AUGUST 2025

Summer Newsletter

DRAGON CURVE TUTORING

FROM LEFT TO RIGHT: KATHY ZHANG, SOPHIE ZHAO, PAIGE ZHU, AMBER WENG, ANDY YAN, SAM EASAW, JASON YU

What has happened this past summer?

Welcome to the second issue of Dragon Curve Tutoring's summer newsletter! Read on to find out what our students have achieved this year.

This year, our team expanded as we undertook the challenge of improving our curriculum while also making class engaging and exciting. We are endlessly thankful to every tutor for their commitment and trust in the board of directors.

However, we are most indebted to our diligent students and their parents. Every class, students come ready to learn while also preparing to have fun. Without them, Dragon Curve Tutoring would not have grown to what it is today. See you next summer!

Best,

paige, amber, sophie & andy

Read on to find out about:

Summer Camp

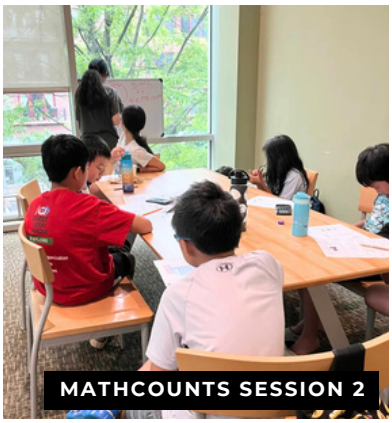
Support

Further Interest

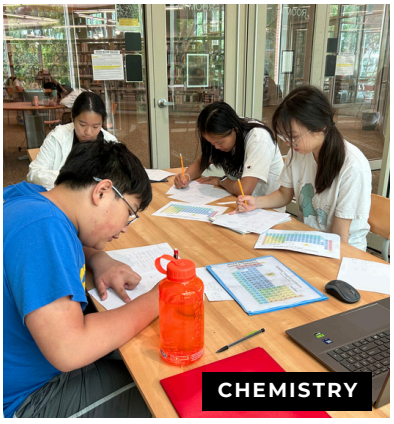
MEOW

STEM Figure of the Month

Puzzle Corner



MATHCOUNTS SESSION 2



CHEMISTRY

ELMO SESSION 1

ELMO

ELMO covered topics such as probability, solving for a variable, patterns, and solving inequalities.

Through the course of two weeks, students used their knowledge to create a card game that reflected their learning.

This year, ELMO was led by Paige, Sophie, and Natalie, as well as our shadows, Clara and Ellen.

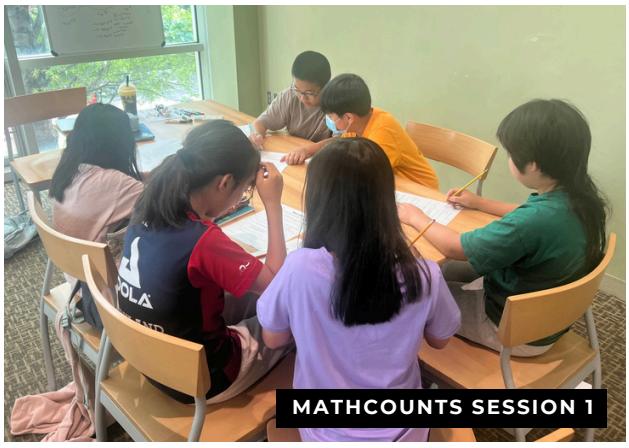
Introduction to CAD

Through Introduction to CAD, students were given their first exposure to computer aided design.

This class taught students about sketching, extruding, and various other features of OnShape. Students also designed their own model that was later 3D printed.

Introduction to CAD was led by Amber and Thomas.

INTRODUCTION TO CAD



MATHCOUNTS SESSION 1

MathCounts

In MathCounts, students learned about algebra, geometry, number theory, and combinatorics while also mock testing official MathCounts material.

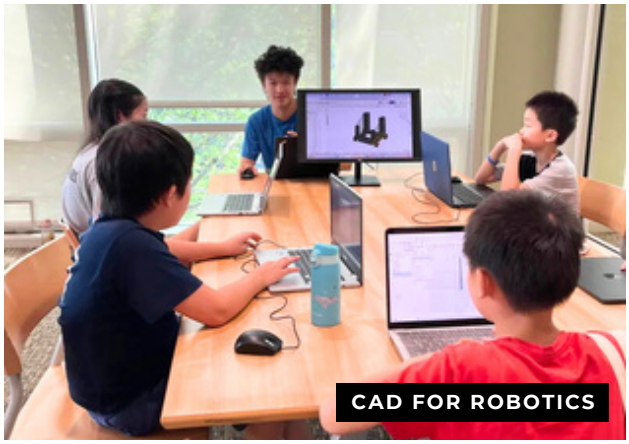
Former MathCounts participants Paige and Amber led the class through various topics and helped students gain a complete understanding of the competition. 2025 National MathCounts Qualifier Angie Zhu also joined the class as a tutor this year.

