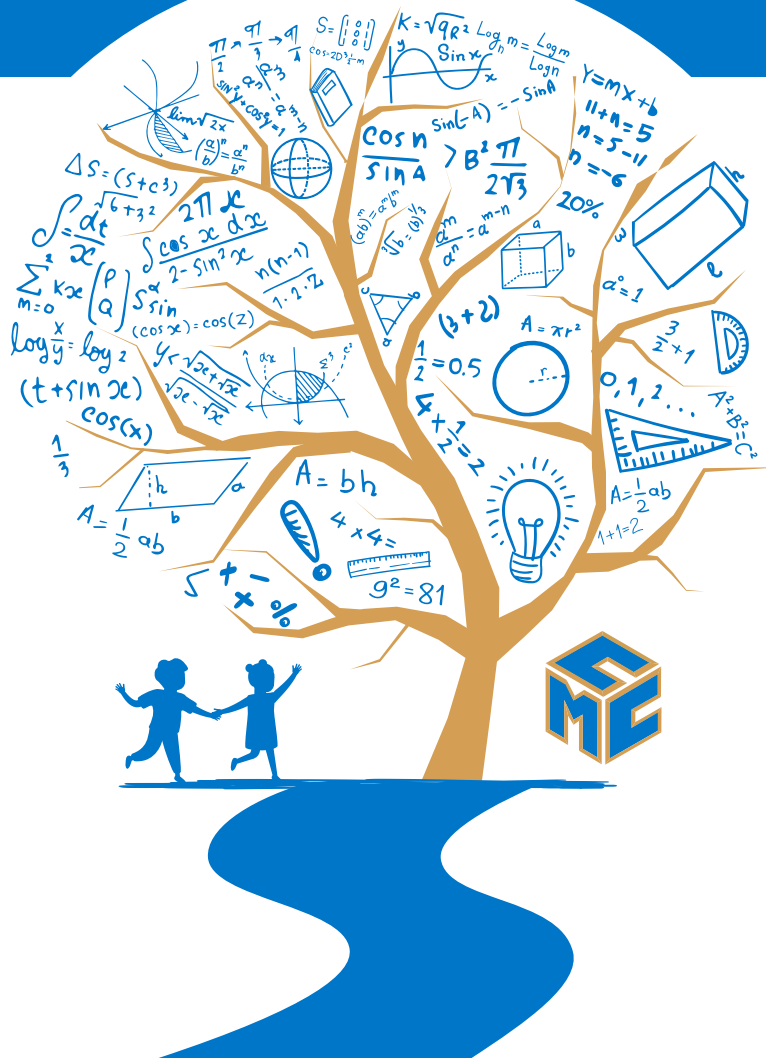


CMC-N Mathematics Conference

ASILOMAR 2023

www.cmc-math.org



PATHWAYS TO MATHEMATICAL POWER

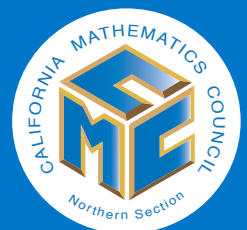
California Mathematics Council - Northern Section - Asilomar 2023

66th Annual Conference

December 1–3, 2023

Asilomar Conference Grounds

Pacific Grove, CA



welcome to Asilomar

Take time to explore mathematical ideas and teaching for understanding. Whether you're a first-timer or a veteran of many Asilomar conferences, we hope this brochure will help you find the exciting opportunities that await you at this year's conference!

A Place to Get New Ideas...

Asilomar is a place to get lots of new lessons and ideas to use in your classroom. Attend sessions led by teachers and educators from all levels, and all over California, the United States, and beyond. Experience hands-on workshops and fun-filled activities you will want to share with your colleagues and students. The Asilomar conference provides over 100 sessions in a three-day program that offers a rich variety of experiences to suit every grade level and to cover all strands of mathematics.

A place to learn what is new in mathematics education...

Come to Asilomar to learn about and discuss the latest mathematics education news, information and issues. We are proud to have an outstanding group of presenters—people at the forefront of change in mathematics instruction. Discover how changes in state and national policy, teaching techniques, materials, texts and assessment will affect your classroom, your students and your teaching.

A place to network...

Hundred teachers from all levels attend Asilomar each year. Take this opportunity to enlarge your network of colleagues who can assist you in building your math program. Become part of the CMC network that supports math teachers throughout California. Meet new friends who share your interests and love of teaching.

A wonderful place to be...

Asilomar is a beautiful State Park. You will encounter many species of wildlife as you meander through the grounds or take the boardwalks to the dunes. Join us!



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Evaluate the conference by December 31, 2023 and you will be entered in a drawing for **FREE** conference registration and on grounds housing for next year.



Go to <https://bit.ly/AsilomarConfEval> to enter to win a **free** registration and **free** housing at next year's conference by completing the **Conference Evaluation**.

