How to Make Math Count

A K-8 CONFERENCE PRESENTED BY

NASSAU COUNTY MATH TEACHERS ASSOCIATION (NCMTA) & ASSOCIATION OF MATH SUPERVISORS OF LONG ISLAND (AMSLI)



January 8, 2026 8am - 2:15pm



Molloy University

JOIN US FOR A SPECIAL DAY OF LEARNING, COLLABORATION, AND PRACTICAL INSPIRATION—DESIGNED SPECIFICALLY TO ADDRESS THE CURRICULUM AND ASSESSMENT NEEDS OF ELEMENTARY AND MIDDLE SCHOOL TEACHERS AND SUPERVISORS.

OUR WORKSHOPS FEATURE PROVEN STRATEGIES, CLASSROOM-READY MODELS, ENGAGING DEMONSTRATIONS, AND HANDS-ON ACTIVITIES YOU CAN IMPLEMENT RIGHT AWAY. YOU'LL LEAVE WITH IDEAS AND TOOLS YOU CAN USE THE VERY NEXT DAY.

WE'RE ALSO EXCITED TO WELCOME BACK OUR EXHIBITORS, GIVING YOU THE CHANCE TO CONNECT WITH VENDORS, EXPLORE NEW RESOURCES, AND DISCOVER MATERIALS THAT SUPPORT YOUR TEACHING GOALS.



How to Make Math Count Keynote Speaker Aaron Langenauer

"FROM PROMPTS TO PRACTICE: THE PATH TO AI-FLUENT TEACHING"



IN HIS KEYNOTE ADDRESS AARON WILL DISCUSS HOW TO MAKE AI BE YOUR PARTNER IN TEACHING, ONE WHOSE CONTRIBUTIONS ARE ONLY AS GOOD AS OURS. SEE HOW YOU CAN DEVELOP AI FLUENCY THROUGH AN UNDERSTANDING OF AI BEHAVIOR, THE FUNDAMENTALS OF PROMPT ENGINEERING, AND APPROACHES FOR EVALUATING THE USEFULNESS OF AI OUTPUT. AARON WILL SHARE CLASSROOM EXAMPLES AND STRATEGIES YOU CAN PUT TO IMMEDIATE USE, YOU'LL WALK AWAY EQUIPPED TO BEGIN YOUR JOURNEY TOWARD AI-FLUENT TEACHING. HIS KNOWLEDGE AND THOUGHT PROVOKING IDEAS ARE SURE TO INSPIRE YOU TO MASTER THIS NEW TECHNOLOGY.

Program Schedule		
Registration, Coffee, Commercial Exhibits	8:00-9:00	
Keynote Address with Aaron Langenauer	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	



How to Make Math Count How to Register

ONLINE REGISTRATION OPENS OCTOBER 24, 2025.

\$100 TEACHERS AND ADMINISTRATORS \$90 CURRENT AMSLI OR NCMTA MEMBERS \$50 FULL-TIME STUDENTS/STUDENT TEACHERS

REGISTRATION INCLUDES THE KEYNOTE SPEAKER, THREE WORKSHOPS, VENDORS, CONTINENTAL BREAKFAST, AND LUNCH.

TO REGISTER WITH A PURCHASE ORDER OR CREDIT CARD,
PLEASE GO TO

HTTPS://AMSLI.WILDAPRICOT.ORG/EVENT-6397928

REGISTER NOW TO AVOID A \$10.00 LATE FEE THAT WILL BE ASSESSED AFTER JANUARY 2, 2026.

ONCE YOU REGISTER, YOU WILL RECEIVE AN IMMEDIATE CONFIRMATION EMAIL, FOLLOWED BY A REMINDER EMAIL NO LATER THAN JANUARY 6, 2026. IF YOU DO NOT RECEIVE EITHER EMAIL, PLEASE CONTACT US AT HOWTOMAKEMATHCOUNTK8@GMAIL.COM

YOUR REGISTRATION MATERIALS WILL BE READY FOR YOU AT THE REGISTRATION DESK IN KELLENBERG HALL AT THE ANSELMA ROOM, ON JANUARY 8, 2026.

IF YOU HAVE ANY QUESTIONS ABOUT THE PROGRAM OR REGISTRATION, EMAIL US AT HOWTOMAKEMATHCOUNTK8@GMAIL.COM OR CALL SUZANNE GOLDER AT 516-662-8378.





COLUMN ASELECT FOUR SESSIONS FROM THIS SECTION.

1. UNPACKING THE NUMERACY BRIEFS FOR ELEMENTARY CLASSROOMS STACEY MOONEY, WS BOCES

GRADES K-2 TEACHERS AND ADMINISTRATORS

OVERVIEW OF THE NEWLY RELEASED EIGHT NUMERACY BRIEFS FROM NYSED. RECEIVE SUPPORT AND MANY HIGH-QUALITY ENGAGING RESOURCES TO TURN THEORIES INTO COMMON PRACTICE FOR K-2 EDUCATORS. EXAMINE THE STRUCTURE, PURPOSE, AND KEY MESSAGES OF THE NUMERACY BRIEFS, WITH A FOCUS ON EQUITY, ENGAGEMENT, AND MATHEMATICAL THINKING.

2. HOW TO SET UP MATH CENTERS IN A K-2 SETTING CATHLEEN RAKEMAN, MALVERNE GRADES K-2 TEACHERS AND ADMINISTRATORS

LEARN THE BENEFITS OF SETTING UP SMALL GROUP, HANDS-ON CENTERS TO HELP REINFORCE CURRENT AND PREVIOUS MATH TOPICS.

3. BUILDING THINKING CLASSROOMS IN THE PRIMARY GRADES DAWN J. LOPEZ, HEMPSTEAD PUBLIC SCHOOLS GRADES 1 AND 2 TEACHERS AND ADMINISTRATORS

BUILDING THINKING CLASSROOMS IN MATHEMATICS BY DR. PETER LILJEDAHL HELPED JUMPSTART MY QUEST TO INCREASE ENGAGEMENT IN MY CLASSROOM. WHEN STUDENTS DO THE THINKING, MAGIC HAPPENS IN THE ROOM EVERY DAY. PARTICIPANTS WITH PRACTICE THE FRAMEWORK AS UTILIZED IN A PRIMARY MATHEMATICS CLASS, SOLVING PROBLEMS COLLABORATIVELY AND ENGAGING IN VALUABLE MATHEMATICS DISCOURSE.

