

Nassau County Mathematics Teachers Association Association of Math Supervisors of Long Island

Present a K-8 Conference

### HOW TO MAKE MATH COUNT

#### Molloy University Friday, January 10, 2025, 8:00 AM – 2:15 PM

We are pleased to announce that NCMTA and AMSLI will sponsor *The How To Make Math Count K-8* conference, held at Molloy University, Rockville Centre, NY, on Friday, January 10, 2025. Join us for this special day, designed to meet the curriculum and assessment concerns of elementary and middle school teachers and supervisors. Workshops include teacher-tested ideas, models, demonstrations, techniques, and hands-on activities that can be used in the classroom the very next day. We are fortunate to again have exhibitors so you will have an opportunity to speak with vendors and peruse materials.

This year we are thrilled to welcome back the wonderful, John SanGiovanni as our Keynote Speaker. John will be addressing, "Figuring Out Fluency Beyond Facts and Algorithms." In his Keynote Address John will discuss why fluency is more than basic facts and algorithms. It is complex and teaching it well is challenging. To find success, we must know what it is so that we can teach it well. This session unpacks the big ideas of fluency arming participants with practical know-how for advancing their students' fluency. Participants will take a deep dive into teaching, practicing, and assessing the strategies of fluent students. Learning will be complemented with ready-to-use classroom resources. His natural skill of presenting is sure to leave you wanting more.

We are happy to offer online registration and payment. The cost is \$75 (\$65 members, \$50 for fulltime students or student teachers) which includes the keynote speaker, three workshops, vendors, continental breakfast, and lunch.

To Register with a Purchase Order or Credit Card please go to

#### https://ncmta.memberclicks.net/

Register now. A \$10.00 late fee will be assessed after January 3, 2025. You will receive immediate confirmation of your registration. You will receive an email reminder by January 6, 2025. If you do not receive a confirmation email or reminder email please contact us at <u>howtomakemathcountk8@gmail.com</u> Your registration materials for the day will be waiting for you at the registration desk in the **Kellenberg Hall, Anselma Room on January 10, 2025.** Participants will be able to attend the keynote address, three out of four sessions, lunch and time to visit the exhibit area. Lunch is included in the cost of the conference. If you have any questions about the program or registration, email us at <u>howtomakemathcountk8@gmail.com</u> or call Suzanne Golder at 516-662-8378.

CONFERENCE TIME SCHEDULE				
Registration, Coffee, Commercial Exhibits	8:00	-	9:00	
Keynote Address	9:10	-	10:10	
Session 1	10:25	-	11:15	
Session 2 or Lunch and Commercial Exhibits	11:25	-	12:15	
Session 3 or Lunch and Commercial Exhibits	12:25	-	1:15	
Session 4	1:25	-	2:15	