	Time	Event	Location
Friday	12:30pm	Pre-conference registration and materials pick-up	Surf & Sand
	Pre-Conference 1:30–4:30pm (details on page 3)	Zachary Champagne, Making It Count	Triton
		Dance, Kristina, Explorations in Data Science from YouCubed	Heather
		Lambert, Rachel, UDL Math and GAMES!	Acaia
		Morris, Kathy, Rejuvenating your Fractions Lessons!	Evergreen
		Orton, Chase, A Better Way to Grow Teachers	Toyon
	Rendon, Sharon, How Might We Rethink Intervention?	Oak Shelter	
3:00–7:00pm	Registration and materials pick up	Surf & Sand	
6:00–7:00pm	Dinner	Dining Hall	
1:30–7:30pm	Exhibits (materials for purchase)	Merrill Hall	
4:00–6:00pm	First Time at Asilomar	Merrill Hall	
7:30–9:00pm	Keynote Session: (information on page 5) Dr. Kristopher Childs , 5 Keys to Creating an Equitable Mathematics Classroom (Note: When maximum capacity is reached in Chapel, this session will be live streamed in Fred Farr Forum and Kiln.)	Chapel <i>(Live streamed in Fred Farr Forum and Kiln)</i>	
Saturday	7:00–8:15am	Breakfast	Dining Hall
	7:30–9:30am	First Time at Asilomar	Merrill Hall
	7:30am–12:00pm	Registration and materials pick up	Surf & Sand
	7:30am–4:30pm	Exhibits (materials for purchase)	Merrill Hall
	7:45am	Coffee and tea	Merrill, Chapel, Scripps patio
	8:00am–12:00pm	Sessions (matrix begins on page 10, speaker section begins on page 12)	
	9:00am–5:00pm	CMC Affiliate Hub (refer to pages 7 and 11)	Manzanita
	11:00am–3:00pm	Snack Break	Chapel
	12:00pm	Exhibit Drawing	Merrill Hall
	12:00–1:00pm	Lunch (refer to page 8)	Dining Hall
	12:15–1:00pm	CMC-North Early Childhood Math Committee planning meeting (refer to page 7)	Triton
	1:00–5:00pm	Sessions (matrix begins on page 10, speaker section begins on page 12)	
	6:00–7:00pm	Dinner	Dining Hall
	7:00–8:00pm	New Teacher Social (refer to page 7)	Fred Farr Forum
8:00–10:00pm	President’s Party and Affiliate Social!	Fred Farr Forum	
Sunday	7:30–9:00am	Breakfast (pick-up box lunch)	Dining Hall
	8:00am	Coffee/Tea	Chapel
	8:00–8:45am	CMC-North Membership Meeting	Surf & Sand
	9:00–10:15am	Morning Keynote Session: (information on page 6) Courtney Ortega , Pathways to Engagement: Belonging in a Math Classroom	Chapel
	10:15–10:45am	Coffee Break	Chapel
	10:45am–Noon	Mid-morning Keynote Session: (information on page 6) Zachary Champagne , Making Math More Social	Chapel

Champagne, Zachary
Making It Count

During this interactive session, we'll focus on the research and teaching ideas related to how children come to understand counting and cardinality. Along the way we'll investigate the expectations of students in TK and Kindergarten, view a variety of video clips of students at varying levels along the path as they learn to count, and investigate the future ideas that are impacted by a student's understanding of counting and cardinality. **PreK–2 | PRS | Triton**

Dance, Kristina
Explorations in Data Science from YouCubed

Data Science is a new mathematics course that is opening up what it means to do mathematics. The YouCubed data science curriculum provides access to relevant and authentic mathematics learning for ALL students. In this workshop teachers will dive into data science activities that open students eyes to what doing maths involves as well as showing new pedagogical approaches to teaching data science that can be used in any classroom. **9–12 | PRS | Heather**

Lambert, Rachel
UDL Math and GAMES!

Using UDL Math, we explore how intervention needs to engage students as whole beings, including engagement, agency, multiple representations, and the development of strategic thinking. We share our current research GAMES (Games for Access to Mathematical Engagement). In this session, participants will engage in playing some of the games we recommend, analyzing the mathematics students engage in, and brainstorming how to strategically use games to help students engage in unfinished learning. **Leadership | PRS | Acacia**

Morris, Kathy
Rejuvenating your Fractions Lessons!

Let's face it—"I do, We do, You do" doesn't cut it when it comes to teaching fractions. No matter how hard your students (or you) work, many still struggle to "do" fractions by unit's end. Come explore lesson routines designed to build students' curiosity, reasoning, autonomy, and competence. Viewing fractions as a natural expansion of the Number System, we'll practice leveraging students' prior knowledge (decomposition, friendly numbers...) and predictable hurdles (regrouping, equivalence...) to help them make sense of the hardest topic in elementary math. **3–5 | PRS | Evergreen**

Orton, Chase
A Better Way to Grow Teachers

Challenging times require us to re-imagine the professional development currently offered to math teachers and rethink how we cultivate the craft of equity-focused math teaching. This session outlines a process for creating and supporting a teacher-centered culture of professionalism—one that reignites teachers' inner fire and empowers them to make meaningful improvements in their instructional craft that enhances student identity and agency. Teachers and leaders welcomed. **Coaches/Teacher Ldrs | PRS | Toyon**

Rendon, Sharon
How Might We Rethink Intervention?

Do you have students who struggle and need intervention? What is the answer? Pre-teach? Vocab drill? More practice? Join me to experience intervention redesigned; a course focusing on relationships, problem-solving, and enjoying mathematics. Experience activities to support students as they rebuild their mathematical identity and read comments from teacher surveys. **6–8 | PRS | Oak Shelter**



Did you know...The conference is entirely run by a small team of volunteers—mostly full time teachers! To get involved, drop by the CMC-North Affiliate hub in Manzanita!



Chapel | 7:30–9:00

(Live streamed in Fred Farr Forum and Kiln)

Dr. Kristopher Childs seeks to create a movement through educating, advocating, and inspiring individuals to pursue academic excellence. Due to his student-centered approach to teamwork, faculty, staff, and students recognize him as a visionary and collaborative leader. Dr. Child's approach helps both school and district teams that he consults achieve common goals and improve student academic success and students' classroom experiences.

5 Keys to Creating an Equitable Mathematics Classroom

Every student deserves a high-quality mathematics education experience. This experience starts with ensuring they are in an equitable mathematics classroom. In this session you will learn the five keys to creating an equitable mathematics classroom and gain practical strategies you can immediately implement in your environment.

Join us next year (July 15-17) in Denver for HIVE 2024; tickets on sale now, go to www.openupresources.org



OPEN-UP
resources®

Opening Doors to Education Equity



Chapel | 9:00–10:15

Courtney Ortega is a National Board Certified Teacher and taught math and science in middle schools and high schools across the Bay Area before transitioning to district leadership. She is currently the Secondary Math Coordinator for Oakland Unified School District in California. Courtney has developed professional learning systems grounded in lesson study, the TRU math framework, and site-based content coaching. She believes in nurturing collaborative structures that empower teams of teachers to engage in student-centered inquiry. Outside of her work in education, Courtney enjoys dancing, reading, and spending time with her husband and son.

Pathways to Engagement: Belonging in a Math Classroom

One pathway to mathematical power includes building our students' sense of belonging. Beyond feeling welcome, safe, and engaged, belonging includes our identity, our culture, and our roots. The way our students learn matters, and we need to leverage their cultural and linguistic assets in order to maximize deep mathematical understanding. Let's examine instructional routines that can nurture and sustain belonging in our math classrooms.