4. THE POWER OF MATH TALK: NUMBER TALKS IN ACTION JILLIAN GALLAGHER AND KIERA O'HARA, OCEANSIDE GRADES K-5 TEACHERS AND ADMINISTRATORS

THIS WORKSHOP WILL PROVIDE TEACHERS WITH A POWERFUL DAILY ROUTINE TO STRENGTHEN STUDENTS' NUMBER SENSE, MENTAL MATH SKILLS, AND CONFIDENCE IN SHARING MATHEMATICAL THINKING. IN THIS INTERACTIVE WORKSHOP, PARTICIPANTS WILL EXPLORE HOW TO STRUCTURE SHORT, FOCUSED CONVERSATIONS THAT INVITE STUDENTS TO SOLVE PROBLEMS MENTALLY, JUSTIFY THEIR REASONING, AND LEARN FROM EACH OTHER'S STRATEGIES. PARTICIPANTS WILL EXPERIENCE NUMBER TALKS FIRSTHAND, EXAMINE EXAMPLES OF STUDENT THINKING, AND PRACTICE FACILITATING DISCUSSIONS THAT HIGHLIGHT FLEXIBILITY WITH NUMBERS AND MULTIPLE SOLUTION PATHS. PARTICIPANTS WILL LEAVE WITH A TOOLKIT OF PRACTICAL ROUTINES, PROBLEM STRINGS, AND QUESTIONING TECHNIQUES TO IMMEDIATELY IMPLEMENT IN THEIR CLASSROOMS.

5. CREATING, ANALYZING, AND UTILIZING CFA'S ROXANNE BASANDELLA AND CHRISTOPHER ROGERS, WESTBURY K-5 TEACHERS AND ADMINISTRATORS

IN THIS HANDS-ON WORKSHOP, PARTICIPANTS WILL LEARN HOW TO DESIGN SHORT, STANDARDS-BASED COMMON FORMATIVE ASSESSMENTS (CFAS) THAT ALIGN WITH ANY MATH PROGRAM. THE SESSION WILL GUIDE EDUCATORS THROUGH THE PROCESS OF CREATING EFFECTIVE CFAS THAT PROVIDE MEANINGFUL DATA WITHOUT OVERWHELMING INSTRUCTION TIME. ATTENDEES WILL ALSO DEVELOP CUSTOMIZED DATA COLLECTION SPREADSHEETS TO HELP EFFICIENTLY IDENTIFY STUDENT STRENGTHS AND AREAS OF CONCERN. FINALLY, PARTICIPANTS WILL EXPLORE STRATEGIES FOR ANALYZING ASSESSMENT DATA AND USING IT TO PLAN TARGETED, RESPONSIVE INSTRUCTION THAT MEETS THE NEEDS OF ALL LEARNERS. WHETHER YOU'RE NEW TO CFAS OR LOOKING TO REFINE YOUR CURRENT PRACTICES, THIS WORKSHOP WILL PROVIDE PRACTICAL TOOLS AND STRATEGIES FOR ENHANCE YOUR INSTRUCTIONAL DECISION-MAKING.

HOW TO MAKE MATH COUNT JANUARY 8, 2026 COLUMN A

6. MATH VOCABULARY MAGIC ERICA RUGE AND TANISHA MASON, FREEPORT GRADES K-4 TEACHERS ONLY



MATH VOCABULARY IS AN ESSENTIAL COMPONENT FOR UNDERSTANDING MATH CONCEPTS AND DEVELOPING MATH SKILLS. IT IS IMPERATIVE THAT STUDENTS GRASP KEY VOCABULARY TERMS IN ORDER FOR THEM TO PROCESS AND MAKE SENSE OF THE MATERIAL. WITHOUT A SOLID UNDERSTANDING OF FOUNDATIONAL MATH CONCEPTS AND VOCABULARY, STUDENTS ARE MORE LIKELY TO DEVELOP MISCONCEPTIONS OR STRUGGLE WITH MORE ADVANCED SKILLS. MATH BUILDS PROGRESSIVELY LIKE A SERIES OF BUILDING BLOCKS; THEREFORE, MASTERING THESE FOUNDATIONAL TERMS AND CONCEPTS IS CRUCIAL FOR ALL STUDENTS.

7. USING IXL TO MEET THE NEEDS OF YOUR STUDENTS AND CREATE MEANINGFUL ASSESSMENTS PATRICIA EGAN, LAWRENCE

K-6 TEACHERS AND ADMINISTRATORS

CLASSROOM TEACHERS ARE BEING ASKED TO GIVE MORE FORMATIVE ASSESSMENTS SUCH AS STAR OR I-READY. HOWEVER, THESE ASSESSMENTS RARELY GIVE US THE VALUABLE INFORMATION WE NEED TO DIFFERENTIATE INSTRUCTION FOR OUR DIVERSE LEARNERS. IN THIS WORKSHOP WE WILL CREATE ASSESSMENTS USING IXL, REVIEW AND ANALYZE THOSE ASSESSMENTS AND THEN CREATE MATH LEARNING PLANS FOR OUR STUDENTS. PARTICIPANTS SHOULD HAVE ACCESS TO IXL THROUGH THEIR SCHOOL BEFORE ATTENDING.

8. PROMPT ENGINEERING DEEP DIVE: ADVANCING YOUR AI FLUENCY AARON S. LANGENAUER, PLAINVIEW-OLD BETHPAGE CSD GRADES K-8 TEACHERS AND ADMINISTRATORS

READY TO MOVE BEYOND BASIC PROMPTING AND ELEVATE YOUR PATH TO AI-FLUENT TEACHING? THIS ADVANCED WORKSHOP BUILDS ON THE KEYNOTE'S FOUNDATION TO EXPLORE POWERFUL PROMPT ENGINEERING TECHNIQUES INCLUDING ROLE-TASK ALIGNMENT, FEW-SHOT PROMPTING, USING DELIMITERS, AND MANAGING THE CREATIVITY-DETERMINISM SPECTRUM. YOU'LL DISCOVER HOW TO GUIDE AI BEHAVIOR THROUGH STRATEGIC FRAMEWORKS, CONTEXT ENGINEERING, AND PLAN-FIRST APPROACHES THAT WORK ACROSS ANY SUBJECT OR TASK. WALK AWAY WITH A TOOLKIT OF ADVANCED STRATEGIES THAT WILL DEEPEN YOUR AI FLUENCY AND TRANSFORM HOW YOU PARTNER WITH AI IN ALL ASPECTS OF YOUR WORK.