CAD For Robotics

In CAD for Robotics, students focused on using OnShape for FTC Robotics.

Using goBILDA, students were able to make complex designs and custom components that can be used in FTC.

Amber, Thomas, Sky, Andy, and Mason taught this class, using their experience in both coding and FTC Robotics to help guide students.



CAD FOR ROBOTICS

Chemistry

In this class, students were introduced to higher-level chemistry. The class covered topics such as titrations, combustion, precipitation, gases, and acids/bases.

Students both participated in discussions and practiced their newly learned knowledge through structured exercises.

Sam and Elizabeth led Chemistry this year.

Biology

Students in Biology focused on preparing for AP Biology through both lectures and interactive activities.

Genetics, ecology, cellular energetics, and evolution were taught in this class, with activities such as decoding DNA and making a protein aiding learning.

Biology was guided by Sophie, Kathy, and Jason.

Introductory Java

In Introductory Java, students learned the foundations of coding in this language.

The class taught students about strings, inputs, loops, conditionals, arrays, and other topics. Students also worked on a final coding project to sum up their learning.

Andy, Mason, and Sam used their experience in computer science and coding to host this class.

Introductory Python

Introductory Python formed a basis for students looking to learn more about coding and computer science.

Students learned about loops, lists, and more. By combining real-world examples and hands-on learning, students were able to create a final project.

Introductory Python was taught by Andy and Mason this year.

MEOW

This year, Dragon Curve launched an interactive math program for girls which covered cryptography, fractals, and graph theory.

Camp was split into the learning phase, which occurred over the first week, and the project phase, where each group completed and presented a personalized project.

See more on Page 5.

Donations & Support

Your donation can make a profound difference in the lives of individuals, particularly those from underserved communities. At Dragon Curve Tutoring, we provide high-quality math and programming education to those who need it most. By contributing, you help us bridge the educational gap and empower students with essential skills for success.

Donations help fund math competition teams, provide better class materials, create Dragon Curve merchandise, and improve our learning environment. Join us in our mission to create equal access to education, and help us inspire the next generation to find beauty and wonder in mathematics, programming, and sciences. Your generosity can transform lives and build a brighter future for all.

For more information, please visit https://dragoncurvetutoring.org/donate.html

Interested in Tutoring?

Are you interested in tutoring in our Summer 2026 classes? We are looking for tutors that will be entering high school in 2026 for the following classes:

- ELMO (Elementary Level Math Olympiad)
- Mathcounts
- AMCS
- Introduction to Scratch
- Introduction to Python
- Introduction to Java
- Introduction to CAD
- CAD for Robotics
- Biology
- Chemistry
- Physics
- USABO

If you are interested in teaching any of the above classes, please reach out to us at info@dragoncurvetutoring.org or scan the QR code on the right.

We are also looking for rising 8th graders (2026-2027 school year) to be TAs in our classes! If you are interested in being a TA, please email us at info@dragoncurvetutoring.org.

Love Letter to MEOW

Paige Zhu

Over the last two weeks, Amber, Megan, and I had the opportunity to teach a group of talented middle school girls about advanced math topics. This program began as an idea through the Math Prize for Girls grant program. We wanted to create a space where students could explore higher-level mathematics in a supportive environment. Over the summer, the three of us spent hundreds of hours preparing lesson plans, creating problem sets, organizing materials, and designing projects that would be both challenging and engaging.

On the first day, I was a little nervous about how the lessons would be received. Within the first hour, it was clear that the students were curious, motivated, and ready to tackle anything we gave them. Discussions were lively, and students approached problems with creativity and persistence.

Between sessions, the group relaxed with games of Mafia, which became an unexpected favorite. Despite the occasional intense debate over who was "suspicious," these breaks gave everyone a chance to recharge before returning to the math.