Chapel | 10:45–noon

Zachary Champagne has been involved in mathematics education for 24 years. He believes that each and every student has important mathematical ideas and works to share his passion and love for mathematics with teachers around the country. Zak is currently serving as a Lead Teacher at The Discovery School in Jacksonville, Florida where he teaches third and fourth grade students. He has received many state and national awards for excellence in teaching, including the Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST), Duval County Teacher of the Year, Finalist for Florida Teacher of the Year, and the Kenneth Kidd Mathematics Educator of the Year award. He tweets at @zakchamp and writes at www.zakchamp.com

Making Math More Social

How can we empower our students to engage with and listen to each other's ideas? During this session, we'll explore how to get students talking about math with a focus on how they talk and listen to each other. Often, math discussions are centered on one teacher and a few students. Let's shift the focus to investigating how our students communicate about math with each other. Come play with some math ideas and learn how our students are engaging with each other.

President's Party

Come join us at our President's Party, sponsored by CMC-North

Please come enjoy some appetizers and desserts with a no host bar. Network, meet folks from your affiliate, honor our colleagues receiving awards.

Laugh, dance and relax after a day of learning.

Saturday, 8:10–10:00pm | Fred Farr Forum and Patio

Social Gatherings

What's a better way to get to know more about local CMC Affiliates than to mingle and network with other people from the affiliate groups?

Join us for appetizers and beverages!

CMC-North Affiliates

Saturday, 8:00–10:00pm | Fred Farr Courtyard

CMC-North Local Affiliate Groups

- Math Council of California's Far North, CMCFN
- Mt Lassen Math Council, MLMC
- Northern Nevada Math Council, NVMC
- Sonoma County Math Council, SCMC
- Sacramento Area Math Educators, SAME
- Math Educators of Solano County, MESC
- San Francisco Math Teachers Association, SFMTA
- Alameda Contra Costa Math Educators, AC3ME
- Santa Clara Valley Math Association, SCVMA
- Monterey Bay Math Council, MBMC



CMC-North Affiliate Hub will be open Saturday, 9:00am–5:00pm in Manzanita. Don't forget to stop by!

Top reasons why you should stop by the Hub!

1. Enter to win free registration for the 2024 conference!
2. Find out what CMC can do for you
3. Play some really cool math games
4. Apply for grants to help you teach math
5. Nominate someone special for a CMC award
6. Snacks and beverages will be available
7. Take a selfie in front of the CMC wall
8. Pick up some fabulous CMC Swag! Who doesn't want that?
9. Make connections with your local affiliate!

CMC-North Early Childhood Math Committee planning meeting

Come be a part of the discussion about the formation of a new committee in CMC-North focused on early childhood mathematics. **Saturday, 12:15–1:00pm | Triton**

Join us for a **New Teacher Social!**

Co-sponsored by **CMC-North**, hand2mind and MIND Education. Come to network, catch up, play games, and reenergize. We'll have drinks, snacks, and prizes.

Saturday, 7:00–8:00pm | Fred Farr Forum



The CMC-North Asilomar Conference is at capacity and you may find your preferred session is closed.

What to do if your session is full?

Check our our list of suggestions!

- See what you can learn with the Exhibitors in Merrill Hall (pg 30-31)
- Apply for a Mini-Grant in Oak Knoll (pg 33)
- Be early to your next session & refresh yourself with a walk on the beach
- Pay it forward and share one of your favorite lessons in Manzanita, the Make-It, Take-It room.

The conference is entirely run by a small team volunteers-mostly full time teachers. Drop by CMC-North Affiliate Hub in Manzanita to get involved.

CMC-NORTH OFFICERS

President..... Mary Ann Sheridan
President Elect..... Tim Weekes
Vice President Beth Baker
Treasurer..... Dennis Kombe
Secretary..... Alison Nash

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Beth Baker

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Beth Baker, Cathy Sinnen, Ali Brewer

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Linda Flood, Rebecca Lewis

Registration
Kayce Mastrup

Exhibits
Chris Tsuji, Mark Mosheim,
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NCTM Representatives and Sales
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Mini Grant Awards
Linda Flood, Rebecca Lewis

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Angelica Trejo-Ortiz, Jinne Webb

Program Logo and T-shirt Design
Kaitlyn Allen

Social Media
Sandhya Raman

CMC Affiliate Hub
Joan and Rick Easterday,
Kathlan Latimer, Linda Flood

**First Timers Table and
New Teachers Social**
April Goodman-Orcutt, Sherry Rodgers

CONFERENCE INFORMATION

Sessions

You will find three session types: Presentations, Interactive and Make-It, Take-It sessions.

Presentations (PRS)

Will be speaker-focused, but you may expect discussion, explorations and/or some activity.

Interactive Sessions (INT)

Provide for discussion and exploration. Participants will be involved in activities and interaction with others.

Make-It, Take-It (MITI)

Make your own models for classroom projects and activities. Please join one of our scheduled sessions. Participation is limited to twenty-five. Advanced registration is not required.

Session Capacity/Seating

We have made every attempt to provide adequate seating for participants at the conference. However, to ensure your safety and adhere to fire regulations, the number of participants allowed in each meeting room will be limited to the number of seats approved by the Fire Marshall. Anyone sitting on the floor or standing will be asked to leave the room. Please check the Program Matrix (pages 10–11) for the seating capacity of each room. **All seats are available on a first-come, first-served basis.**

Exhibits

Some speakers have products as an integral part of their presentation. Also see the latest materials and textbooks from other companies.

Friday, Merrill Hall, 1:30–7:30pm

Saturday, Merrill Hall, 7:30am–4:30pm

Parking

Since parking space is very limited, on-grounds parking is reserved for registrants housed on grounds. Others must park outside the main entrance to Asilomar.

Disabled Services

Jitney service and white courtesies phones are available on Asilomar Grounds. Disabled access is available on the Asilomar grounds.

Electronic devices

Out of respect for presenters and other participants, please silence or turn off electronic devices during sessions.

Program Changes

Although this book contains the latest information available as of the printing deadline, some last-minute changes are inevitable. We apologize for any inconvenience that may result, and we appreciate your understanding.

Refreshments

Coffee and tea are available during the conference at Merrill Hall, Fred Farr Forum and Curlew on Friday and Saturday. Water will be in all the rooms on the grounds.