9. BUILDING THINKING CLASSROOMS-AN INTRODUCTION MELANIE ANDERSON, LEVITTOWN

K-8 TEACHERS AND ADMINISTRATORS

'MATH ON ITS FEET- BUILDING THINKING CLASSROOMS IN ACTION- AN INTRODUCTION K-8' DISCOVER PETER LILJEDAHL'S BUILDING THINKING CLASSROOMS FRAMEWORK AND LEARN HOW TO TRANSFORM MATH LESSONS INTO SPACES OF COLLABORATION AND CURIOSITY. IN THIS HANDS-ON WORKSHOP, YOU'LL, EXPLORE HOW TO FORM RANDOM GROUPS OF 3, CO-CREATE CLASSROOM NORMS WITH STUDENTS, IMPLEMENT NON-CURRICULAR TASKS, AND EXPERIENCE A COMPLETE BTC LESSON FROM DIRECT INSTRUCTION TO CONSOLIDATION. PARTICIPANTS WILL LEAVE READY TO TAKE THESE STRATEGIES TO THEIR OWN CLASSROOM THE VERY NEXT DAY. MELANIE HAS BEEN USING BTC FOR 5 YEARS AND THERE WILL BE TIME FOR Q AND A SPECIFIC TO PARTICIPANTS UNIQUE SITUATIONS. WEAR COMFORTABLE SHOES!

10. MAXIMIZING MATH GAMES AND ACTIVITIES ASHLEY CHARNOFF, PRIVATE CONSULTANT 2-4 TEACHERS AND ADMINISTRATORS

CHILDREN LEARN THROUGH EXPLORATION AND REPETITION. IN THIS WORKSHOP, WE WILL LOOK AT HOW NUMBER TALKS, PROBLEM SOLVING TASKS AND GAMES CAN BRING MATH ALIVE FOR STUDENTS. WE WILL PLAY GAMES, PROBLEM SOLVE, DO SOME NUMBER TALKS AND EXPLORE PROJECT BASED LEARNING.

HOW TO MAKE MATH COUNT JANUARY 8, 2026 COLUMN A

11. THE POWER OF VISUALIZATION & SPATIAL REASONING IN MATHEMATICS

LAURÉN TALLARINE, MANHASSET PUBLIC SCHOOLS K-6 TEACHERS AND ADMINISTRATORS



PARTICIPANTS WILL EXPERIENCE HANDS-ON TASKS THAT HELP STUDENTS BUILD CONFIDENCE AND COMPETENCE IN SPATIAL THINKING—AN ESSENTIAL SKILL FOR SUCCESS IN MATHEMATICS. WE'LL EXPLORE QUICK BLOCKS, DOT CARDS, NUMBER TALKS AND OTHER ACTIVITIES THAT CAN ENCOURAGE YOUR STUDENTS TO VISUALIZE MATHEMATICAL CONCEPTS.

12. PLAY-DOH- A MAGICALLY MORPHING MANIPULATIVE LISA PELUSO AND FRANCINE WISNEWSKI, MOLLOY UNIVERSITY

3-5 TEACHERS AND ADMINISTRATORS

IN THIS INTERACTIVE SESSION, PARTICIPANTS WILL EXPLORE THE IMPORTANCE OF USING MANIPULATIVES IN MATHEMATICS EDUCATION. THEY WILL SPECIFICALLY EXAMINE THE DYNAMIC AND DIVERSE ROLE THAT PLAY-DOH CAN PLAY IN MATHEMATICS TEACHING. TO ENSURE INSIGHT AND UNDERSTANDING, ATTENDES WILL PARTICIPATE IN STATION ROTATION ACTIVITIES THAT WILL ALLOW IMMEDIATE IMPLEMENTATION UPON RETURN TO THE CLASSROOM.

13. TEACHING KIDS THE WHY? MOVING BEYOND THE ALGORITHM AND LEARNING TO "SPEAK MATH"

TRICIA BLACK, NORTH MERRICK SCHOOLS 3-6 TEACHERS AND ADMINISTRATORS

WHEN STUDENTS UNDERSTAND WHY MATH WORKS, THEY CAN TRULY "SPEAK MATH" WITH CONFIDENCE AND MEANING. THIS INTERACTIVE SESSION EXPLORES WAYS TO BUILD CONCEPTUAL UNDERSTANDING ALONGSIDE PRECISE MATHEMATICAL LANGUAGE. PARTICIPANTS WILL ENGAGE IN HANDS-ON TASKS, NUMBER TALKS, AND DISCUSSION ROUTINES THAT HELP CHILDREN REASON, EXPLAIN, AND USE ACCURATE TERMINOLOGY TO DESCRIBE THEIR THINKING. LEAVE WITH PRACTICAL STRATEGIES TO STRENGTHEN REASONING, DISCOURSE, AND CONCEPTUAL CLARITY IN YOUR CLASSROOM.

14. PROBLEMS THAT COUNT FOR ALL OF YOUR STUDENTS JIM MATTHEWS, SIENA UNIVERSITY

3-8 TEACHERS AND ADMINISTRATORS

FED UP WITH CLASS AFTER CLASS OF TEACHING BASIC MATH RULES AND ALGORITHMS? LOOKING FOR SUGGESTIONS ON HOW TO TURN YOUR CLASSROOM INTO AN EXCITING THINKING AND PROBLEM-SOLVING CENTER? SEARCHING FOR INTERESTING MATHEMATICS CONTENT TO ENGAGE YOUR STUDENTS THE DAY BEFORE A HOLIDAY BREAK? THIS HANDS-ON SESSION IS WHAT YOU ARE LOOKING FOR. BONUS: THE SHARED PROBLEMS CAN BE USED WITH STUDENTS FROM 3RD GRADE TO CALCULUS.

