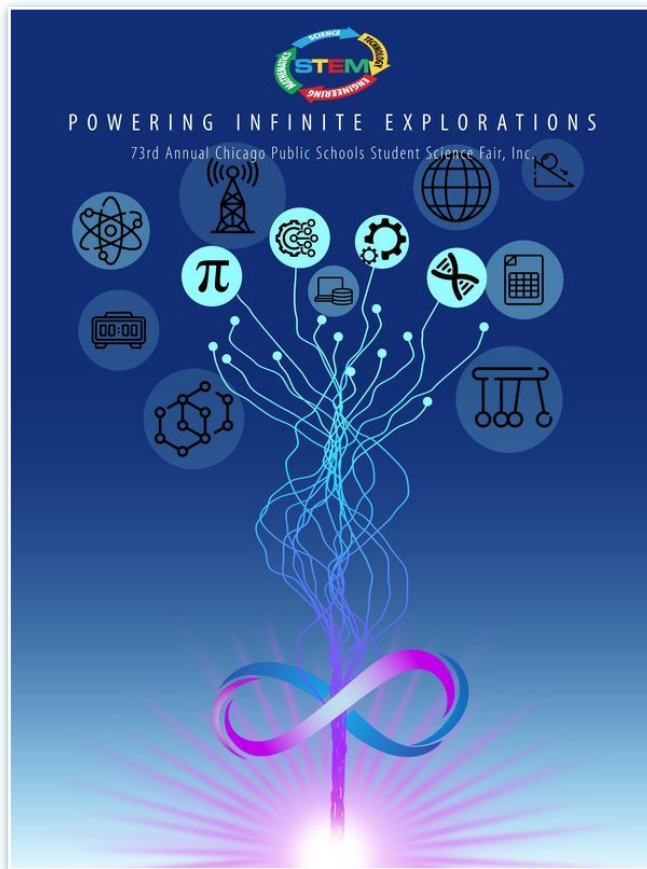
STEM Exhibition showcases student research

Students in grades 4, 6-8 design and present science projects at this year's STEM Exhibition.

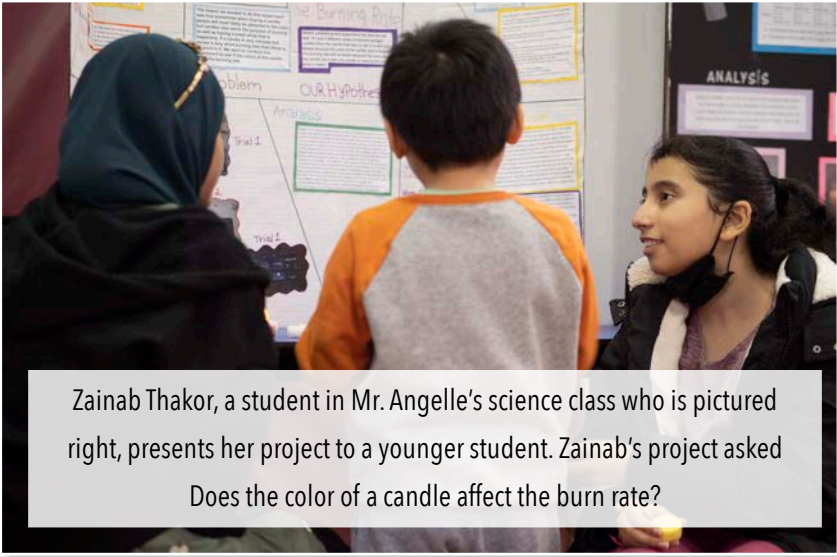
For many years, Peterson has held a Science Fair near the end of the spring semester to provide students with the opportunity to create and research a science project of their choosing. This year, the Science Fair became the STEM Exhibition and moved to the fall semester to align with the CPS academic competition schedule. Students will now be able to advance past the Peterson STEM Exhibition to the Regional Fair and even the city-wide and state level events, too.

At the STEM Exhibition, projects were scored by judges for multiple components including scientific approach, experimental research, knowledge gained, and presentation quality.

Thank you to Ms. Sanchez (8th grade), Mr. Angelle (7th grade), Ms. MacWilliams (6th grade), and Ms. DeVarenne (4th grade) for coordinating this experience for our Peterson students!