Meal Tickets

Participants staying on-grounds receive a meal ticket with their housing, covering Friday dinner through Sunday lunch.

Zip-up hoodies, long and short sleeve shirts, displaying this year's Asilomar Mathematics Conference logo will be available for purchase in Merrill Hall, Friday and Saturday. Don't miss your opportunity to bring home a memento of your conference participation.

Help Protect the Vegetation

Please stay on the paved paths that meander through the grounds or the boardwalks that take you on a delightful journey through the dunes. By keeping people off the vegetation, Asilomar is able to preserve the natural landscape for all to enjoy for many years to come. You might see some paths that look like walking trails, but if they are not paved, they are simple animal trails created by many hooves walking the same route through the grounds.

*Thank you very much for
your cooperation.*



Conference Sponsors



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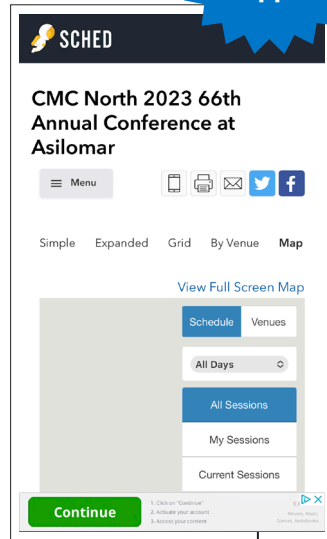
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The conference app will allow you to use your smartphone or tablet onsite to easily:

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- Rate and take notes on sessions
- Access sponsor and exhibitor details
- Receive news alerts
- View map of the exhibit hall layout
- Access social media
- Post tweets via Twitter-@CAMathCouncil #cmcmath



Room to Room | Google Maps!

Do you need easy walking directions from **room to room**? Try Google Maps!



Conference & Speaker | Evaluations



Go to <https://bit.ly/AsilomarConfEval> to enter to win a **free** registration and **free** housing at next year's conference by completing the **Conference Evaluation**.

Your feedback is important to us! Please take a moment to complete the **Speaker** evaluation at <http://bit.ly/AsilomarSpeakerEval>



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Hashtag **CMCMATH**

Nominate!

If you know a great math teacher, go to the PAEMST portal to nominate a teacher of mathematics or computer science for the 2023 award. To nominate a teacher or to download an application visit www.paemst.org. The nomination period is open until January 9, 2024. The application must be completed by February 6, 2024.



