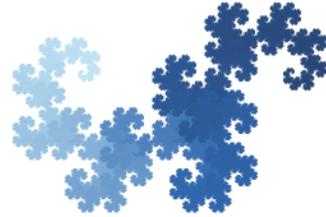


# Monthly Newsletter



## DRAGON CURVE TUTORING



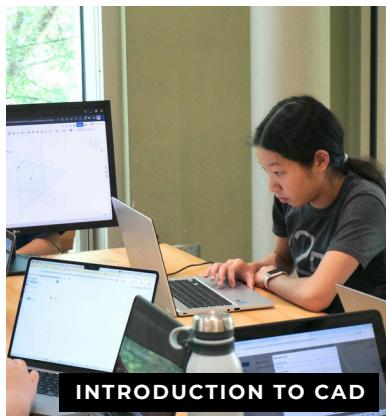
### What has happened in the last month?

Welcome to the first issue of Dragon Curve Tutoring's monthly newsletter! We are so excited to share out students' progress so far this summer.

Dragon Curve would firstly like to thank our hardworking tutors. They have worked tirelessly to create enjoyable lessons, coordinate schedules, and help our board plan for future events.

Finally, we want to remind everyone that Dragon Curve could not have become what it is now without the support of our participants and their parents. We are extremely grateful for the trust that parents have placed in us and extend our utmost thanks.

*paige, amber, sophie & andy*



Read on to find out about:

Summer Camp

Upcoming Events

Support

Student Interviews

STEM Figure of the Month

Puzzle Corner



ELMO SESSION 1

## ELMO

Elementary Level Math Olympiad (ELMO) students have made rapid progress, learning about many mathematical concepts with tutors Paige and Amber.

In the first week, students were introduced to algebraic expressions, probability, prime numbers, and factorization through group discussions and worksheets.

Demonstrating their progress, students worked in small groups to create a board game during the second week. Parents were invited to view students' final projects on the last day as well.



SCIENCE BOWL

## Science Bowl

During a three week period, Science Bowl covered an array of topics, including biology, chemistry, and physics.

Under the guidance of Amber and Sophie, students learned about evolution, chemical bonding, kinematics, and more.

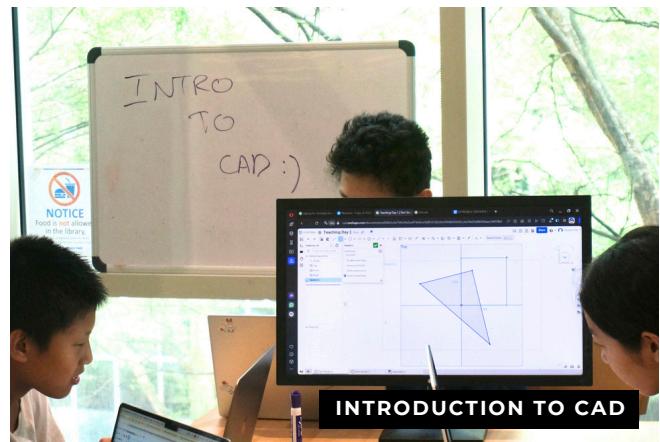
Our tutors employed multiple ways of learning, such as lectures, discussions, labs, and mock Science Bowl competitions.

Through this course, students have gained a comprehensive understanding of middle school National Science Bowl.

## Introduction to CAD

The Introduction to Computer Aided Design (CAD) Intensive was a short but productive course, guiding students through the basics of 3-D computer design.

Led by Thomas, students learned about sketching, 2-D, and 3-D computer design through Onshape, a CAD software. They summed up their learning in a final design that was printed out and assembled.



INTRODUCTION TO CAD

## MathCounts

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

Former MathCounts participants Andy, Paige, and Amber led the class through various topics and helped students gain a complete understanding of the competition.

Their work aims to prepare current and future MathCounts participants for competitions both inside and outside of school.



MATHCOUNTS



### INTRODUCTORY PYTHON

## Introductory Python

In Introductory Python, Mason, Sam, Andy, and Thomas established the foundations of coding with Python. Students learned about functions, numbers, variables, loops, and conditions.

Students then combined their learning by coding a simple game that utilized various components of coding on Python. Through this course, our tutors aimed to lay a strong foundation for future computer science projects and activities.

## 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>

## Upcoming Events

### AMCS

During August, students who signed up for AMCS will be attending five lectures by former AMC 8/10 participants and AIME qualifiers.