Each group completed a distinct project over the course of the program. The graph theory group's project involved optimizing amusement park schedules. The cryptography group learned about substitution ciphers, modular arithmetic, and the principles behind modern encryption, eventually creating their own ciphers and testing them on classmates. Finally, the fractals group examined self-similarity, recursion, and the appearance of fractals in nature, generating fractal images and discussing the mathematics that governs their structure. These projects culminated in a final presentation, where all three groups presented their projects over a 90 minute symposium with parents watching.

Looking back now, this program has been absolutely unforgettable for us. The joy and energy the campers brought every day was unmatched, and I will forever miss playing mafia with you all :)

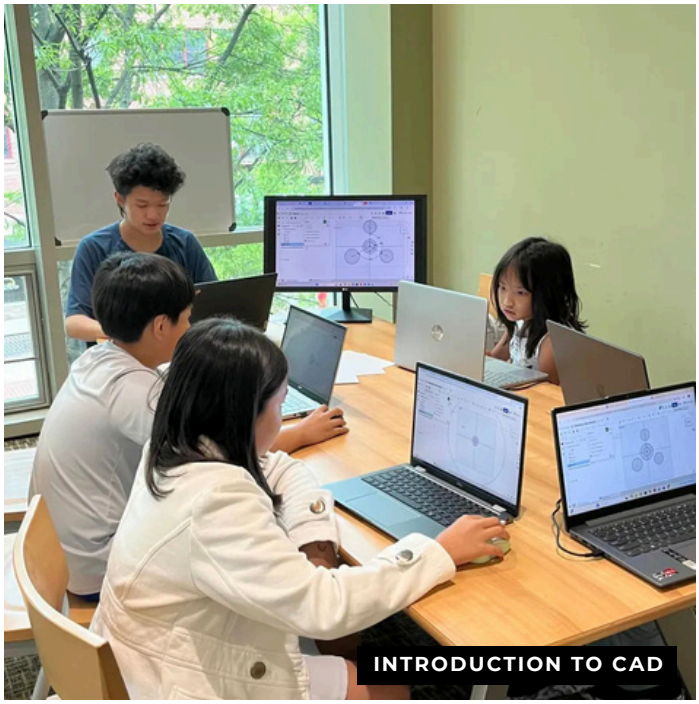
I hope this program that we have created has sparked an interest in mathematics in you all, and look forward to seeing in future math events and opportunities.

Your forever mafia god,
Paige

New Youtube Channel!

Dragon Curve Tutoring now officially has a Youtube channel! Follow us at @dragoncurvetutoring to see uploads of lectures, presentations, and more!

For MEOW participants: the 2025 MEOW symposium videos have been uploaded.



INTRODUCTION TO CAD

My MEOW Experience

Ella Qian '30, MEOW 2025 Camper

MEOW 2025 was one of the best summer camps I've been to, and I've been to a lot! The teachers were really nice and during the duration of the camp, the whole atmosphere of MEOW was positive and amazing, everyone was so nice and welcoming. They provided us with food and snacks, along with smiles and laughs. Even though it was a lot of fun, there were many educational aspects of the camp too. I've learned so many new things. I've gotten an introduction to Cryptography, learned so many new card games, and gained many new friends! If you're having second thoughts about signing your kids up for MEOW, just know, even if it's a free camp, it'll be one of the best memories for your kids!

My MEOW Experience

Maria Ivankovic '29, MEOW 2025 Camper

My name's Maria, and my experience at MEOW these past 2 weeks has been awesome! This is my most favorite math camp yet. Our tutors were amazing as well and explained stuff very clearly to us when we needed it. The pizza lunches and snacks were great, and I also enjoyed solving problems and playing games with my peers during our breaks. I recommend MEOW for any rising 6th-9th grader who's passionate about math. You'll be challenged here, have fun, and make some great friends. Look for more information about MEOW on Dragon Curve Tutoring's website!

Love Letter to MEOW, Part 2

Amber Weng

It has been an absolute honor to teach at MEOW alongside Paige and Megan. This summer has been an incredible journey, from our initial planning phases all the way to our final symposium.

The students were curious, hardworking, and engaged, whilst still being silly and hilarious. They maintained their lively energy while tackling problem sets and Mafia debates alike.

I could not be more proud of how far each group has come today. From the first introductions of the topics all the way to the final presentations, the students have continued to surprise me with their creative solutions and diligent work.

I hope our camp has inspired each of you to continue exploring math, and I look forward to seeing all of you in the future. And finally, a huge thank you to everyone who has made this camp possible.