## COLUMN & - SESSIONS 1 & 2

- 1. *Peek Inside Our Primary K-2 Math Classroom* Peek inside our primary math classrooms as we share practical math routines, engaging math activities and many more math tips that we use every day in our math classes. Participants will be exposed to a variety of "hands on" math activities that are sure to get their students engaged! Leticia Cuthbertson, and Christine Lofaro, Huntington Schools, Gr K -2.
- 2. **The Game Is On!** Give children dice and cards and they think they are playing a game. Introducing game like activities in math class encourages cooperation, conversation, and collaboration. The Standards for Mathematical Practice describes a variety of practices that educators should seek to develop in their students. The activities introduced in this workshop will encourage learners to have conversations that will help students grow in multiple ways as mathematical learners. **Audrey Bellovin**, Garden City Schools, Retired, Gr K-2.
- 3. *Word Problem Warriors* Learn the different kinds of story problems and how understanding the type of story problem will help your students to solve them. Representations help to make sense of the story problem, support calculations, and explain one's thinking. There is more than one way to represent and solve story problems. The Three Read Method, along with tape diagrams, will be included. You will bring great resources back to your classroom for immediate use. Let's win the war on word problems! Millie Joyce, Garden City Schools, Gr K-2.
- 4. Integrating Math and Social Studies in Early Childhood Classrooms In this interactive session, attendees will explore the numerous ways in which NYS Next Generation Mathematics Standards can be easily paired to support key ideas, conceptual understandings, and content specifications of the NYS Social Studies Framework. Participants will experience a station rotation/workshop model in which they will participate in activities reflecting the K-2 math and social studies curriculum. Dr. Lisa Peluso and Dr. Francine Wisnewski, Molloy University, Gr K-2.
- 5. *Kinesthetic Strategies to Boost Math Outcomes* Brain scientists have identified that movement is essential for enhanced brain function, circulation, focus, concentration, learning and retention. Join us for this fun, energizing, and interactive learning session! Learn practical, kinesthetic strategies for making math fun, boosting fluency, building number sense, supporting state standards, and addressing unfinished learning. Sherise Thomas and Khalilah Anglin, NYC Schools, Gr K-5.
- 6. **The Building Thinking Classroom Framework for K-8 Teachers (Beginner Workshop)** Building Thinking Classrooms is a researched-based framework for math instruction created by Dr. Peter Lilijeedahl. This workshop will be an introduction to the framework. Participants will gain insight into how to form collaborative groups, how and where to assign tasks, and the difference between curricular and non-curicular tasks. This workshop is for all teachers and educators whether you are new to Thinking Classrooms or are already using it. Melanie Anderson, Levittown Schools, Gr K-8.
- 7. **The Building Thinking Classroom Framework for K-8 Teachers (Advanced Workshop)** This workshop is for those already using the thinking classromm framework or those who took the beginner workshop and will take a deeper dive into the art of closing a lesson including several ways to consolidate. A key focus will be how to create Meaningful Notes in a thinking classroom, and strategies for how to thin-slice your existing curriculum to meet the needs of all learners in a skillful and scaffolded manner. **Melanie Anderson**, Levittown Schools, Gr K-8.
- 8. **Building Thinking Classrooms for Supervisors** Join us for a workshop on Building Thinking Classrooms in Mathematics tailored specifically for administrators. This session will provide an overview of BTC practices and offer opportunities to discuss and exchange ideas on effectively implementing this instructional design in your schools. **Dr. Joanne Fennessy** Commack Schools **and John Towers**, Levittown Schools, Gr K-8.

- 9. Project Based Learning through Math Project-Based Learning (PBL) is a teaching method in which students learn by actively engaging in real-world, authentic and personally meaningful projects. Based on the very recent Blue Ribbon Commission recommendations for NYS Graduation Measures, project-based learning and performance-based assessments will become an accepted and encouraged way of instruction and assessment as evidence of learning NYS Next Gen Math Learning Standards. Participants will learn about, discuss and explore the following topics in this workshop: -\*\*\*NEW Blue Ribbon Commission recommendations for Project-Based Learning and Assessments\*\*\* -Inquiry-based approach to instructional discovery learning for mathematics students -Integrating NYS NextGen Math standards through project-based learning -Options and possibilities to develop interdisciplinary PBLs with other subject-areas-Developing Driving Questions to solve real-world problems or answer authentic student questions -Types of PBL and Exemplars-The Planning Process-Implementation, Assessing and Reflecting-Ways to showcase and celebrate learning, Stacey Mooney, Western Suffolk BOCES, Gr K-8.
- 10. Using Origami to Introduce the Properties of a Square –We will use the ancient art of Japanese paper folding (origami) to discover and prove the properties of a square by using origami paper (which is always a square), 8.5 inch squares made from "astro-brights" letter size paper. We will make two models. The properties of a square will be printed on one of the finished origami models. Helen Rodney, Bronx/AMTNYS, Gr K-8.
- 11. **Teaching Algorithms ... Exactly Backwards** The shift in focus, from "what" to "why", is the foundation of today's math standards. Teaching this way fosters in children a deep, conceptual understanding of the way numbers work, and empowers them with confidence as math learners. In this workshop participants will explore teaching algorithms...exactly backwards. Rather than beginning with "what to do", participants will engage in activities that explore each of the four operations (addition, subtraction, multiplication and division) from a conceptual standpoint. They will see how each algorithm is based in place value understanding, and that the "steps" students have traditionally memorized are really more about "doing what makes sense" than they are about memorizing! Participants in this workshop will experience how natural a process learning these algorithms in this way is that it enhances and complements any curriculum students are working with, as well as lends support to children at their individual ability levels. Basing their work with algorithms on place value understanding makes this abstract concept more concrete for struggling learners. **Christopher Sarlo** and **Patti Dieck,** Amityville Schools, Gr 2-5.
- 12. *Magnificent Math: Let's Dive In. All New for 2025!* Are you looking for games/activities and resources to supplement your lessons? If so, this workshop is for you. I will share many things to engage your students and have fun learning math. Participants will play some games and leave with lots of resources to use in the classroom. As a classroom teacher, AIS provider, and math coach for many years, I always have NEW things to share. Laura Marks, Island Trees Schools, Retired, Gr 3-4.
- 13. *Fostering Math Readiness in 3-5 Students: Engaging Parents in Everyday Learning* Many young children struggle with learning math, not because they lack the ability, but because they are missing key foundational understandings necessary for new concepts. In this interactive workshop, we will explore the critical difference between learning early skills and developing true readiness for new learning. We'll discuss the role parents play in fostering math readiness at home through organic, everyday interactions—without relying on extra screen time or worksheets. Participants will learn how to engage parents in the readiness-building process, empowering them with ways to build foundational math skills through real-life experiences. Using a research-backed approach, we'll demonstrate ways parents can incorporate meaningful math readiness activities into their existing routines. By the end of this session, you'll have practical tools to educate and empower parents, helping them to support their child's math journey from readiness to mastery. **Patti Dieck,** and **Christopher Sarlo,** Amityville Schools, Gr 3-5.
- 14. *Growth Mindset: STEAMing Up Experiential Learning!* What does it take to be successful in STEAM? By embedding lessons with positive psychology concepts of growth mindset, grit, character strengths, happiness, and hope, we will empower students to be reflective and critical thinkers. Jessica Ryan and Courtney Jacobs, Lynbrook Schools, Gr 3-5.