15. MEETING OUR MIDDLES: DIFFERENTIATION IN EVERY MATH CLASSROOM ANGELICA CALABRO, SEWANHAKA CENTRAL HIGH SCHOOL DISTRICT 5-8 TEACHERS ONLY

DIFFERENTIATION DOESN'T HAVE TO FEEL OVERWHELMING—IT CAN BE BUILT RIGHT INTO YOUR DAILY LESSONS AND PRACTICES. IN THIS WORKSHOP, YOU'LL SEE HOW LEVELED PRACTICE PROBLEMS (BELOW, ON, AND ABOVE GRADE LEVEL) ALLOW ALL STUDENTS TO ACCESS THE SAME CONTENT THROUGH TIERED ENTRY POINTS. YOU'LL ALSO EXPLORE HOW "MATH MATS," SIMPLE GRAPHIC ORGANIZERS, PROVIDE STRUCTURE AND CLARITY FOR EVERYONE WHEN LEARNING NEW PROCEDURES. THESE UNIVERSAL SUPPORTS CAN BE GRADUALLY FADED, CREATING NATURAL SCAFFOLDS THAT PROMOTE INDEPENDENCE, PERSEVERANCE, AND GROWTH. THESE ARE JUST TWO OF THE MANY INTENTIONAL SIMPLE TOOLS WE WILL EXPLORE THAT BOTH DIFFERENTIATE AND PROVIDE YOU WITH INVALUABLE DATA. PARTICIPANTS WILL LEAVE WITH READY-TO-USE EXAMPLES AND TEMPLATES, A CLEAR FRAMEWORK FOR DESIGNING DIFFERENTIATED MATERIALS, AND THE CONFIDENCE TO MAKE MATH LESSONS MORE ACCESSIBLE, ENGAGING, AND EMPOWERING FOR ALL MIDDLE SCHOOL STUDENTS.

COLUMN A

16. MATH IN MOTION

DANA MORSE, TEXAS INSTRUMENTS

6-8 TEACHERS AND ADMINISTRATORS



MATH IS NO LONGER A SPECTATOR'S SPORT. WE WILL ENGAGE STUDENTS THROUGH CODE. STUDENTS CAN CREATE LIGHT, MUSIC, DRIVE A ROBOTIC CAR AND EVEN FLY DRONES FROM THE CODING ON THE TI CALCULATORS. NOT TO WORRY IF YOU DO NOT HAVE THE TECHNOLOGY, LEARN HOW TO BORROW FOR FREE. EXPLORE MATH CONCEPTS IN A WHOLE NEW WAY.

17. DON'T FORGET TO CIRCLE BACK: THE POWER OF SPIRAL REVIEW NORA GREENE, NORTH SHORE HEBREW ACADEMY 6-8 TEACHERS AND ADMINISTRATORS

ARE YOU TIRED OF STUDENTS FORGETTING CONCEPTS SHORTLY AFTER YOU TEACH THEM? THIS PRESENTATION WILL INTRODUCE YOU TO SPIRAL REVIEW, A POWERFUL TEACHING STRATEGY THAT SYSTEMATICALLY REVISITS KEY MATH TOPICS THROUGHOUT THE YEAR. LEARN HOW THIS SIMPLE, EFFECTIVE METHOD CAN IMPROVE LONG-TERM RETENTION, BUILD STUDENT CONFIDENCE, AND LEAD TO DEEPER MATHEMATICAL MASTERY. DISCOVER PRACTICAL TIPS FOR IMPLEMENTING SPIRAL REVIEW IN YOUR CLASSROOM.

18. GETTING STARTED WITH BUILDING THINKING CLASSROOM MADELINE TURILLI, MADELINE 4 MATH CONSULTING, INC. 6-8 TEACHERS AND ADMINISTRATORS

EXPERIENCE THE CORE PRACTICES OF BUILDING THINKING CLASSROOMS—VISIBLY RANDOM GROUPS, VERTICAL WHITEBOARDS, AND RICH TASKS—AND LEAVE READY TO LAUNCH THIS FRAMEWORK IN YOUR MIDDLE SCHOOL MATH CLASS.

19. COLLEGIAL CIRCLE FOR MATH SUPERVISORS JOHN TOWERS, LEVITTOWN ADMINISTRATORS ONLY

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.

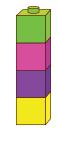
20. THE ROLE OF COUNTEREXAMPLES IN MATHEMATICS JAY SCHIFFMAN, ROWAN UNIVERSITY (RETIRED)

8TH GRADE TEACHERS AND ADMINISTRATORS

WHAT FAILS IN MATHEMATICS IS OFTEN AS IMPORTANT AS WHAT SUCCEEDS. THE USE OF COUNTEREXAMPLES CANNOT BE MINIMIZED AND OFTEN CAN ALLEVIATE COMMON MISCONCEPTIONS. THIS HANDS-ON WORKSHOP WILL FOCUS ON THE ROLE PLAYED BY COUNTEREXAMPLES IN MATHEMATICS SELECTED FROM THE AREAS OF NUMBER AND OPERATIONS, ALGEBRA, AND DISCRETE MATHEMATICS. WE WILL ALSO EXAMINE CLASSICAL THEOREMS IN THESE DISCIPLINES AND VIEW WHY ALL OF THE HYPOTHESES NEED TO BE SATISFIED AND FORM COUNTEREXAMPLES WHEN A HYPOTHESIS IS OR HYPOTHESES ARE DELETED. IN ADDITION, WE WILL CONSIDER WHAT MIGHT BE NEEDED TO SALVAGE FALSE STATEMENTS IN ORDER TO RENDER THEM TRUE. THE USE OF TECHNOLOGY AS MANIFESTED BY GRAPHING CALCULATORS IN ADDITION TO DELVING MORE DEEPLY IN THE SENSE OF PRODUCTIVE STRUGGLE IN NOT STOPPING AFTER MERELY A FEW CASES WILL PLAY A VITAL ROLE IN OUR EXCURSIONS.

