

Nassau County Mathematics Teachers Association Nassau County Association of Math Supervisors

Present a K-8 Conference

HOW TO MAKE MATH COUNT

Molloy College Thursday, January 12, 2017 8:00 A.M. – 2:30 P.M.

We are pleased to announce that NCMTA and NCAMS will sponsor **The How To Make Math Count K-8** conference, held at Molloy College, Rockville Centre, NY, on **Thursday, January 12, 2017**. **Join us for this special day, designed to meet the curriculum and assessment concerns of elementary and middle school teachers**. 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 have **Brian Cohen** delivering the keynote address: *What Should We Hope (and Fight) for as we Transition to the New Standards*? He is the K-12 STEM Coordinator for the Skaneateles, NY Central School District, group leader for the 2016 Grades 3-5 Common Core Standards Review Committee, and member of the NYSED Mathematics Advisory Panel. He has also served on the Common Core Standard-Setting Committee and authored numerous articles, including the searchable database Unlocking the Common Core: Key Math Concepts.

We are happy to offer online registration and payment. Online payment is available for credit cards, PayPal, or purchase order numbers from your district. To complete online registration, please visit the link at http://www.ncmta.net/howto.html. If you would prefer to pay by check, please complete the registration form (at the end of this program) and enclose a check or purchase order for \$45 (full-time students or student teachers, \$25), made payable to Treasurer, N.C.A.M.S. It is not necessary to mail in a physical form if you have opted for the online registration. Registration forms, either online or via mail must be received by December 24th, 2016. We expect a large response. Register early so you get your first choices for sessions. You will receive an email confirmation of registration by January 5th, 2017. If you do not receive a confirmation by January 5, 2017, make sure to contact us at makemathcount@aol.com. Your schedule for the day will be waiting for you at the registration desk in the lobby of Wilbur Arts Center on January 12. A continental breakfast will be served.

Participants will be scheduled for 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, call Deborah Upton at 617-851-9770 or email <u>makemathcount@aol.com</u>.

CONFERENCE TIME SCHEDULE							
Registration, Coffee, Commercial Exhibits	8:00	-	9:00				
Keynote Address	9:10	-	10:10				
Session 1	10:20	-	11:15				
Session 2 or Lunch and Commercial Exhibits	11:25	-	12:20				
Session 3 or Lunch and Commercial Exhibits	12:30	-	1:25				
Session 4	1:35	-	2:30				

How to Make Math Count Planning Committee

COLUMN A (SESSIONS I & II)

- 1. *Just Right Math Games* We will present math games that support fact fluency within 20. Participants will engage in various math stations where these games will be presented and played in partnership. **Diane Schneider** and **Nicole Montellese**, Hewlett Woodmere Schools, Gr K-1.
- 2. *Math Stations to Support Differentiated Instruction* This workshop will focus on the management and implementation of Math Stations to meet the individual needs of all learners. We will discuss the organization of a work board, managing groups of learners, station topics and activities for those stations. Joanne Cicio and Christine Lofaro, Huntington Schools, Gr K-2.
- 3. *Engaging Students through the Guided Math Approach* Participants will be introduced to guided math, a strategy that can be used to differentiate math instruction, while also maximizing students' success in number sense, computational fluency, problem solving, and reasoning. Robin Rann, Lindsey Andersen, Matt Comiskey, Jennifer Desmond, Andrea Ferrari, Amy Laverty, and Dana Ward. Northport-East Northport Schools, Gr K-2.
- 4. *Well Played!* Support learning of all of your students. Build fluency and mathematical thinking through games. Participants will leave the workshop with games and ideas they can use the next day. Lisa Minerva and Alyssa Moirano, East Williston Schools, Gr K-2.
- 5. *Math as a Language for Elementary Scientists* The purpose of the workshop is to discuss strategies, activities and concepts teachers can use that will help their students to see and use math as a language to convey understanding in science through observation, measurement, and analysis. Henry Kupstas, East Williston Schools, Gr K-4.
- 6. *Math is Thinking, Literacy is Thinking: Making Connections Across Math and Literacy to Support All Learners* Participants will explore how literacy and math learning complement each other through thinking, discussion and practice. Presenter will share literacy standards and strategies to demonstrate how literacy standards can enhance mathematical learning. Participants will examine the Mathematical Practices and Habits of Mind and develop understandings for how the transfer of thinking skills and literacy skills will support all learners. Amy Brennan, South Country Schools, Gr K-5.
- 7. *Math & Movement: Using Movement to Enhance Math Ability, Increase Physical Fitness and Meet the CCLS* - Do your students struggle with fluency and deep conceptual understanding of math concepts? Math & Movement is a research-based, multi-sensory approach to teaching and learning math. In this highlyinteractive presentation, you will be taught a series of kinesthetic strategies that support the modules and offer "brain breaks" while simultaneously building number sense, critical thinking and increasing a student's fluency and ability to focus and understand. **Suzy Koontz** and **Kim McCullough**, Math and Movement, Gr K-5.
- 8. *Growing a Growth Mindset* Using children's literature, participants will explore the positive psychology constructs of growth mindset, hope, grit, character strengths, and happiness. How will these STEAM activities promote parent engagement and help to change your school's culture? Jessica Ryan, Lynbrook Schools and Molloy College, Gr K-6.
- 9. **Engaging Students through Effective Questioning and Discourse** In this workshop, teachers will be provided with a range of strategies to foster critical and creative thinking and depth of reasoning through the use of effective questioning and engagement strategies. By using quality questioning techniques, teachers can shift typical mathematics classrooms into more student-centered, inquiry-based classrooms in which students are thinking and reasoning at high levels. You will see how critical thinking skills, creativity, problem solving, collaboration, and communication come alive through effective questioning and engagement strategies. Bor Simone, Nassau BOCES, Gr K-8.