- 15. *The Power of Positive Transactions: Enhancing Behavior through Classroom Economics* Join us for an engaging workshop designed specifically for elementary classroom teachers looking to enhance student behavior through a structured classroom economy! In this interactive session, we will explore how implementing a classroom economy can foster positive behaviors, motivate students, and create a vibrant learning environment. Participants will learn how to create a rewarding system that encourages immediate recognition of good behavior. We'll discuss practical strategies for "catching students doing the right thing" and rewarding them with classroom currency, effectively motivating them to make positive choices. Teachers will also discover how to integrate financial literacy into their lessons, teaching students essential skills like balancing check registers, depositing, withdrawing and saving money. Every week students have the opportunity to shop at a classroom boutique, reinforcing the connection between their behavior, the currency they've earned, and the rewards they can enjoy. By the end of the workshop, educators will be equipped with the tools to establish a classroom economy that not only enhances student motivation but also promotes essential life skills, creating a supportive and engaged classroom community. Don't miss this chance to transform your classroom dynamics and empower your students! **Shari Bowes,** Lynbrook Schools, Gr 3-6.
- 16. *Engaging Minds: Transforming Math Instruction with Effective Math Centers* Join us for a dynamic workshop designed for educators eager to enhance their math teaching strategies. In this interactive hands-on session, we'll explore innovative math center activities that foster collaboration, critical thinking, and problem-solving skills. Participants will learn how to create and implement effective math centers tailored to diverse learning needs. Let's inspire a love for math and make learning an exciting journey! Lisa Minerva and Diane Viola, East Williston Schools, Gr 4-5.
- 17. *Taking Math Off the Page!* While worksheets certainly have their place, there are many more engaging ways to help students build fluency and comprehension. Participants will learn how to utilize such tools as well as how to adapt these tools to fit the needs of their specific students and curriculum. During the session, participants will have an opportunity to try the activities themselves and create materials to use right away! Jennifer Taggart and Lisa Lein, East Williston Schools, Gr 5-6.
- 18. *Math Made Smarter: Leveraging Khan Academy, I-Ready and AI in the Classroom* This session will demonstrate how Khan Academy, i-Ready, and AI tools can be integrated to support student success in math. Khan Academy offers free, personalized lessons and practice exercises, while i-Ready provides adaptive assessments and targeted instruction. AI-powered platforms enhance these tools by offering real-time feedback and personalized problem-solving. Together, these resources help tailor learning experiences, track progress, and address individual student needs, making math instruction more engaging and effective. Lisa Ross, Saint Stanislaus Kostka Catholic Academy, Gr 5-8.
- 19. *Train Your Problem-Solving Superpower with These Math Problems*. Are you ready for a problem solving session? Solving math problems can bring excitement to your classes. All students can contribute and benefit from the experience. Multi-approaches allow students to draw on their own talents and insights. The strengths and abilities of all your students are exercised and sharpened as different approaches are tried. You'll find how effective multi-approach questions are both for investigating and reinforcing many topics. Additional probles will be distributed and a variety of problem sources will be provided. **Dennis Mulhearn,** Valley Stream Schools, MOEMS, Retired, Gr 6-8.
- 20. *Fortifying the First Five Minutes: Do Nows Done Better* Fifteen different types of five-minute periodopening activities will be presented and discussed, with samples. Strategies include Non-English Textbooks, Quotes, Explorations, Manipulative Readiness, Quizzing, Find and Fix, Remember and Rethink, and more. These activities help all math classes get off to a positive, purposeful, immediate start. **Robert Gerver**, North Shore Schools Retired, ICPS Gr 6-8.
- 21. Hands-On Activities for Developing Understanding of Algebraic Concepts This engaging workshop is designed to develop students' (grades 5-8) initial understanding of algebraic concepts, such as signed numbers, variables, and methods for solving linear equations. These activities employ objects such as balance beams, "mystery" bags of popcorn, Algebra Tiles, pictorial diagrams, and more. Such activities are successful in removing the abstractions of algebra. Dr. Sharon Whitton, Professor Emerita of Hofstra University, and Aubree Williams Goldfarb, The Scholars' Academy-NYCDOE, Gr 6-8.