The Intersection of Art and Math

To learn more, scan the QR code or visit greatminds.org/em2-ca-edition



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Facility	8:00–9:00	9:20–10:20	10:40–12:00	1:00–2:00	2:20–3:20	3:40–5:00	
CHAPEL	Chapel Seats 250 Dan Meyer Use Your Technology: Don't Let Your Technology Use YOU 9–12 PRS 100 BT TM	Patrick Callahan Asset-Based Assessments: Tools for Advocacy Not Judgement GI PRS 200 BT	Jo Boaler Math-ish – Enchant Your Students with the ish Version of Maths! K-12 PRS 300 BT LD	Hua Howie How to Make a Better Marketing Team for Math GI PRS 400	Annie Fetter Sense-making: Is it at the Core of Your Classroom? GI PRS 500 BT ACCEQ	Kyndall Brown Mapping with Mathematics: YPAR in the Math Classroom 9–12 INT 600 BT ACCEQ	
	Hearth Seats 30 Steven Abell How Operator Precedence *Really* Works TchrEd INT 120 BT TM	Maggie McHugh Bringing Project-Based Learning to Life in Math 6–8 INT 220 BT LD	Chris Bolognese Exploring Expected Value with Strategic Games GI INT 320 BT GAMES	David Pugalee Lesser Imagining for Deeper Student Learning 6–8 INT 420 BT LD	India White Equitable Math Instruction through Cultural Relevance GI INT 520 BT ACCEQ	Gail Standiford Proportional Reasoning and Manipulatives, It Makes Sense! 6–8 INT 620 BT TM	
FIRESIDE	Afterglow Seats 30 Jessica Reyes Engage and Explore! Access to Deep Math Understanding for All 6–8 INT 121 BT MITI	Cynthia Raff Make Middle School Statistics Come Alive 6–8 INT 221 BT ACCEQ	Theodore Sagun Slaying the Middle School Class with Number Sense Routines 6–8 INT 321 BT ACCEQ	Susan Hoffmier Get MAD! Making Decisions with Mean Absolute Deviation 6–8 INT 421 BT LD	Soren Rosier Unleashing the Potential of Peer Tutoring in Math Education 6–8 INT 521 BT LD	Jolene McGarrath Leave Better Children for Our Future 6–8 INT 621 BT FRMWK	
	Embers Seats 30 Melisa Andino Reimagining Fluency through Powerful Routines 7–8 INT 122 BT GAMES	Cam Wong Multicultural Math Games and Activities 6–8 INT 222 BT GAMES	David Woodford Number Line Probability with Dice 6–8 INT 322 BT GAMES	Matt Wallace Rethinking Formative Assessment to Promote Equity 9–12 PRS 422 BT ACCEQ	Dean Becker Classroom Ready Statistics Projects 9–12 INT 522 BT LD	Robert London Teaching Problem Solving: An Approach Consistent with CCMF 9–12 INT 622 BT ACCEQ	
	Fred Farr Seats 170 Courtney Ortega The Role of Revision in Math Class 6–8 INT 101 BT ACCEQ	Zachary Champagne Making Math More Social GI PRS 201 BT	Ivan Cheng How to Do Less Work and Get Better Results: Use the AFLT Method 9–12 INT 301 BT ACCEQ	Ed Campos Design for Diversity: Solve Inequities with Creativity GI INT 401 BT ACCEQ	Sean Nank Standards Based Grading (SBG): Seven Years of Lessons GI INT 501 BT	Harold Asturias Linking Learning Language and Math GI INT 601 BT ACCEQ	
	Kiln Seats 54 Richard Sgroi Using and Creating Guided Discovery Activities 9–12 INT 103 BT LD	Robin Aston Assessments that Matter: Rethinking Tests 9–12 INT 203 BT ACCEQ	Osvaldo Soto Continual Meaning Making through Discrete Math 9–12 INT 303 BT ACCEQ	Ma Bernadette Salgarino Mathematics Framework: R.E.A.L. Math GI INT 403 BT FRMWK	Gail Burrill Algebra Across the K-12 Curriculum GI INT 503 BT FRMWK	Brianna Ruiz Activating Agency for Multilingual Learners 9–12 INT 603 BT ACCEQ	
	Oak Shelter Seats 32 Tom Beatini Exploring Limits of Sequences Using “Cool Problems” 9–12 PRS 104 BT LD	Nicole Sebek Equity in Real World Data Using Lines of Best Fit 9–12 INT 204 BT ACCEQ	Joanne Becker When is Equal Not Equitable: Modeling in Geometry 9–12 INT 304 BT ACCEQ	Beth Baker Venn Diagrams: A Power Tool 6-12 INT 404 LD	Zeke Kossover Tearing Up Your Dataset to Understand How to Make a Graph 9–12 INT 504 BT TM	Lupe Zamora Math Journey through the Years 9–12 MITI 604 BT MITI	
	Evergreen Seats 32 Gail Burrill What Mathematics Belongs in Algebra II? 9–12 INT 105 BT FRMWK	Gail Burrill Building Mathematical Power: Interactive Dynamic Technology 9–12 INT 205 BT ACCEQ	Hallie Foster BQF: Big Questions First 9–12 PRS 305 BT LD	Sharon Soule Thin Slicing Curriculum: Getting from Point A to Point B 9–12 INT 405 BT LD	Richard Sgroi Financial Applications: Real-World, Real Math, Real Interest 9–12 INT 505 BT LD	Carol Treglio Know Your Students = Pathway to Mathematical Power 9–12 INT 605 BT ACCEQ	
	NORTH WOODS (more on page 11)	Heather Seats 60 Mardi Gale Purposeful Questioning = Access, Ownership, Understanding GI PRS 102 BT ACCEQ	Timothy Weekes Math Talks for Agency, Identity and Ownership GI INT 202 BT ACCEQ	Pam Smith Numerical Fluency With Visual Number Talks Dot Models 3–5 INT 302 BT TM	Joseph Espinosa Pathways to Powerful Place Value Pre K-2 INT 402 BT ACCEQ	Rachel Restani How Does Peer Feedback Support Understanding of Fractions? 3–5 INT 502 BT ACCEQ	Robyn Stone Investigating, Sensemaking, and Communicating Practices PreK–2 INT 602 BT ACCEQ
		Scripps Seats 50 Diana Zaragoza What's in Grandma's Purse: A Counting Collections Activity PreK–2 MITI 106 BT MITI	Diana Zaragoza Fun with Fractions: Games to Build Understanding 3–5 MITI 206 BT MITI GAMES	Caroline Loomis Quick Routines to Foster Collaboration 9–12 INT 306 BT LD	Claudia Bertolone-Smith Give Math a Fair Chance! 3–5 INT 406 BT ACCEQ	Diana Moss Units Coordination in Hands-on Activities for Primary Grades PreK–2 INT 506 BT ACCEQ	Julie McNamara Fraction Sense: What Is It and How Do We Develop It? 3–5 INT 606 BT ACCEQ
		Acacia Seats 25 Erika Davalos-Lemus Let's Count! Building the Power of Counting PreK–2 INT 107 BT ACCEQ	Jonathan Dueck Family Engagement in the Primary Classroom PreK–2 INT 207 BT ACCEQ	Suzanne Ebrahimi CANMEE Lesson Study for Equity and Excellence in TK-2 PreK–2 INT 307 BT LD	Liz Gamino CRP+ SMP=Equitable Access to Big and Bold Mathematical Ideas GI INT 407 BT ACCEQ	Kathleen Jalalpour Ditch the Pencils! Teaching Math in Kg/1st grade PreK–2 INT 507 BT ACCEQ	Liz Gamino Building Children's Mathematical Knowledge Via Play PreK–2 INT 607 BT GAMES
		Toyon Seats 24 Stacy Anderson Building Subtraction Fluency without Going Next Door PreK–2 INT 108 BT ACCEQ	Pam Smith Building Numerical Fluency With Visual Number Talks Bars PreK–2 INT 208 BT TM	Sean Reidy Math Moments: Harnessing Fun to Build Grit and Understanding PreK–2 INT 308 BT GAMES	Michelle Pauls Routines, Resources, and Games to Build Primary Number Sense PreK–2 INT 408 BT GAMES	Howard Schragr King Maximo and the Number Knights-Setting the Table for Math PreK–2 PRS 508 BT	Karen Arth Building Number Routines with Numberblocks PreK–2 INT 608 BT ACCEQ