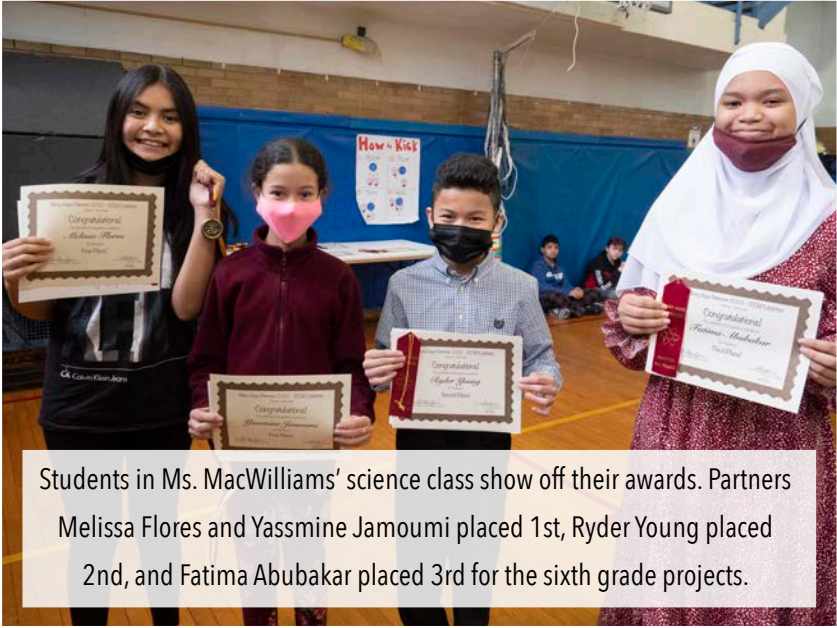
This year's Peterson STEM Exhibition was held on Wednesday, December 21 with the theme *Powering Infinite Explorations*.



Zainab Thakor, a student in Mr. Angelle's science class who is pictured right, presents her project to a younger student. Zainab's project asked Does the color of a candle affect the burn rate?



After the judging was complete, students from all grades visited the STEM Exhibition. Participants present their projects to fellow Peterson students.



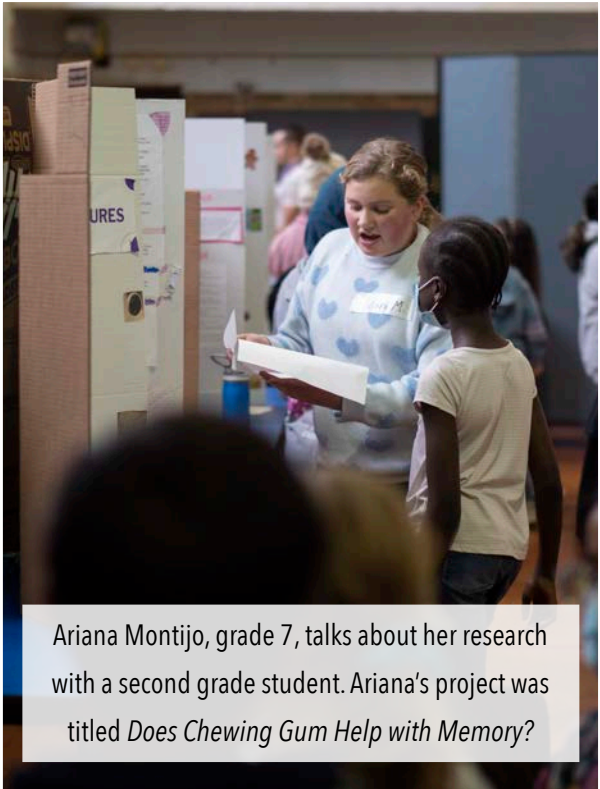
Students in Ms. MacWilliams' science class show off their awards. Partners Melissa Flores and Yasmine Jamoumi placed 1st, Ryder Young placed 2nd, and Fatima Abubakar placed 3rd for the sixth grade projects.

STEM Exhibition

Wednesday, December 21



Alkhadidja Zemmouri, a student representing room 128 from Ms. DeVarenne's fourth grade science class, presents research findings on whether bubble bath or dish soap produces more bubbles.