## COLUMN B - SESSIONS 3 & 4

- 22. *Connecting Math to Art* Math and Art go together like peanut butter and jelly! You just have to know where to look and be a little creative with your lessons. In this workshop you will learn ways to connect Math concepts with monthly thematic art projects. Children will be able to express their math understanding through meaningful engaging projects. Alina Janosel, Christina Daly and Liz Paolillo, Malverne Schools, Gr K-2.
- 23. *Fostering Math Readiness in K-2 Students: Engaging Parents in Everyday Learning* Many young children struggle with learning math, not because they lack the ability, but because they are missing key foundational understandings necessary for new concepts. In this interactive workshop, we will explore the critical difference between learning early skills and developing true readiness for new learning. We'll discuss the role parents play in fostering math readiness at home through organic, everyday interactions—without relying on extra screen time or worksheets. Participants will learn how to engage parents in the readiness-building process, empowering them with ways to build foundational math skills through real-life experiences. Using a research-backed approach, we'll demonstrate ways parents can incorporate meaningful math readiness activities into their existing routines. By the end of this session, you'll have practical tools to educate and empower parents, helping them to support their child's math journey from readiness to mastery. **Patti Dieck** and **Christopher Sarlo**, Amityville Schools, Gr K-2.
- 24. **Bringing Your Resources Alive** –In this workshop you will discover ways primary age students can help to bring their learning to life with basic materials used in the classroom. Find and create fun activities for students to show their learning and practice with peers. Please bring scissors and gallon size ziplock bags with you. **Chantelle Persaud**, Port Washington Schools, Gr K-2.
- 25. *Where to Start with Early Childhood Independent Centers* In this session you will learn some tips and tricks to help manage successful independent math centers in a K-2 classroom. Learn how to embed timers, create visual slides, and foster independence once students are officially at their center. Amanda Tavares, Carle Place Schools, Gr K-2.
- 26. **Building Math Minds Through Games** Join us to discover a variety of games that foster mathematical thinking and reasoning. These activities are perfect to enjoy with both your students and your family. Get ready to play and explore! Jenny Campbell and Tara Beamer, Garden City Schools, Gr K-5.
- Supporting Positive Mathematics Attitudes: A Kinesthetic Learning Approach Students' attitudes towards 27. mathematics are a dynamic construct of interactions between emotions, beliefs, and values placed on mathematics, all of which aspects are constantly renegotiated relationally across a variety of mathematical learning contexts. As such, to approach math attitudes as a dichotomous 'liking versus disliking math' mindset is too simplistic; instead, we at the NMF have embraced an evidence-based 3-Factor Model of Math Attitudes that flows through all of our kinesthetic programs. Researchers Mazana et al. (2019) found that "positive" Attitudes Towards Math (ATM) that were developed early on in students' academic careers become less positive in secondary school and college. High levels of perceived math usefulness, enjoyment, confidence, and motivation were key to students' general engagement in mathematics and in turn their positive attitude. In this presentation, we will explore (1) what contributes to our ATM, (2) what strategies exist to strengthen the ATM of our students, and (3) how using a movement-based, multisensory instructional framework supports the positive growth of ATM for both students and teachers. Participants will engage in breakout conversations as well as collective movement-based math activities to both practice these strategies and reflect on the importance of our own ATM (as educators) as highly influential in the development of our students' confidence and competencies in mathematics. Kirby Schoephoerster, National Science Foundation, Gr K-5.