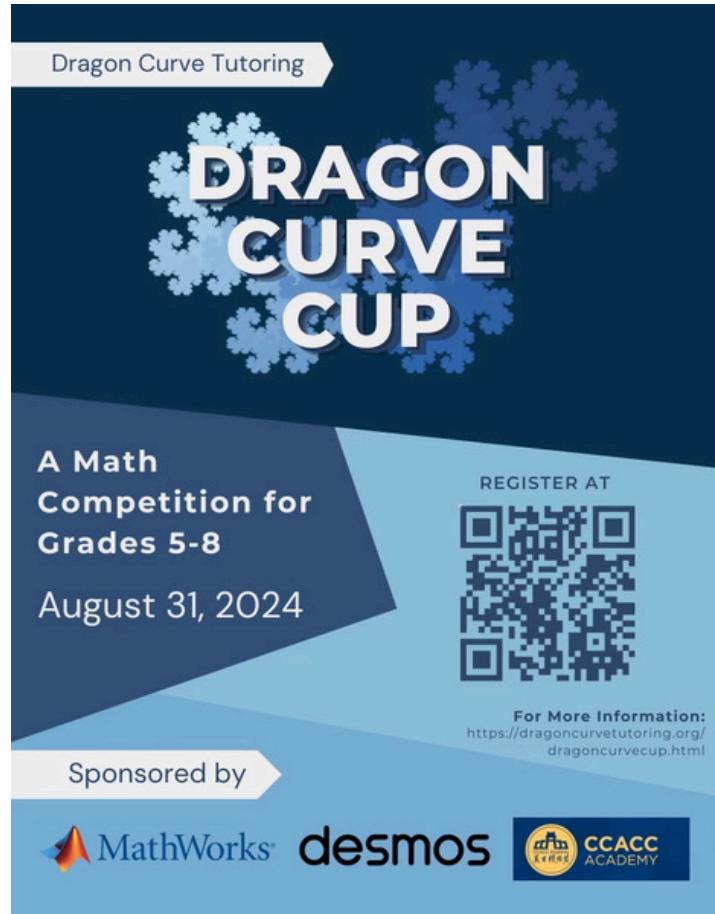
### Dragon Curve Writing Competition

Students going into grades 3-8 have a chance to win prizes by entering our writing competition. The winning entries will also be posted onto our website.

### 1st Annual Dragon Curve Cup

On August 31, 2024, Dragon Curve Tutoring will be hosting the first annual Dragon Curve Cup, a middle school mathematics competition. Through four rounds — speed, time, team, and logic — participants will be challenged by many complicated problems.

More information is available on the flyer to the right. To sign up, please visit our website!



# Student Interviews

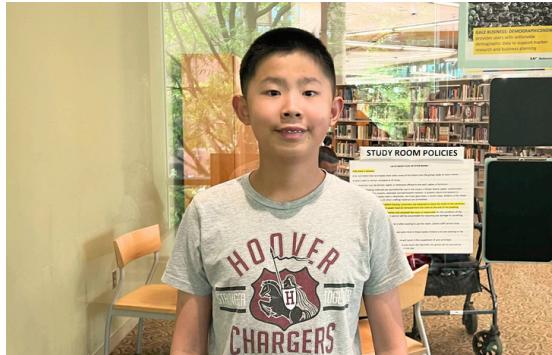
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## ELMO Session 1

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The ELMO class spent two weeks learning about introductory math topics and created a final project to present what they learned. Alex, a rising 4th grader at Cold Spring ES, says, "I loved ELMO! My favorite part was learning about probability." Anna, a rising 5th grader at Wayside ES, describes her final project, saying "We made math board games in pairs of two. It was really fun to combine games and math together." Avalyn, a rising 4th grader at Potomac ES adds on, saying "I really liked that we got to work in pairs. It made the process a lot more fun!" Thank you to our ELMO session 1 class for their positivity and energy during class! We hope to see you all again next year!



### Jason Y., 2030

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A rising 7th grader at Herbert Hoover Middle School, Jason participated in Science Bowl and Introductory Python this year. He says, "I like doing all the experiments and fun activities," referring to the pH lab and mock competitions in Science Bowl. He continues, "For coding, I enjoy working on projects." Our tutors enjoy working with Jason due to his unending enthusiasm for new learning and considerate personality when helping other students who are not as far ahead as him.



### Clara Y., 2030

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Clara, a rising 7th grader at Eastern Middle School, was part of our InteGirls team and MathCounts class last year. This year, she will be participating in AMCS, Science Bowl, and Introductory Python. She states, "My favorite activity so far has been the physics experiment we did. I enjoyed it a lot and love that my tutors are always coming up with new ways for us to learn." We tutors appreciate Clara's positive attitude in class despite facing challenges with new topics!



## Famous STEM Figure of the Month: John Heighway

This July, we are excited to spotlight John Heighway, a renowned figure in the world of mathematics and computer science. John Heighway is celebrated for his contribution to fractal geometry through the development of the Heighway Dragon, a mesmerizing fractal pattern also known as the Dragon Curve. This mathematical marvel, which gained popularity through its appearance in popular culture and literature, exemplifies the beauty of iterative algorithms and geometric transformations.

At Dragon Curve Tutoring, we are proud to bear the name of the Dragon Curve, inspired by Heighway's iconic discovery. His work not only captivates with its visual appeal but also inspires deeper exploration into the mathematical principles underlying fractals. Join us in honoring John Heighway and his significant impact on the STEM community.

## Puzzle Corner

		7			3	6	9
9	6		7	1			2
7					5	3	
1				6	7		
8					6		1
5	2		4				6
		6					
		5					

Sudoku Difficulty: Hard

17	2
3	5

24 Difficulty: Medium

*Thank you for reading!*

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