- 10. *Moon, Mars and Beyond* Moon, Mars and Beyond is a distance learning program offered by the Challenger Learning Center in Wheeling, West Virginia. Participants, using mathematical calculations, decoding and graphing skills, are challenged to retrieve a lost manned spacecraft located somewhere between Jupiter and the dwarf planet Pluto. A flight director, via Skype, will guide the participants to a hopefully successful mission and save the lost astronauts. **Joan Soldano**, Stardust Educational Consulting, Inc, Gr 3-5.
- 11. *Tangrams are so Much More than a Puzzle* Using tangram pieces we will solve problems, work with fractions and have some fun with spatial reasoning skills! You might find you have a hidden talent! Grace Quinlan, Past President, NCMTA, Gr 3-5.
- 12. *Growth Mindsets with Built-In Differentiation in Fractional Thinking* We will provide "go deep" learning techniques to grapple with Fractional Thinking. Grappling is productive struggling. Presenters will model whole-class learning with built-in differentiation. BYOD for "smarter not harder" online lessons. **Rudy Neufeld**, UMathX, **Renee Meekins** and **Kesha Townsel**, NYC Schools, Gr 3-5.
- 13. *Providing Effective Feedback in the Math Classroom* In this workshop, educators will have the opportunity to engage in a math task that is aligned to upper elementary CCSS. Participants will explore possible student misconceptions and the use of a mathematical practice rubric to learn how to provide feedback to students. This approach will enable students to persevere through rigorous math tasks. Jennifer Lewner, Valley Stream Schools, Gr 3-8.
- 14. Use Cubes as a Setting for Your Problem Solving A cube is the starting point for many rich problems. Stack cubes, count cubes, paint cubes and do some real math at the same time. Work on a dozen classic problems. The setting may be geometric but many topics and concepts are involved including factors, combinatorics, volume, surface area, and networks. Take home these and more than 50 additional problems. **Dennis Mulhearn**, Retired, Valley Stream Schools, MOEMS, Gr 4-8.
- 15. *Differentiating Your Math Instruction so that All Students are Motivated, Challenged, and Experience Success* We will share problems and teaching ideas that will motivate and challenge all of your students. The problems will connect to any excellent curriculum and to the Common Core. We have used these problems successfully with 4th through high school level students. Jim Matthews, Siena College, Gr 4-8.
- 16. *Improve Student Learning with a Green Check, a Red X, and a Report* A study of over 3000 students in 46 schools showed that students learn more when they use ASSISTments to get immediate feedback on their assignments and teachers use ASSISTments to access and use reporting data to drive instruction and review. (Want proof? Watch this short video: tiny.cc/homeworkstudy). Come see how easy (and free) it is to implement ASSISTments in your classroom as well as how to make skill practice, classwork, exit cards, and tests more effective. Andrew Burnett, Worcester Polytechnic Institute, Gr 4-8.
- 17. *Making Kaleidoscopes and Tesselations to Learn Geometry* Participants will engage in exciting activities that they can use in guiding their own students in discovering important geometric properties and relationships. **Sharon Whitton**, Hofstra University, Gr 5-7.
- 18. *More than a Worksheet* Participate in numerous engaging math activities that you can immediately use in your classroom. We will play and learn with dice, cards, play-dough, spinners, and much more. Activities will take into consideration NYS Math Standards, differentiation, and various student learning styles. **Kathleen Conors** and **Grace Parisi**, Long Beach Schools, Gr 5-7.
- 19. **DOK and the CRQ Framework: Road to Rigor!** Journey into Depth of Knowledge, Cognitive Processes, and the Cognitive Rigor Question Framework. Participants will define cognitive rigor and explore strategies for encouraging students to think critically and demonstrate their learning in deep and extensive ways. **Michelle Burget** and **Theresa Berke**, Syosset Schools, Gr 5-8.