- 28. *Math Moves: Using a Structured Approach to Problem-Based Learning to Move from Being the "Sage on a Stage" to the "Guide on the Side"* Problem-based learning in mathematics doesn't have to mean just letting your students free to explore and figure everything out on their own. When structured the right way, problem-based learning creates an environment where all students see themselves as doers of math. Join this session to learn how to make problem-based math instruction work for you, including: how to make the shift from "sage on the stage" to "guide on the side," how to flip your lessons from "I Do, You Do, We Do" to "You Do, We Do, I Do," how to celebrate student thinking in a way that builds math identity and self-confidence. **Dr Kelly Serpa**, Amplify STEM Product Specialist, Gr K-8.
- 29. **Responsive Classroom Practices in Math Instruction** Participants will learn about how to incorporate Responsive Classroom components into math instruction. We will discuss each component in relation to math instruction and what it can look like in your classroom. After learning about the components, participants will plan a morning meeting around a math topic they are currently teaching. This workshop is most beneficial to participants who actively engage in Responsive Classroom practices. Alyssa Penkal and Sloane Sepe, East Williston Schools, Gr 1-3.
- 30. *Igniting Student Thinking with Warm-Ups* Warm-up routines are a powerful tool for building students' mathematical fluency, conceptual understanding, and engagement. In this workshop, teachers will explore a variety of engaging warm-up routines such as Number Talks, True or False?, and Which One Doesn't Belong. Participants will learn how to implement these warm-ups and integrate them into the current curriculum. **Christina Cardella and Linda Burke**, Garden City Schools, Gr 2-6.
- 31. *Algebra Adventures* Do your students think of algebra as math with letters? Have they asked you when we are going to start algebra? Chances are they have been "doing algebra" since kindergarten; they just didn't know it. In this presentation, participants will learn how to incorporate algebra, number puzzles, and growing patterns in a fun and exciting way. There are numerous ways to solve for the "unknown," and you will see your students' problem-solving skills and algebraic reasoning improve. **Patricia Egan**, Lawrence Schools, Gr 3-5.
- 32. *Math Workshop Model* The "Math Workshop Model Grades 3-5" is designed to introduce educators to the structure and benefits of the math workshop model, which can be applied across all grade levels. Participants will explore what a math workshop looks like in the classroom and gain practical strategies for implementation. Attendees will also engage in hands-on math games using manipulatives, providing an interactive way to enhance student learning. **Melissa Comis,** Connetquot Central Schools, Gr 3-5.
- 33. *Piecing It Together: Understanding Fractions* Are fractions a mystery to your students? Are you looking for innovative ways to strengthen your students' understanding of this essential math concept? Piecing It Together aims to empower educators with tools and strategies to create a dynamic learning environment around fractions. We'll explore the fascinating realm of fractions through visible thinking routines, number sense routines, dynamic number talks, and games! **Kailyn Zanella**, West Hempstead Schools, Gr 3-5.
- 34. *Game On! Using Math Games as a Tool for Developing Fluency, Perseverance and Collaboration* In this presentation, we will discuss ways to incorporate game play in your math classes, in order to have students engage mathematical concepts and practice. Such game-play and student-centered activities encourage student discourse, which helps bolster math fluency and deepen student understanding! **Brittany Roaldsen** and **Lauren Russo**, Levittown Schools, Gr 3-6.
- 35. *Improve Your Problem-Solving Skills Learn to Write Good Problems* The best problem-solvers are also great problem writers. In this session you will see multiple ways to extend a good problem into several great problems. We will be using sample Math Olympiad (MOEMS) questions to develop creative extensions that continue to challenge your students. Your students will have a better grasp of the problem-solving tools when they practice writing their own questions. Art Kalish, SUNY, Old Westbury, Gr 5-8.