Ariana Montijo, grade 7, talks about her research with a second grade student. Ariana's project was titled *Does Chewing Gum Help with Memory?*

Maker U work continues

Middle school students in grades 6-8 continued their work this month with the new CPS Maker U Curriculum. This curriculum was designed by the Department of STEM to provide students with leveled learning opportunities across multiple disciplines. When students complete a level, they earn a badge!

Several middle school advisories moved on to Level 3 this month, which challenges students to design a prototype of a product to help address their client's problem. Students will soon earn their fifth and final badge for the Design Thinking module.



Chance to Dance

On Thursday, December 8, all Kindergarten students travelled to the Lyric Opera House to see a matinee performance of The Nutcracker performed by the Joffrey Ballet.



Concerts are Back!

On Friday, December 16, our Peterson band and choir students participated in our Winter Concert hosted at Northside College Prep. All band and choir students in grades 4-8 participated in the concert, showcasing how much they've practiced over the past few months. This year's holiday concert marked our first Peterson concert since 2019!

STEAM Career Spotlight

December's STEAM Career Spotlight featured Cesar Arcasi-Matta, an analytical chemist who uses cutting-edge tools in science to help answer questions like where does his skin color come from, how do people experience differences in health and disease, and how can he help the people living in poverty in his hometown of Peru?

Teachers then have resources available to talk more about our career spotlights in the classroom.

If you want to talk more about Cesar Arcasi-Matta and analytical chemistry at home, scan here!



I AM AN **ANALYTICAL CHEMIST**



I love dancing, cooking, and soccer. I developed a stutter after moving to the US from Peru. **I almost became a fashion designer.** I was the first person in my family to go to college. **I want to help solve humanity's problems through science.**

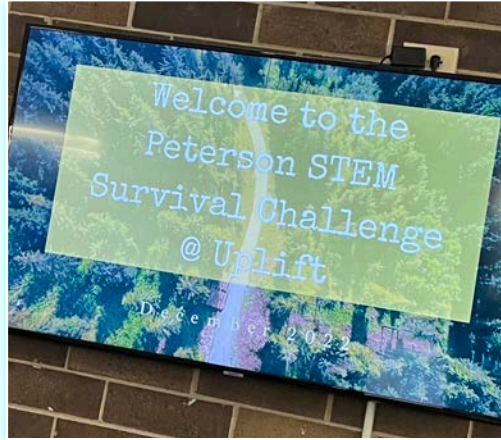
CESAR ARCASI-MATTA

Students Thrive in Survival Challenge

Earlier this month, our eighth grade students visited Uplift Community High School, a fellow CPS designated STEM School, to take part in a fictional survival challenge that tested their grit, critical thinking, and collaboration skills.

The premise was that students were hiking through Colorado's Rocky Mountain National Park as part of a research team when suddenly a few old rotten trees had fallen into the stream, taking out the makeshift bridge the park rangers had built for their team to carry supplies in. As a result, students took part in four different challenges to try to lead their team to safety:

- Students learned how to navigate drones through unfamiliar terrain and created a visual of major obstacles.
- Students learned how to use a recording studio to help rescuers understand the dilemma and attempt to rebuild the bridge to get back to the entrance of the park.
- Students designed and constructed a prototype of a container to carry the message to the rescue team.
- Students coded a robot to navigate through unfamiliar terrain carrying the message to the rescue team.



Can you support our STEAM programming?

Do you have ideas for any events, field trips, guest speakers, assemblies, or other opportunities that could supplement our Peterson STEAM programming? Are you interested in volunteering with one of our initiatives? We are always looking for ways to elevate our student experience!



If you are interested, please contact Mr. Mitchel Meighen, our STEAM Specialist, at msmeighen@cps.edu.

Peterson chickens lay their first clutch of eggs



Our Peterson chickens laid their first clutch of eggs this month and we collected almost 50 eggs in the first week. Since we have multiple different breeds of chickens in our coop, the eggs came in many different sizes and colors.

Did you know that when a chicken lays an egg, it is covered with a thin coating called a "bloom" or a "cuticle" that protects the egg. Before you wash off this coating, eggs don't need to be refrigerated.