COLUMN B SELECT FOUR SESSIONS FROM THIS SECTION.

21. THE GAME IS ON!
AUDREY BELLOVIN, GROWING MATHEMATICAL THINKERS
GRADES K-2 TEACHERS AND ADMINISTRATORS



PLAY PROVIDES A RICH CONTEXT FOR DEVELOPING YOUNG CHILDREN'S MATHEMATICAL THINKING. THIS WORKSHOP EXPLORES HOW GAMES CAN SERVE AS EFFECTIVE TOOLS FOR PROMOTING NUMBER SENSE, SPATIAL REASONING, AND PROBLEM-SOLVING SKILLS. PARTICIPANTS WILL EXAMINE HOW GAME-BASED LEARNING SUPPORTS KEY MATHEMATICAL PRACTICES SUCH AS STRATEGIC THINKING, REASONING, AND COMMUNICATION. THROUGH HANDS-ON EXPERIENCES AND REFLECTION, EDUCATORS WILL CONSIDER HOW GAMES CREATE OPPORTUNITIES FOR MEANINGFUL MATHEMATICAL DISCOURSE, COLLABORATION, AND DIFFERENTIATION. THE SESSION WILL ALSO HIGHLIGHT WAYS TO INTENTIONALLY SELECT AND ADAPT GAMES TO ALIGN WITH CURRICULAR GOALS WHILE MAINTAINING THE JOYFUL, EXPLORATORY NATURE OF PLAY THAT MOTIVATES YOUNG LEARNER.

22. FUN MATH GAMES THAT PROMOTE FLUENCY AND FLEXIBILITY IN BASIC ADDITION AND SUBTRACTION BARBRINA ERTLE, ADELPHI UNIVERSITY GRADES K-2 TEACHERS ONLY

GAMES SHOULD BE MORE THAN JUST CARDS OR DICE BEING ADDED TO AN ACTIVITY. THEY SHOULD BE MORE THAN JUST DOING MATH PROBLEMS FASTER THAN YOUR PEERS. IN THIS INTERACTIVE SESSION WE WILL EXPLORE QUALITIES THAT MAKE AN ACTIVITY REALLY A GAME THAT IS ENGAGING AND FUN, THAT PROMOTES MATHEMATICAL THINKING, NOT JUST DOING MATH PROBLEMS. WE WILL EXPLORE SOME DIFFERENT MATH GAMES THAT PROVIDE FUN AND MEANINGFUL PRACTICE OF ADDITION AND SUBTRACTION WITHOUT A TIMED PRESSURE, TO HELP CHILDREN DEVELOP DEEPER UNDERSTANDING OF AND FLUENCY WITH NUMBER OPERATIONS AND FLEXIBLE PROBLEM SOLVING.

23. USING TARGETED LEARNING TRAJECTORIES TO ACCELERATE STUDENT LEARNING

SUSAN RESNICK, SOUTH COUNTRY CONSULTANT, JACK BURKE, SOUTH COUNTRY SCHOOL DISTRICT, KAREN ERNST, BROOKHAVEN ELEMENTARY SCHOOL, AND DENISE YEE, KREAMER ST. ELEMENTARY SCHOOL K-6 TEACHERS AND ADMINISTRATORS

MATH INTERVENTION THAT IS SEPARATED FROM THE CORE CURRICULUM OFTEN DOES NOT TRANSFER TO CLASSROOM PERFORMANCE. COME LEARN HOW USING STRONG SCREENING TOOLS FOR EARLY INTERVENTION, CURRICULUM BASED LEARNING TRAJECTORIES AND SPECIFIC AND ACTIONABLE PROGRESS MONITORING HAS TRANSFORMED THE WAY WE VIEW INTERVENTION AND STUDENT LEARNING THAT TRANSLATES TO CLASSROOM SUCCESS.

24. COMBINING DESMOS TECHNOLOGY AND BUILDING THINKING CLASSROOM STRATEGIES TO SURFACE STUDENT THINKING JUSTIN SUDER, AMPLIFY PRODUCT SPECIALIST K-8 TEACHERS AND ADMINISTRATORS

VERTICAL WHITEBOARDS ARE ONE GREAT WAY TO SURFACE STUDENT THINKING. DESMOS CLASSROOM TECHNOLOGY IS ANOTHER. JOIN THIS INTERACTIVE SESSION, AND EXPLORE HOW DESMOS MATH SUPPORTS THE STRATEGIES SHARED IN THE POPULAR BOOK, BUILDING THINKING CLASSROOMS, INCLUDING:

- RICH TASKS
- COLLABORATIVE STUDENT GROUPS
- MULTIPLE MODALITIES FOR SURFACING STUDENT WORK
- QUESTIONING STRATEGIES
- LESSON FLOW



HOW TO MAKE MATH COUNT JANUARY 8, 2026 COLUMN B

25. CELEBRATE MATH WEEK! - HOW TO RUN A FUN MATH-THEMED WEEK-LONG EVENT IN YOUR SCHOOL (OR DISTRICT)

DR. JAMES GROVER, WEST ISLIP SCHOOLS

K-8 TEACHERS AND ADMINISTRATORS

IN THIS SESSION, PARTICIPANTS WILL LEARN HOW TO A RUN A SUCCESSFUL CELEBRATE MATH WEEK. THE PUROSE OF CELEBRATE MATH WEEK IS TO ENGAGE STUDENTS IN FUN MATH ACTIVITIES FOR ALL LEVELS THAT RELATE MATH TO STUDENTS' REAL LIFE. TEACHERS AND ADMINISTRATORS WILL LEARN HOW TO ORGANIZE AND COMMUNICATE THE EVENT, HOW TO MANAGE WINNERS AND PRIZES, AND TIPS FOR MAKING LASTING MEMORIES FOR STUDENTS.