- 36. *Strategies to Support Special Education Students in Middle School Math* Strengthen your special education support skills. This workshop will provide you with concrete strategies in order to best educate your students. It will focus on breaking down lessons into basic, relatable parts in order for students to comprehend the material and recall it in the future. It will also provide tips to help students become more mathematically independent. **Dr. Florence Frenkel**, Henry Viscardi School, Gr 6-8.
- 37. Harnessing the Power of AI for Math Teaching and Learning – Are you ready to unlock the transformative potential of AI in your math instruction? In this engaging workshop, you will explore a variety of AI-powered tools and techniques that can drive student engagement, differentiate lessons, provide personalized support, and help students connect the relevance of math to their lives. Key topics will include: AI-Powered Lesson Planning and Content Creation: Discover how to leverage large language models and other AI technologies to generate dynamic lesson plans, activities, assessments, and math content tailored to your students' needs and aligned with academic standards. Student-Facing AI Applications: Equip your students with AI-powered math learning apps, virtual math assistants, and productivity tools that can enhance engagement, facilitate problemsolving, and help them see the real-world relevance of mathematics. Ethical Implementation: Discuss best practices for responsible AI integration, addressing important considerations like bias, privacy, and academic integrity to ensure your use of AI aligns with your school's policies and promotes equitable learning. Join us and unlock the full potential of AI to transform your math classroom into an engaging, supportive, and futureready learning environment. Walk away with a toolbox of AI-powered resources and strategies to empower both you and your students as mathematicians. Samantha Halper and Jessica Keegan, Oceanside Schools, Gr 6-8.
- 38. *Collegial Circle for Supervisors* Grab your lunch and gather with math supervisors to talk about trends in today's educational world from curriculum to instruction to initiatives and everything in between. Join for an opportunity to meet colleagues face-to-face and engage in collegial conversation during this "lunch and learn" workshop specifically designed for administrators. John Towers, Levittown Schools, Gr 6-8.
- 39. *Model Showdown: Comparing and Contrasting Linear and Exponential Function Models* As students advance in their mathematical careers in school, the study of functions becomes increasingly important. In particular, comparing and contrasting linear and exponential functions is a key component of Pre-Algebra and Algebra 1 courses. This workshop will explore both functions, including how to use these functions to model real-world situations and data. Participants will walk-away with ideas they can use in their own classrooms. Nora Greene, North Shore Hebrew Academy, Gr 6-8+.







# **Participant Preferences**

This year the conference will operate in a math camp format. You will be able to create your own schedule and attend your choices based on first come, first served basis. In order to help us plan, please let us know your preferences. Choose eight workshops, 4 from each column, in order of preference. Use the numbers next to the description.

Column A Choices	Column B Choices
First Choice #	First Choice #
Second Choice #	Second Choice #
Third Choice #	Third Choice #
Fourth Choice #	Fourth Choice #

Pay by credit card or purchase order.

The cost is **\$75.00** (**\$65** members, **\$50** for full-time students or student teachers) before January 3, 2025. After that there will be a \$10 late fee. The cost includes continental breakfast and lunch.

### **On-line registration only.**

Credit card registration:

https://ncmta.memberclicks.net/howto2025creditcad

Purchase Order registration:

https://ncmta.memberclicks.net/howto2025purchaseorder

Please note new payee: AMSLI

All PO's and checks should be mailed to Tara Mauer, AMSLI, c/o Oceanside High School, 3160 Skillman Ave. Oceanside, NY 11572.

PO questions: tmauer@oceansideschools.org

Please note: MyLearningPlan doesn't register you for this conference. You must register with us!

Don't Delay, Registration fills up quickly. Don't be closed out!

### NO ON-SITE REGISTRATION WILL BE ACCEPTED! <u>A CONFIRMATION EMAIL WILL BE SENT IMMEDIATELY.</u> <u>A REMINDER EMAIL WILL BE SENT ON OR AROUND JANUARY 3, 2025.</u>

General questions: howtomakemathcountk8@gmail.com

# **Register Before January 3, 2025**

Molloy University - 1000 Hempstead Avenue, Rockville Centre NY