Facility	8:00–9:00	9:20–10:20	10:40–12:00	1:00–2:00	2:20–3:20	3:40–5:00
VIEW CRESCENT	Marlin Seats 34 Daniel Kline Building Community through Julia Robinson Math Festivals 3–5 INT 109 BT GAMES	Mary Macfarlane Just the Facts 3–5 INT 209 BT	Arienne Rusgal Ramp Up for Student Success: Accelerate Learning 3–5 INT 309 BT LD	Jessica Rockwood Creating Systems for Effective Math Intervention 3–5 INT 409 BT LD	Beena Menon Collaborative Problem Solving on VNPS Using Manipulatives 3–5 INT 509 BT TM	Marisa Aoki Problem Solving + Portfolios = Amazing Student Growth 3–5 INT 609 BT LD
	Curlew Seats 34 Danielle Letts We Are All Mathematicians 3–5 INT 110 BT ACCEQ	Sara Green Developing Students' Math Identities 3–5 INT 210 BT ACCEQ	Jim Franklin Number Line to 10,000,000, Other Math Manipulatives, and STEAM 3–5 INT 310 BT TM	Henri Picciotto Fractions: The Well-chosen Rectangle, Pies, and a Challenge 3–5 PRS 410 BT ACCEQ	Veronica Enriquez Create Problem Solvers: Incorporate Manipulatives with BTC 6–8 INT 510 BT TM	Veronica Enriquez Finding the Power of Making Sense of the Infinite Pieces 3–5 INT 610 BT TM
	Sanderling Seats 34 Tracy Sola Powerful Pathways to Collaborative Student Talk 3–5 INT 111 BT ACCEQ	Tracy Sola Powerful Pathways to Collaborative Student Talk 6–8 INT 211 BT ACCEQ	Nigel Nisbet The Power in Struggle: Creating Equitable Access to Math GI PRS 311 BT ACCEQ	Meagan Thompson Bringing Mathematical Reasoning to Life GI INT 411 BT LD	Cheryl Tobey Empowering Students through Formative Routines 3–5 INT 511 BT ACCEQ	Cheryl Tobey Empowering students through Formative Routines 6–8 INT 611 BT ACCEQ
DOLPHIN	Dolphin Seats 34 Mark Goldstein Bring Joy Back to the Classroom with Games and Card Sorts 6–8 INT 112 BT	Joe Condon Powerful Formative Assessment-Big R and Little r Re-engagement 6–8 INT 212 BT LD	Tom Beatini Want to Develop Fluency with Functions? Algebrafy Patterns! 6–8 INT 312 BT LD	Kevin Deutsch Whole Classroom Math Games for Thinking and Discourse 6–8 INT 412 BT GAMES	Becca Schuler Periodic Table: The Math is Elemental! 6–8 INT 512 BT LD	Steve Morris I'm Pro Choice...Boards! Designing CBs Based on DOK GI PRS 612 BT ACCEQ
	Triton Seats 24 LaToya Byrd Supporting Culturally Responsive Pedagogy with IM K–5 Math™ Ldr/TE PRS 115 BT ACCEQ	Sarah Harris The Power of Leading by Doing Ldr/TE INT 215 COACH	Mardi Gale Coaching to Support Understanding and Content Access for All Ldr/TE PRS 315 BT COACH	Ken Pinkerton Organizing a Community Math Festival: Humboldt Math Fest Ldr/TE INT 415 BT	Robert Preston Bridging Elementary and Middle School Mathematics Ldr/TE PRS 515 BT LD	Angela Torres Coaching from Teachers' Strengths to Empower Students Ldr/TE INT 615 BT COACH
SEA GALAXY	Nautilus E Seats 25 Rajeev Virmani Sacred Spaces: Male Educators of Color in the Classroom GI PRS 116 BT ACCEQ	Gary Eisenberg The Power of the Visual Story in Math Instruction Ldr/TE INT 216 BT TM	Beth Alsberg Data: More than Just Numbers—A Data Visualization Project 6–8 INT 316 BT ACCEQ	David Mattoon Visual Power! A Pathway to Understand Equations and Fractions 6–8 PRS 416 BT LD	Shannon McCaw Storylines that Inspire Meaningful Mathematical Connections 6–8 MITI 516 BT ACCEQ	Liesl McConchie Four Ways to Center Your Math Intervention Around Math Identity 6–8 PRS 616 BT ACCEQ
	Nautilus W Seats 40 Isabel Garcia The Mathematics for Social Justice Toolkit: Take Action! GI PRS 117 BT ACCEQ	Eric Muller Feeling Pressured: The Amazing Math of Air Pressure GI INT 217 BT LD	Peg Cagle PLC: Purposely Leveraging Community to Serve Our Students GI PRS 317 BT	Michael Stern Problems with Hooks (Hooky Problems) 9–12 INT 417 BT ACCEQ	Travis Bower Nspire App for iPad: Best Practices 9–12 INT 517 BT TM	Robert Vriesman An Intuitive Approach to the Unit Circle 9–12 INT 617 BT ACCEQ
	Oak Knoll Seats 12	Grant Writing Clinic Session 130 Want free stuff for your classroom? Drop in and get some quick tips on how to write a grant to receive funding for new materials and/or equipment for you and your students to use. You will also get a chance to win a free registration for the 2024 Asilomar CMC North Math Conference.				
Manzanita Seats 12	CMC Affiliate Hub Session 132 Drop in to the affiliate hub for a cup of coffee and learn what CMC can do for you! Affiliate activities will be shared, and there are some math materials that need a new home. You will also get a chance to win a free registration for the 2024 Asilomar CMC North Math Conference.					
Willow Inn Seats 12	Make-It, Take-It Drop in Session 131 Come fold with us! Origami, foldables and more. Have one to share, bring it! Stop by to enter the drawing for a conference registration and membership.					

Strands	
ACCEQ	Access & Equity
COACH	Coaching
GAMES	Games
MITI	Make-It, Take-It
FRMWK	Framework
LD	Lesson Design
TM	Tech. and Manip.

How to Read the Matrix

The matrix also reflects site, room, day and time of session. Refer to the alpha section for more information about each session. Site map on back of program.

speaker — **Alicia Alberts**

title of presentation — Teaching Math Concepts

target audience: 3–8 | INT | 748 | BT

GI: general interest
K–C: grade level
Ldrshp: Teacher Leaders
TchEd: Teacher Education

STRAND

session number —

session type (see page 8 for more information) —

BT: interest to beginning and new teachers

strands focused on special interest (see page 24 for more information)

Name badges must be worn at all times while attending the conference. Badges are required for entry into the sessions and the exhibit hall.



Abell

Abell, Steven — brising.com

How Operator Precedence *Really* Works

We've all been taught how to read expressions the same way for generations. And here's something everyone always knew but didn't want to say out loud: that way never really worked very well. Meanwhile, the Computer Science people took a fresh look at the problem and found a simpler way that works great. Come and see it working in software, and also learn how to do it efficiently on paper.
TchrEd | INT | 120 | Saturday, 8:00-9:00 | Hearth | BT

Alsberg, Beth — Prospect Sierra School

Data: More than Just Numbers—A Data Visualization Project

Data is being generated at an unprecedented rate, and being able to make sense of data is power. This is a project in which students are data scientists. They choose a topic they are curious about from their lives and 3-5 variables within that topic. They collect data and analyze it to make sense of it and uncover patterns. They create their own artistic data visualization to convey meaning to others. This math is personal; it matters to students and broadens their understanding of what math can be.
6-8 | INT | 316 | Saturday, 10:40-12:00 | Nautilus East | BT

Anderson, Stacy — MCOE

Building Subtraction Fluency without Going Next Door

We will be looking at ways of building subtraction understanding through contextual, concrete tasks. Then connecting with representational and abstract strategies that connect more with children's innate sense of problem solving and strategies that help to support and build on number sense rather than stacking, "going next door" to borrow and carry! This session is highly influenced by CGI research and methods. Appropriate for PreK-5th grade.
PreK-2 | INT | 108 | Saturday, 8:00-9:00 | Toyon | BT