- 20. *Paper Folding and Cutting for Area of Shapes* This workshop will use paper folding and cutting to develop conceptual understanding of the area of shapes. **Hoyun Cho**, Capital University, Gr 5-8.
- 21. *Period-Opening Activities for All 5-8 Math Classes* Twelve different period-opening activities will be discussed and sampled. These activities, field tested and revised by the presenter for 40 years, include manipulatives, foreign language texts, quotes, quizzes, historical and amazing facts, recreational mathematics, explorations, and more. **Robert Gerver**, Retired, North Shore Schools, Gr 5-8.
- 22. **The "Flipped" Classroom** This workshop presents a way for teachers to "flip" the traditional model of classroom instruction. Come see how this model of instruction can increase student understanding and engagement, as well as promote 21st century learning skills. The "flipped" classroom works to create student-centered learning environments, collaboration with peers, and more one-on-one time with students in the class. **John Towers,** Levittown Schools, Gr 6-8.
- 23. *You Think YOU Have Problems? Try These!* Real problems must challenge appropriately, have multiple solution paths, and lead students to a better understanding of math concepts. Discover ways for your students to become better problem solvers while preparing them for any assessment they may encounter. **Nicholas Restivo**, MOEMS, Gr 6-8.
- 24. *Math Stations and Tiered Activities* Middle school students are more successful when engaged and working at an appropriate level. It is also important for them to learn to work collaboratively while reviewing, practicing and enriching the curriculum. Come and learn about some math stations and tiered activities which will bring back the "fun" in math while meeting the Common Core Standards. **Gabriella Gizzi** and **Kristina Wood**, Roslyn Schools, Gr 6-8.
- 25. Using Mobile Devices For Student Success Learn how to use the devices your students already have to bring their mathematics education in the 21st century. This hands on learning experience will demonstrate strategies that will dynamically transform lessons. Technologies include iPad, Chromebook, and smartphones. Participants must bring their own device (BYOD). Paul Pelech, Westbury Schools, Gr 7-8.

COLUMN **B** (SESSIONS III & IV)

- 26. UnCHARTered Territory: Whole New Wonderful Ways to Use the 120 Chart Did you ever feel like the 120 Chart just hangs in your classroom getting very little attention? Do you feel like you use the chart for only a limited amount of time? Well, the 120 chart is about to get used in a whole new way and for more than just a few lessons. There are so many ways to use the chart from simple counting to complex double digit addition and subtraction. Students should be taught to add and subtract using a 120 chart before being taught any kind of formal computation. Learn the many concepts that can be taught with this chart. Hands-on lessons and ideas will be shared. Millie Joyce and Anne Hayes, Garden City Schools, Gr K-2.
- 27. *Composing & Decomposing Numbers* Put the worksheets away! Build understanding of addition and subtraction with meaningful activities that will help students memorize their math facts. **Sue Mehr**, Deer Park Schools, Gr K-2.
- 28. *Title: Journals, in Math? Who Knew What Secrets You Could Learn!* Who doesn't like to write their thoughts down in a journal? But writing down math thoughts, well that's another story. Learn how to entice your children into writing about math and their math experience. Go back to class and begin your very own math journaling tomorrow! **Cyndi Nichols**, Commack Schools, Gr K-2.
- 29. *Improving Math Fluency Using Sprints* This workshop will introduce the use of Math Sprints into one's daily/weekly instructional practices in order to improve fluency skills in mathematics, as defined by the CCLS Mathematics Shifts. John Towers, Levittown Schools, Gr K-5.

