

# Greg Tang's

## MATH ENRICHMENT INSTITUTE

November 4, 2019

New York City

Are you ready to give your students a better foundation in number and operations? Ready to use more effective visual models to make sense of word problems? Ready to teach in a way that gives students a deeper, more connected and satisfying understanding of math?

Join us November 4th in New York City for our Math Enrichment Institute for grade 1-6 teachers. We will build strong foundational skills using a *streamlined* progression of concrete, pictorial and abstract models (C-P-A). Then we will switch our focus to enrichment and add fractions, rigor, coding and technology to the mix.

How will we accomplish all this in just one day? By offering a conference-style institute with concurrent sessions, electives, small class sizes, and three terrific speakers. We want this to be the best day of math PD you have ever experienced!

### Expertise, Electives, Enrichment

For this special day, Greg Tang will be joined by his wife Tammy and son Greg Jr. Together, they have taught close to 5,000 workshops and have helped schools across the country improve their math instruction and apply technology in more effective ways.



**Greg Tang Sr** works with some of the highest performing and most improved schools and districts in the country. He is the *NY Times* best-selling author of *The Grapes of Math*, gold medal eBook *Math Appeal*, and 6 other books from Scholastic. To date, his website GregTangMath.com has over 80 million page views and is a cornerstone of math curriculums around the world.



**Tammy Tang** is the author of 10 best-selling technology books. She is a keynote and featured speaker at many of the largest technology conferences in the US including ISTE, TCEA and FETC. Tammy helps K-12 teachers find more creative and effective ways to integrate and apply technology. Her first math book will be available this spring.



**Greg Tang Jr** leads more than 200 onsite teacher workshops, student enrichment sessions, and family math nights each year. He is the creator of Tanga Tuesday™ and Wordy Wednesday™ puzzles, and inventor of the popular math game Tenframe Mania™. He is a master game developer, programmer, and favorite among teachers, students, and math coaches.

Time	Cultural Center	Classroom
7:30-8:00	Coffee & Danish	
8:00-9:45 Session 1	<b>Visual Problem Solving</b> Greg Jr (4-6)	<b>Number &amp; Operations</b> Greg Sr (1-3)
10:00-11:45 Session 2	<b>Number &amp; Operations</b> Greg Sr (4-6)	<b>Visual Problem Solving</b> Greg Jr (1-3)
11:45-12:30	Lunch	
12:30-1:45 Elective 1	<b>Fraction Foundations</b> Greg Sr (1-6)	<b>Technology Tips</b> Tammy (1-4)
1:45-3:00 Elective 2	<b>Reasoning &amp; Rigor</b> Greg Sr (1-6)	<b>Coding &amp; Kids</b> Greg Jr (3-6)

## Morning Math Curriculum

### **Greg Sr sessions on Number & Operations.**

Grade 1-3

- a. Learn proven C-P-A progressions for modeling addition and subtraction.
- b. Explore part-whole relationships and additive comparison models.
- c. Use anchor tasks and math centers to teach, differentiate, assess.

Grade 4-6

- a. Learn proven C-P-A progressions for modeling multiplication and division.
- b. Explore part-whole relationships and multiplicative comparison models.
- c. Use anchor tasks and math centers to teach, differentiate, assess.

### **Greg Jr sessions on Word Problems.**

Grade 1-3

- a. Use tape diagrams to model all addition & subtraction problem types.
- b. Use question-less and number-less problems to shift focus to reasoning.
- c. Model multistep, elapsed time, and multiplication/division word problems.

Grade 4-6

- a. Use tape diagrams to model all multiplication & division problem types.
- b. Use question-less and number-less problems to shift focus to reasoning.
- c. Model multiplicative comparison problems including ratios, rates, percents.

## Afternoon Math Electives

### Fractions (grade 1-6)

Greg Sr will generalize and apply whole number concepts and operations to fractions. We will re-write, re-name, and re-think fractions in an incredibly simple yet oh-so-effective way. We will use Cuisenaire Rods to model fractions concretely (C), tape diagrams to model fractions pictorially (P), and both number bonds and standard algorithms to model fractions and solve equations abstractly (A). Fractions is the hardest topic that is easy to fix.

### Rigor & Reasoning (grade 1-6)

Greg Sr will explore what rigor means, discuss the challenges a rigorous curriculum brings, and help you make adjustments that ensure all of your kids experience success. Together, we will push rigor and reasoning to new heights, with an emphasis on differentiation, engagement, and practice. We will use word problem progressions and "puzzly" reasoning activities that are great for math talks, math centers, and independent practice.

## Afternoon STEM Electives

### Google Activities for Kids (grade 1-4)

Join Tammy and experience firsthand clever activities that will transform your kids from consumers of information to producers of knowledge. They will learn important computer skills, from drag and drop to spreadsheet formulas and functions, from pizza glyphs to T-shirt t-shirts, fact flippers, and a guess-my-number game. You will leave with the skills to apply Tammy's ideas to other content areas and the confidence to create your own.

### Coding & Kids (grade 3-6)

Join Greg Jr for this cutting edge, one-of-a-kind workshop. You will apply basic coding concepts to solve fun and challenging problems. Each is designed to develop the critical skills kids need to be good at coding. They are also the same skills kids need to be good at math! Coding is a great way to provide meaningful enrichment, develop strong reasoning skills, and prepare kids for higher math. See why coding and kids are a perfect match.

## Why attend Greg Tang's Enrichment Institute?

Our team will make sense of operations and word problems, model and solve fraction and rigorous reasoning problems, use coding to develop higher-order thinking skills, and use Google Sheets and Slides to integrate technology in clever and engaging ways.

We hope you will join us. It is our first time hosting a workshop in New York City and we are happy to be partnering with MOCA – the Museum of Chinese in America. Together, we look forward to welcoming you and providing a friendly, inspiring, and joyful day of learning.

**When:** November 4, 2019  
8:30a – 3:00p

**Who:** Grade 1-6 Teachers & Administrators

**Where:** Museum of Chinese in America  
215 Centre Street  
New York, NY 10013



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