26. IS MATH REALLY REAL? EXPLORING MATH IN THE REAL WORLD AND CRAFTING PROBLEMS FROM THE JOURNEY

DR. MARILYN M. DEPIETTO, HOFSTRA UNIVERSITY

K-8 TEACHERS ONLY

JOIN ME FOR A MATH WALK WHERE TEACHERS EXPLORE REAL-WORLD SITUATIONS TO WHICH THEY WILL APPLY MATHEMATICAL CONCEPTS. WE WILL IDENTIFY MATH IN OUR SURROUNDINGS AND THEN USE LITERACY SKILLS TO COLLABORATIVELY CRAFT QUESTIONS AND PROBLEMS THAT INCORPORATE THESE MATHEMATICAL IDEAS. PARTICIPANTS WILL BE ESCORTED ON A LITERAL 15-MINUTE WALK TO FIND REAL WORLD MATHEMATICS APPLICABLE TO STANDARDS FROM GRADES K THROUGH 8.

27. EQUITY IN ACTION: DIFFERENTIATING MATH INSTRUCTION FOR SPECIAL EDUCATION STUDENTS

DR. FLORENCE FRENKEL AND KIMBERLY MOROVICH, HENRY VISCARDI SCHOOL K-8 TEACHERS ONLY

THIS POWERFUL AND PRACTICAL COURSE IS DESIGNED FOR ELEMENTARY AND MIDDLE SCHOOL EDUCATORS WHO ARE COMMITTED TO PROVIDING EQUITABLE, RIGOROUS, AND STANDARDS-BASED MATH INSTRUCTION FOR STUDENTS WITH SIGNIFICANT DISABILITIES, INCLUDING THOSE WHO ARE NONVERBAL, MEDICALLY FRAGILE, HAVE PROCESSING CHALLENGES, OR ARE NON-AMBULATORY. PARTICIPANTS WILL LEARN HOW TO UPHOLD THE INTEGRITY OF THE NEW YORK STATE NEXT GENERATION MATHEMATICS LEARNING STANDARDS WHILE ADAPTING AND DIFFERENTIATING INSTRUCTION TO MEET THE UNIQUE NEEDS OF EACH AND EVERY STUDENT. THE COURSE EMPHASIZES MAINTAINING HIGH EXPECTATIONS FOR ALL LEARNERS, ENSURING ACCESS TO GRADE-LEVEL CONTENT THROUGH CREATIVE, FLEXIBLE, AND EVIDENCE-BASED INSTRUCTIONAL PRACTICES. THROUGH REAL-LIFE EXAMPLES, COLLABORATIVE PROBLEM-SOLVING, AND HANDS-ON EXPLORATION OF ADAPTED MATERIALS, PARTICIPANTS WILL GAIN STRATEGIES TO:

- · DIFFERENTIATE LESSONS WHILE ALIGNING WITH NYS MATH STANDARDS
- · DESIGN INCLUSIVE TASKS THAT PROMOTE ENGAGEMENT AND CONCEPTUAL UNDERSTANDING
- · USE MULTI-MODAL APPROACHES (VISUAL, TACTILE, AUDITORY, AAC) TO SUPPORT NONVERBAL AND MEDICALLY FRAGILE STUDENTS
- SCAFFOLD INSTRUCTION FOR STUDENTS WITH COGNITIVE AND PROCESSING CHALLENGES WHETHER YOU'RE A GENERAL EDUCATION TEACHER, SPECIAL EDUCATOR, OR MATH SPECIALIST, THIS COURSE WILL PROVIDE YOU WITH THE TOOLS AND MINDSET NEEDED TO ENSURE EVERY STUDENT—REGARDLESS OF ABILITY—CAN ACCESS AND SUCCEED IN MATH LEARNING.





HOW TO MAKE MATH COUNT JANUARY 8, 2026 COLUMN B

28. USING AI TO CHALLENGE AND SET GOALS FOR ADVANCED MATH LEARNERS

CAROLE KREISBERG AND MERYL YOFFE, HEWLETT-WOODMERE 1-6 TEACHERS ONLY

HOW CAN WE PUSH ADVANCED MATH LEARNERS BEYOND ROUTINE PRACTICE AND INTO MEANINGFUL CHALLENGE? THIS WORKSHOP EXPLORES STRATEGIES FOR DESIGNING RICH TASKS, SETTING AMBITIOUS YET ATTAINABLE GOALS, AND USING ARTIFICIAL INTELLIGENCE AS A PARTNER IN THE PROCESS.

29. FRACTION ACTION! UNLOCKING THE MYSTERY OF FRACTIONS IN 3RD & 4TH GRADE

AMY GIGLIOBIANCO, OCEANSIDE SCHOOL DISTRICT 3-4 TEACHERS AND ADMINISTRATORS

EXPLORE THE PROGRESSION OF FRACTION CONCEPTS ACROSS 3RD AND 4TH GRADES, GAINING A CLEAR ROADMAP OF STUDENT LEARNING MILESTONES. DEEPEN YOUR UNDERSTANDING OF HOW FRACTION KNOWLEDGE DEVELOPS—FROM INITIAL PART-WHOLE REASONING TO MORE COMPLEX EQUIVALENCE AND COMPARISON SKILLS. DISCOVER CONCRETE, CLASSROOM-TESTED STRATEGIES AND HANDS-ON ACTIVITIES DESIGNED TO SUPPORT ALL LEARNERS IN BUILDING STRONG, LASTING FRACTION UNDERSTANDING. EMPOWER YOUR STUDENTS TO CONFIDENTLY NAVIGATE FRACTIONS WITH CONCEPTUAL CLARITY WHILE ENHANCING YOUR INSTRUCTIONAL TOOLKIT.

30. BUILDING A CLASSROOM OF THINKERS ELIZABETH CORRELL, SOUTH HUNTINGTON UFSD 3-6 TEACHERS AND ADMINISTRATORS

WHY DO YOU TEACH? IF YOU TEACH TO CREATE A COMMUNITY OF KIND, HARD-WORKING, HINKERS, THEN THIS WORKSHOP IS FOR YOU! BASED ON PETER LILJEDAHL'S BUILDING THINKING CLASS BOOMS METHODS OF TEACHING, AND COUPLED WITH SOME OF MY OWN STRATEGIES, I WILL INTRODUCE THE TOP FACTORS THAT IMPACT THINKING IN A CLASSROOM. I WILL ALSO MODEL WAYS AND OFFER RESOURCES FOR YOU TO SHIFT TO NEW WAYS OF PRESENTING INFORMATION TO YOUR STUDENTS.