Co-presenter: Gloria Carrasco

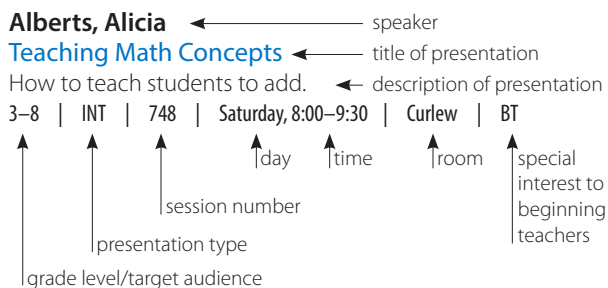
Andino, Melisa — EdGems Math

Reimagining Fluency through Powerful Routines

The fluency routines modeled and practiced in this session will provide teachers with highly-effective strategies designed to develop all students' fluency in mathematics, with a focus on flexibility, efficiency, and accuracy.
7-8 | INT | 122 | Saturday, 8:00-9:00 | Embers | BT

Out of respect for presenters and other participants, please silence or turn off electronic devices during sessions.

How To Read The Speaker List



Baker

Aoki, Marisa — Fresno County Superintendent of Schools

Problem Solving + Portfolios = Amazing Student Growth

Using improvement science, we discovered that a focus on problem solving has led to significant gains for our students, not only in test scores, but in confidence, class culture, and math identity. We also discovered that our compiled portfolios of student work offered parents a compelling opportunity to see growth in how their child was making sense of mathematics. Come learn how you can bring the powerful partnership of problem solving and portfolios to life in your own classroom!
3-5 | INT | 609 | Saturday, 3:40-5:00 | Marlin | BT

Co-presenter: Jannette Gardner

Arth, Karen — H2M

Building Number Routines with Numberblocks

Experience how hand2mind's Number Routines using Numberblocks pairs with the famous Numberblocks hit TV series to build enriching lessons around 7 different number routines. Geared for preK-2, these 10-15 minute lessons deepen students conceptual understanding of complex math topics in the most natural, common-sense way possible. So come meet "Wonderful One" and all his number friends as we experience together the joy of learning mathematics.
PreK-2 | INT | 608 | Saturday, 3:40-5:00 | Toyon | BT

Aston, Robin — Soquel HS

Assessments that Matter: Rethinking Tests

What if assessments could be standards based, relevant, and promote student problem solving? View a practical roadmap for how to move assessments from routine skills based tests, to standards based performance tasks. Engage in discussions about how changes to the way assessments are written and graded can increase access and engagement of students. Envision standards based assessments that are relevant, interesting and truly allow all students to show and develop their mathematical thinking.
9-12 | INT | 203 | Saturday, 9:20-10:20 | Kiln | BT

Asturias, Harold — Lawrence Hall of Science

Linking Learning Language and Math

We must amplify, not simplify, the language students use to communicate for academic purposes. Deficit views of historically marginalized children persist in education. Linguistically and culturally diverse students and other students at the margins must make sense of the world through the lens of social justice. One key element is understanding how language and math are interconnected and mutually reinforcing. In this hands-on session, we will practice math language routines that support students' sense-making, academic conversations, and meta-awareness of content and language. Let's empower our students to excel in mathematics!
GI | INT | 601 | Sunday, 3:40-5:00 | Fred Farr Forum | BT

Baker, Beth — CMC Far North

Venn Diagrams: A Power Tool

Leverage what students know about zombies vs vampires to springboard to solving vs. simplifying. Venn diagrams are the perfect graphic organizer for all kinds of compare & contrast. Linear vs. quadratic graphing, relations vs functions, area vs. perimeter, and cats vs. dogs can all be explored and understood with the power of the Venn diagram.
6-12 | INT | 404 | Saturday, 1:00-2:00 | Oak Shelter | BT



Beatini, Tom — Union City Public Schools**Exploring Limits of Sequences Using “Cool Problems”**

Do sequences have to end? Let's explore some “cool problems” where sequences model real-world phenomena. Participants will leave this session with classroom ready materials that enable their students to explore and analyze quantitative relationships. See how technology connects algebraic representations and promotes algebraic thinking. The goal is to help students develop a deeper understanding of sequences and limits as they transition from algebra to calculus.

9–12 | PRS | 104 | Saturday, 8:00–9:00 | Oak Shelter | BT

Want to Develop Fluency with Functions? Algebrafy Patterns!

Let's explore low-floor high-ceiling tasks that connect concrete, pictorial, and abstract representations which provide opportunities for pattern building, conjecturing, generalizing, and justifying mathematical relationships. Different pedagogical techniques will be modeled that demonstrate how pattern generalization is an activity suitable for developing algebraic thinking and how recursive rules for sequences provide the foundation for conceptual understanding of functions.

6–8 | INT | 312 | Saturday, 10:40–12:00 | Dolphin | BT

Becker, Dean — Albany HS**Classroom Ready Statistics Projects**

Add meaning to lessons about linear relationships, regression, paired tests, and other statistical and mathematical topics. Experience classroom ready activities related to regression, tests of difference of means, and proportions. All activities use readily available resources and can be completed in a class period.

9–12 | INT | 522 | Saturday, 2:20–3:20 | Embers | BT

Becker, Joanne — San José State Univ.**When is Equal Not Equitable: Modeling in Geometry**

The session begins with a brief overview of mathematical modeling, what it is and is not. Then participants will experience three problems of increasing complexity that involve mathematical modeling in geometry and highlight the difference between equal and equitable in real world settings.

9–12 | INT | 304 | Saturday, 10:40–12:00 | Oak Shelter | BT

Bertolone-Smith, Claudia — CSU Chico**Give Math a Fair Chance!**

Students can exhibit troubling behaviors that STOP them from learning and doing mathematics! In this session, we will practice effective strategies for increasing engagement, addressing the underlying reasons for distracting behavior, and helping students give math a fair chance! We will discuss how to create a brave and safe math learning environment full of curiosity and joy. This session will be especially valuable for PSTs or new teachers!