Your favorite mafia target (dog),
Amber

My MEOW Experience

Angie Zhu '31, MEOW 2025 Camper

MEOW 2025 was one of the best summer camps I've ever attended! We explored interesting topics like graph theory, cryptography, and fractals through engaging and interactive lessons. After classes, we had a great time bonding over card games and hanging out with other campers. MEOW was also a very inclusive environment. When one of my groupmates in cryptography couldn't make it to the final presentation, everyone made sure that she could still be a part of it by making recordings of the slides she would've presented. The lectures were not only informative but also fun and interesting. We even got to learn a new game called Set during one of the lectures and played it together. I would highly recommend MEOW to anyone considering a math camp next summer!

Interested in Submitting Curriculum?

If you are interested in becoming a curriculum writer for Dragon Curve, please email us at info@dragoncurvetutoring.org. We are looking for curriculum for any STEM topic, including the following:

- Introduction to Scratch
- Physics
- USABO / USACO / USAPhO

My MEOW Experience

Kelly Wang '30, MEOW 2025 Camper

MEOW was my absolute favorite summer camp in 2025! I had an incredible time. It was super fun, and I learned a lot about fractals, graph theory, and cryptography, but we also played games together. The mentors were amazing, and everyone was really nice and welcoming. I made a lot of great friends. I highly recommend this camp to anyone looking for an unforgettable experience.

My MEOW Experience

Sarah Zhang '31, MEOW 2025 Camper

MEOW 2025 is a very fun camp that is mainly about math. We got time to hang out with friends, and everyone there was friends with each other. It was also quite entertaining because the camp counselors were a similar age as us. It was a lot easier to interact with them, and honestly, the subjects weren't that hard; so it was a really fun experience. You should definitely come.

MEOW GRAPH THEORY GROUP

My MEOW Experience

Joanna Liu '30, MEOW 2025 Camper

MEOW was an amazing experience—everything from the teachers, the snacks, the fun, and especially the learning! Each day of camp was filled with joy, and it had the perfect balance of excitement and education. We explored many math topics such as graph theory, fractals, and cryptography, while also enjoying the process. Making new friends, eating yummy snacks, and learning lots of math is a win-win—it is most definitely worth the time to go learn math at MEOW! :D

My MEOW Experience

Olivia Tu '31, MEOW 2025 Camper

MEOW was one of the best and most fun camps I have attended! At first I was worried that I wouldn't understand the material but then I started to look forward to going to camp everyday. The counselors were super nice and even brought us to Chipotle and a boba shop! Not only did we learn interesting lessons, but we also had plenty of time to socialize with new friends and play fun card games and Mafia. We were split into three groups: Graph theory, Cryptography, and Fractals, and completed a final project based on our topic. I was in the Graph theory group and I really enjoyed learning and making a fun presentation with all my classmates!

Upcoming Events

We are hosting tryouts for our inteGIRLS teams! For more information, visit our website: www.dragoncurvetutoring.org

DCT Parent Reviews

"I am truly grateful for your engaging and inspiring lessons. Your passion for teaching and your ability to make each topic interesting have made a lasting impact on my daughter's learning experience." - ELMO '25 Parent

"Thank you very much for organizing the camp activities! Ryan really likes it and has been very excited. He was particularly interested in the math games and hands on activities and couldn't wait to tell us about them. Fantastic job!" - ELMO, MATHCOUNTS '25 Parent

Interested in leaving us a review? Write us one here!

Follow us on Instagram!

@dragoncurvetutoring

Famous STEM Figure of the Issue: Maria Chudnovsky

This summer, we are excited to spotlight the work of renowned mathematician Maria Chudnovsky, a leading figure in graph theory and combinatorics. She is celebrated for her groundbreaking contributions, including the Strong Perfect Graph Theorem and her deep work on the structure of claw-free graphs, earning her a place among the most influential mathematicians of our time. Beyond her remarkable research, Maria is known for her ability to make complex ideas accessible and for inspiring young mathematicians to think creatively and persevere through challenges. One of our MEOW groups this year is dedicated to graph theory, inspired in part by her work. A few years ago, Amber and I had the pleasure of speaking with Maria over a Zoom call, an experience that left us deeply inspired by her passion, warmth, and love for mathematics.

Puzzle Corner

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7	9			6	3			
1						7		6
	1	6		4	2		7	9
			1	7				
9	3		5		6		1	2
4		1	9	3			6	
						9	3	
		9	6	2	7		4	5

Sudoku Difficulty: Easy

2	7
7	13

24 Difficulty: Medium

Thank you for reading!

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