31. THINK LIKE AN OLYMPIAN: DESIGNING OLYMPIAD-STYLE CONTENT FOR ALL LEARNERS

EVAN CURRAN, MILLER PLACE SCHOOL DISTRICT 3-8 TEACHERS AND ADMINISTRATORS

DISCOVER HOW TO INFUSE YOUR MATH CURRICULUM WITH THE CREATIVITY AND CHALLENGE OF MATH OLYMPIAD-STYLE PROBLEMS. LEARN PRACTICAL WAYS TO DESIGN TASKS THAT FOSTER REASONING, FLEXIBILITY, AND JOY IN MATHEMATICAL DISCOVERY. PARTICIPANTS WILL LEAVE WITH READY-TO-USE EXAMPLES AND STRATEGIES FOR DESIGNING THEIR OWN ENRICHMENT PROBLEMS.

32. MULTIPLYING AND DIVIDING WITH RATIO TABLES ELANA REISER, ST. JOSEPH'S UNIVERSITY 3-8 TEACHERS ONLY

LEARN HOW RATIO TABLES CAN BE USED FOR MULTIPLYING AND DIVIDING. THIS WILL EMPHASIZE UNDERSTANDING AND PATTERN MAKING RATHER THAN MEMORIZING FORMULAS. WE WILL LOOK AT WHOLE NUMBER EXAMPLES AS WELL AS DECIMALS.



COLUMN B

33. BRINGING THE GRADES 4-6 NYS COMPUTER SCIENCE & DIGITAL FLUENCY STANDARDS TO LIFE IN MATH CLASS PATTI JEAN DIECK AND CHRISTOPHER M. SARLO, AMITYVILLE UFSD

4-6 TEACHERS AND ADMINISTRATORS

WORKSHOP PARTICIPANTS WILL MOVE, THINK, AND CREATE AS WE EXPLORE HOW THE NEW YORK STATE COMPUTER SCIENCE AND DIGITAL FLUENCY (CS&DF) STANDARDS CAN ENERGIZE YOUR MATH CLASSROOM! IN THIS HANDS-ON SESSION FOR GRADES 4-6 EDUCATORS, PARTICIPANTS WILL DIVE INTO FUN, READY-TO-USE ACTIVITIES THAT CONNECT MATH CONCEPTS WITH COMPUTATIONAL THINKING, DATA ANALYSIS, AND DIGITAL CREATION. EACH TASK IS CLASSROOM-TESTED, EASY TO ADAPT, AND DESIGNED TO HELP STUDENTS THINK LIKE MATHEMATICIANS AND DIGITAL PROBLEM SOLVERS. LEAVE WITH A TOOLKIT OF ENGAGING IDEAS YOU CAN IMPLEMENT TOMORROW—NO TECH EXPERTISE REQUIRED!

34. UNLOCKING WONDER: THE CONTEST LESSON THAT CHANGES MINDS DENNIS MULHEARN, VALLEY STREAM CENTRAL SCHOOL DISTRICT (RETIRED) 4-6 TEACHERS AND ADMINISTRATORS

EXPERIENCE THE WONDER THAT PROBLEM SOLVING BRINGS TO YOUR CLASSROOM! IN THIS INTERACTIVE SESSION, YOU'LL STEP INTO YOUR STUDENTS' SHOES, WORKING SOLO OR IN TEAMS TO TACKLE MULTIPLE-SOLUTION QUESTIONS. DISCOVER HOW EXPLORING DIVERSE APPROACHES NOT ONLY DEEPENS UNDERSTANDING BUT ALSO EMPOWERS EVERY STUDENT TO CONTRIBUTE THEIR UNIQUE INSIGHTS. SEE HOW MULTI-APPROACH PROBLEMS BOOST ENGAGEMENT AND REINFORCE LEARNING ACROSS A VARIETY OF TOPICS.

35. DEMYSTIFYING AI IN MATH: PRACTICAL CLASSROOM STRATEGIES PROFESSOR SUBASH MIDHA, NYU AND SOUTH ASIAN AMERICAN WOMEN'S ALLIANCE(SAAWA)

6-8 TEACHERS AND ADMINISTRATORS

DEMYSTIFYING AI IN MATH: PRACTICAL CLASSROOM STRATEGIES SIMPLE, EFFECTIVE WAYS FOR MATH TEACHERS TO HARNESS AI IN EVERYDAY TEACHING DEMYSTIFYING AI IN MATH TEACHING, THIS SESSION SHOWS HOW AI CAN GENERATE PROBLEMS, SUPPORT DIFFERENTIATION, AND SAVE PLANNING TIME. TEACHERS WILL EXPLORE PRACTICAL STRATEGIES TO ENHANCE LESSONS WHILE KEEPING CREATIVITY AND HUMAN CONNECTION CENTRAL.

36. DO NOWS DONE BETTER-FIFTEEN CATEGORIES OF FIVE-MINUTE PERIOD OPENING ACTIVITIES

DR. ROBERT GERVER, STONY BROOK UNIVERSITY

6-8 TEACHERS ONLY

FIFTEEN DIFFERENT TYPES OF ACTIVITIES THAT TAKE ONLY FIVE MINUTES AT THE BEGINNING OF EACH MATH CLASS WILL BE PRESENTED. CATEGORIES INCLUDE QUIZZES, MANIPULATIVE READINESS, DATA ENTRY, FOREIGN TEXTS, QUOTES, EXPLORATIONS, HOMEWORK-BASED, PARTNER PROBLEMS, WHAT'S THE PROBLEM? FIND AND FIX, AND MORE. THE ACTIVITIES HAVE BEEN FIELD-TESTED AND REVISED FOR OVER FOUR DECADES, AND THEY WILL REALLY HELP YOUR MATH CLASS GET OFF TO A PURPOSEFUL, PUNCTUAL START.