- 30. *K-6 Coding: Don't Tell Them It's Math!* Participants will use Studio.Code.org, tynker.com and crunchzilla.com to explore the world of coding and kids. We will consider free and paid courses and discuss the merits of each. Lists of links to coding resources will be provided. **Laura Forsyth**, Malverne Schools, Gr K-6.
- 31. *My Name is "Siri"* What will math look like in a world where algorithmic questions are answered by a device? Larry Farrell, Mathematics Consultant, Gr K-8.
- 32. *Make Math Fun* I will present games and activities that reinforce integral concepts. **Donna Casano**, East Williston Schools, Gr 1-2.
- 33. *Not Your Parents' Math!* How do blogs, websites, and hands-on activities change the way we teach math in 2017? If you're interested in expanding your professional knowledge of new math techniques and activities to use with your students in the classroom, this workshop is for you. Let's explore all the innovative ways to make math come alive in your classroom. **Laura Marks**, Island Trees Schools, Gr 1-4.
- 34. **Differentiated Math Stations for the ELL Student** Learn what an ELL student is and how we can meet their needs as educators. Differentiate small group activities to be able to support students for higher achievement. Learn to organize and manage groups depending on student levels and needs. Learn to formally and informally assess students to keep track and continue achievement. **Angelica Diaz and Sonia Argueta**, Brentwood Schools, Gr 2-3.
- 35. *Fun with Facts*! We will share games and activities that can help students master basic skills. **Diane Viola and Lisa Minerva**, East Williston Schools, Gr 3-5.
- 36. *Engaging Students through the Guided Math Approach* Participants will be introduced to guided math, a strategy that can be used to differentiate math instruction, while also maximizing students' success in number sense, computational fluency, problem solving, and reasoning. Robin Rann, Lindsey Andersen, Matt Comiskey, Jennifer Desmond, Andrea Ferrari, Amy Laverty, and Dana Ward. Northport-East Northport Schools, Gr 3-5.
- 37. *Getting the Most Out of Math Rotations* Most school districts on Long Island have implemented 80-90minute math blocks in the elementary classroom. This workshop will assist teachers in developing "math rotations." Math rotations are used during a math block to target small group instruction and keep students engaged and on task. This workshop will assist teachers with the planning, making sure he/she is targeting the necessary skills and keeping students on task. The presenter will model a variety of activities to use in the classroom as well as how to use math rotation charts to keep the flow of the math block going. **Shari Bowes** and **Courtney Jacobs**, Lynbrook Schools, Gr 3-5.
- 38. *Math Stations to Support Differentiated Instruction* This workshop will focus on the management and implementation of Math Stations to meet the individual needs of all learners. We will discuss the organization of a work board, managing groups of learners, station topics and activities for those stations. Joanne Cicio and Christine Lofaro, Huntington Schools, Gr 3-5.
- 39. *Superheroes vs. Villains Solving Problems while Saving the World* Using Math and Science, learn how to solve puzzles, use super-skills, and critical thinking. Learn the science behind "superpowers" and use math to solve realistic problems in worldly events. **Nicole Simon and Theresa Vecchiarelli**, Nassau Community College, Gr 4-6.
- 40. **Don't Toss Those Holiday Greeting Cards...Box 'Em!** Give your students a thorough understanding of geometry terms and the nuances of definitions involved with polygons, especially quadrilaterals. Transform old greeting cards into boxes while delivering a better understanding of the relationships among perimeter, area, and volume. **Nicholas Restivo**, MOEMS, Gr 4-8.