37. DICE: NOT JUST FOR GAMES SARA WOLF, DISTRICT 7/IS 584 BRONX 6-8 TEACHERS ONLY

BORED OF THE SAME OLD WORKSHEETS? WHAT IF STUDENTS COULD CREATE THEIR OWN PROBLEMS? WHAT IF YOU CAN CHANGE DIFFICULTY LEVEL JUST BY SWITCHING OUT SOME DICE? TEACHERS WILL SEE DIFFERENT WAYS YOU CAN USE DICE TO ENGAGE STUDENTS IN PRACTICE ACROSS DIFFERENT GRADE LEVELS ACROSS DIFFERENT STANDARDS. PARTICIPATES WILL WALK AWAY WITH DIFFERENT BLANK MATS TO USE RIGHT AWAY AS WELL AS A WAY TO MAKE YOUR OWN POLYHEDRAL DICE.

COLUMN B

38. TASK FOR TEN: MOTIVATING STUDENTS THROUGH DAILY TASKS JOE LOMBINO AND BRIAN SMITH, PLAINEDGE UFSD 6-8 TEACHERS ONLY

LOOKING TO CREATE AN IMPACTFUL AND MEANINGFUL START TO YOUR CLASS WITH CREATIVE DAILY TASKS? THIS WORKSHOP WILL SHOW TEACHERS HOW TO CREATE DIFFERENT CURRICULAR AND NON-CURRICULAR TASKS THAT FOSTER STUDENT ENGAGEMENT, WHILE PROMOTING RICH DISCUSSIONS. THE WORKSHOP WILL COVER FLIPPITY, A SEAT-SHUFFLING WEBSITE THAT CAN ELIMINATE SEATING CHARTS FROM YOUR TO-DO LIST, AS STUDENTS ARE RANDOMLY GROUPED EACH DAY TO PROMOTE STUDENT ENGAGEMENT. LET THE FIRST TEN MINUTES OF CLASS HOOK YOUR STUDENTS EACH DAY AND SET THE TONE FOR A MORE COLLABORATIVE CLASSROOM ENVIRONMENT. RESOURCE: BUILDING THINKING CLASSROOMS

39. UTILIZING DESMOS AS A REGENTS CALCULATOR DR. ROBERT TESEO, EAST WILLISTON, AND DR. JOANNE FENNESSY, COMMACK 7-8 TEACHERS AND ADMINISTRATORS

IF YOUR DISTRICT IS CONSIDERING, OR TAKING FIRST STEPS INTO UTILIZING DEMOS FOR A REGENTS EXAM, THIS WORKSHOP WILL TALK ABOUT THE PROCESS, ADVANTAGES, AND DISADVANTAGES WITH THIS TOOL.

40. BUILDING THINKING CLASSROOMS FOR ADMINISTRATORS JOHN TOWERS, LEVITTOWN

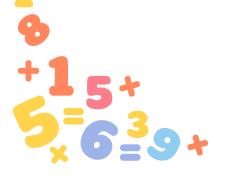
ADMINISTRATORS ONLY

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.

41 RICH PROBLEM SOLVING UTILIZING BASIC ALGEBRA AS A POWERFUL DEDUCTIVE REASONING TOOL

JAY SCHIFFMAN, ROWAN UNIVERSITY (RETIRED)
8 TEACHERS AND ADMINISTRATORS

WE EMPLOY ALGEBRA AS A POWERFUL DEDUCTIVE REASONING TOOL TO JUSTIFY CONJECTURES INVOLVING NUMBER PUZZLES, MAGIC SQUARES, DIVISIBILITY TESTS, AND ARITHMETIC, GEOMETRIC, AND RECURSIVE SEQUENCES. PARTAKING IN RICH PROBLEM SOLVING IN CONTRAST TO MERE SYMBOLIC MANIPULATION, WE IMPART THAT ALGEBRA IS A PALATABLE BRANCH OF MATHEMATICS, NOT MERELY THE INTENSIVE STUDY OF THE LAST THREE LETTERS OF THE ALPHABET X, Y, AND Z! THIS IS PARAMOUNT IN THE SPIRIT OF FOSTERING AN ENGAGING AND INCLUSIVE COMMUNITY TO AMPLIFY ALGEBRA AS A JOYFUL AND RELEVANT BRANCH OF MATHEMATICS THAT ALL STUDENTS CAN SUCCESSFULLY PARTAKE IN.







WORKSHOP SESSION AND FLOOR LOCATION COLUMN A COLUMN B

	OLUM	IN A	
Workshop	K-2	3-5	6-8
1	×		
2	Х		
3	X		
4		X	
5		Х	
6		X	
7		Х	
8		X	
9			Х
10		Х	
11		Х	
12		Х	
13		Х	
14			Х
15			Х
16			Х
17			Х
18			Х
19			Х
20		X	

Workshop	K-2	3-5	6-8
21	Х		
22	Х		
23		Х	
24		Х	
25		Х	
26		Х	
27	Х		
28		Х	
29		Х	
30		Х	
31		Х	
32		Х	
33		Х	
34		Х	
35			Х
36			Х
37			Х
38			Х
39			Х
40			X
41			Х



THIS CONFERENCE WILL FOLLOW A MATH CAMP FORMAT, ALLOWING YOU TO CREATE YOUR OWN SCHEDULE AND ATTEND SESSIONS OF YOUR CHOICE ON A FIRST-COME, FIRST-SERVED BASIS.

TO HELP US PLAN, PLEASE SELECT YOUR TOP FOUR SESSION CHOICES—IN ORDER OF PREFERENCE. USE THE NUMBERS LISTED NEXT TO EACH SESSION DESCRIPTION WHEN MAKING YOUR SELECTIONS. YOU WILL NEED THIS INFORMATION WHEN YOU REGISTER.

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

REGISTRATION IS AVAILABLE ONLINE ONLY HTTPS://AMSLI.WILDAPRICOT.ORG/EVENT-6397928

ALL PO'S AND CHECKS SHOULD BE MAILED TO TARA MAUER, AMSLI, C/O OCEANSIDE HIGH SCHOOL, 3160 SKILLMAN AVE. OCEANSIDE, NY 11572.

DON'T DELAY, REGISTRATION FILLS UP QUICKLY AND YOU DON'T WANT TO BE CLOSED OUT! NO ON-SITE REGISTRATION WILL BE ACCEPTED!

QUESTIONS: HOWTOMAKEMATHCOUNTK8@GMAIL.COM







Molloy University 1000 Hempstead Ave Rockville Centre, NY