- 41. *My Favorite Math Contest Problems* Problem solving is central at all levels of math. Choose the setting and content carefully and you can make math fun and exciting too. Challenge your students with 20 of the best classic contest problems and together you will discover solutions that enrich understanding. **Dennis Mulhearn**, Retired, Valley Stream Schools, MOEMS, Gr 4-8.
- 42. **Ten-Minute Math Mini-Lessons for Flexible and Efficient Computation** In this workshop, we will discuss mini-lessons that will help students develop number sense. They will analyze problems and find efficient ways to solve these problems. In doing so, students will theorize, come up with conjectures, create models, and understand the big ideas about why these strategies work. **Carole Kreisberg**, Hewlett-Woodmere Schools, Gr 5.
- 43. *Growth Mindsets with Built-In Differentiation in Algebraic Thinking* We will provide "go deep" learning strategies to do productive struggling with Ratio, Slope, Linear Relations, Graphing. Presenters will model whole-class learning with built-in differentiation. BYOD for "smarter not harder" online lessons. **Rudy Neufeld**, UMathX, and **Kesha Townsel**, NYC Schools, Gr 5-8.
- 44. *The Farey Sequence: Adding Fractions the Easy Way* Baseball math leads to some really interesting results. Fun stuff!! John Titterton, Retired, Syosset Schools, Gr 5-8.
- 45. *Geometer's SketchPad* In this hands-on presentation you will learn how to use Geometer's Sketch Pad to construct lines, circles and polygons, plot points and functions, calculate lengths, measure angles and slopes. Graphing equations, plotting points and polygon transformations will also be explored. You will then be able to discover the specific properties of various geometric shapes and apply the Euclidean constructions. Bring your flash drive. **Peter Hollenstein**, Molloy College, Gr 6-8.
- 46. *Fibonacci Spirals* The Fibonacci mathematic sequence comes alive in nature during this workshop. Using a range of materials, participants will decipher the pattern of specific Fibonacci numbers and apply that pattern to the world around them. The combination of science, technology, the arts and mathematics makes this a perfect STEAM activity to be used in the classroom. *Joan Soldano*, Stardust Educational Consulting, Inc, Gr 6-8.
- 47. *Some of My Favorite Problems* A set of problems that you can immediately use in your classroom. Each problem can be done in several ways so that students can see a variety of solution techniques and increase the number of tools in their skill toolbox. **Arthur Kalish**, SUNY College at Old Westbury, Gr 6-8.
- 48. *Easy, Medium or Hard? Improving Confidence and Skills* Asking students "Easy, medium or hard?" helps teachers know what students think but more importantly it helps students know what students think! This question can help increase self-awareness, confidence and skills. We will use CCSS examples as well as other middle school content. Feel free to bring your own to evaluate and reflect on level of challenge! **Robin Schwartz,** College of Mount Saint Vincent, Gr 6-8.
- 49. *TI Tips for Success on Regents Exams* Build mathematical confidence in your students and get the most out of the TI graphing calculators that you use in your classroom. It is recommended to bring your own, but presenter will bring units to borrow for the session. **Dana Morse**, Texas Instruments, Gr 8.

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By Car: Take the Southern State Parkway (reached via the Cross Island Parkway from the Whitestone and Throgs Neck Bridges, or via the Belt Parkway) to Exit 20 southbound. Go south on Grand Avenue to Georgia Street. Turn right on Georgia and continue approximately 1/2 mile. The street name changes to Beech and ends opposite the campus.

By Bus or Train: Take the Long Island Railroad Babylon line from Pennsylvania Station in Manhattan, Flatbush Avenue Station in Brooklyn, or other Babylon line stations to the Rockville Centre Station. (Eastbound travelers inquire for possible change at Jamaica Station.) Bus and taxi service is available to and from campus. The N16 line of the Metropolitan Suburban Bus Authority stops at the campus entrance.



<u>REGISTRATION FORM</u> (Use this form ONLY if you do not register online)

Participant's Name			Check #	
·	Last Name	First Name		
Home Address				
Home or Cell Phone ()	(Please complete in case of snow emergency)		
Email address				
School Name				
District		Grade Level		

Please choose <u>eight</u> workshops, **4 from each column**, in order of preference. Use the numbers next to the description. Workshops will be assigned in the order in which we receive this form. Every effort will be made to honor your preferences. Since most workshops are scheduled for only one time slot, choosing fewer than 8 workshops can cause scheduling problems.

Column A (Session I & II)

Column B (Session III & IV)

First Choice	#]
Second Choice	#	1
Third Choice	#	,
Fourth Choice	#]

 First Choice
 #

 Second Choice
 #

 Third Choice
 #

 Fourth Choice
 #

Send this form and a check or purchase order for **\$45.00**, which includes lunch (full time students or student teachers **\$25.00**) made out to **Treasurer**, **N.C.A.M.S.** by **December 24, 2016** to:

Susan Greenberg 18 Briggs Road Plainview, NY 11803

makemathcount@aol.com

We look forward to your early response!

Register Early

NO ON-SITE REGISTRATION A CONFIRMATION WILL BE SENT VIA E-MAIL by January 5, 2017.