3–5 | INT | 406 | Saturday, 1:00–2:00 | Scripps Conference | BT

Co-presenter: *Diana Moss*

Jo Boaler and Cathy Williams — Stanford Graduate School of Ed.**Math-ish – Enchant Your Students with the ish Version of Maths!**

In classrooms math is almost always precise but in the world it is almost always ish. When we bring ish into our classrooms it allows students to think freely, and connect with the world. Come and hear and experience some ish classroom ideas, and learn about the ‘big ideas’ from the California Maths Framework.

K–12 | PRS | 300 | Saturday, 10:40–12:00 | Chapel | BT

Bolognese, Chris — Columbus Academy**Exploring Expected Value with Strategic Games**

Expected value is a topic that connects multiple topics of mathematics but is often omitted. This session will allow participants to explore a few games that build on the idea of expected value. Come to this session to have fun playing some games, to learn more about expected value, and to bring some strategic games to your students.

GI | INT | 320 | Saturday, 10:40–12:00 | Hearth | BT

Co-presenter: *Emily Dennett*

Bower, Travis — Dos Pueblos HS**Nspire App for iPad: Best Practices**

From daily demonstrations to Project Based Learning, discover the robust power of this integrated all-in-one math platform. This single app allows the teacher/student to explore the entire secondary curriculum with multiple representations. The primary focus will be as a teacher presentation tool, but we will also discuss 1to1 iPad Activity use.

Pedagogy will be discussed with a lens on creation vs. consumption of content. Canvas, CPM, Notability, and Apple Classroom will be alluded to.

9–12 | INT | 517 | Saturday, 2:20–3:20 | Nautilus West | BT

Brown, Kyndall — California Mathematics Project**Mapping with Mathematics: YPAR in the Math Classroom**

Using GIS mapping, students investigate environmental injustices by applying mathematical modeling and data analysis to engage in Youth Participatory Action Research in a mathematics classroom using Ethnic Studies principles. Learn how this model of interdisciplinary collaboration can be adapted for your school site.

9–12 | INT | 600 | Saturday, 3:40–5:00 | Chapel | BT

Co-presenter: *Naehee Kwun*

Burrill, Gail — Michigan State Univ.**Algebra Across the K–12 Curriculum**

Experience the progression. Get creative ideas from Presidential Awardees for Excellence in Teaching Mathematics for connecting some core algebraic concepts throughout a student's career from elementary, middle, and high school mathematics. Let's look at where students are coming from and where they are going by making these connections visible for our students.

GI | INT | 503 | Saturday, 2:20–3:20 | Kiln | BT

Co-presenter: *Susan Kunze*

Building Mathematical Power: Interactive Dynamic Technology

Technology can open doors for all students by promoting agency and identity and is critical if we are to teach mathematics to prepare students for tomorrow instead of for a world that no longer exists. From building conceptual understanding to exploring why some approaches are valid and not others to investigating questions about real data and real situations, technology allows all students to become meaningful and contributing partners in the learning process.

9–12 | INT | 205 | Saturday, 9:20–10:20 | Evergreen | BT

What Mathematics Belongs in Algebra II?

As states and districts recognize the importance of data science, many are revising their policies to allow a data science course to replace the third year of high school mathematics, often called Algebra II. What is the important mathematics that should be in that course and how do we make the connections between that content and data science, yet ensuring that we maximize opportunities for all students?

9–12 | INT | 105 | Saturday, 8:00–9:00 | Evergreen | BT

Byrd, LaToya — Illustrative Mathematics**Supporting Culturally Responsive Pedagogy with IM K–5 Math™**

Districts across the country are addressing inequities in math education by implementing culturally relevant and responsive pedagogy. In this session, we will highlight the design features of IM K–5 Math™ that support this effort. Coaches and teacher leaders will experience culturally responsive supports and leverage the expertise in the room to move towards implementation.

Ldr/TE | PRS | 115 | Saturday, 8:00–9:00 | Triton | BT

Cagle, Peg — Reseda HS, Los Angeles Unif.**SDPLC: Purposely Leveraging Community to Serve Our Students**

One hallmark of professions is the role of community in defining and facilitating excellence in the work of the discipline. Explore ways to identify colleagues, expand networks, and join and/or craft productive participation/collaboration structures. Plan and prioritize action steps to accelerate your trajectory in growing all aspects of highly accomplished practice as a mathematics educator, both in and out of the classroom, to provide empowering learning opportunities to each and every child.

GI | PRS | 317 | Saturday, 10:40–12:00 | Nautilus West | BT

Callahan, Patrick — Math ANEX**Asset-Based Assessments: Tools for Advocacy Not Judgement**

Many assessments promote negative narratives and problematic policies. We argue that this is because the instruments are narrowly focused and deny opportunities for student voice and agency. Sorting students by “correct” vs “incorrect” ignores the ways students think. We will share ideas for analyzing students’ explanations and responses to identify “assets”, strengths that can be leveraged to promote learning rather than just a score or ranking.

GI | PRS | 200 | Saturday, 9:20–10:20 | Chapel | BT

Campos, Ed — Kings COE**Design for Diversity: Solve Inequities with Creativity**

In a lively and interactive session we’ll dive into “Solve In Time,” a gamified version of Design Thinking and explore innovative solutions for addressing inequities in math education. In a version of Freedom Dreaming, we’ll co-design the future of Math.

GI | INT | 401 | Saturday, 1:00–2:00 | Fred Farr Forum | BT

Co-presenter: Sandhya Raman

Champagne, Zachary — The Discovery School**Making Math More Social**

How can we empower our students to engage with and listen to each other’s ideas? During this session, we’ll explore how to get students talking about math with a focus on how they talk and listen to each other. Often, math discussions are centered on one teacher and a few students. Let’s ship the focus to investigating how our students communicate about math with each other. Come play with some math ideas and learn how our students are engaging with each other.

GI | PRS | 201 | Saturday, 9:20–10:20 | Fred Farr Forum | BT

Cheng, Ivan — CSU Northridge**How to Do Less Work and Get Better Results: Use the AFTL Method**

Teaching is harder than ever. But there is a way to help your STUDENTS engage productively in doing rigorous mathematics AND improve their learning. Come experience the “AFTL” (Ask First, Teach Later) method for engaging students and take back ready-to-use activities that have proven results! You’ll be glad you did.

9–12 | INT | 301 | Saturday, 10:40–12:00 | Fred Farr Forum | BT

Co-presenter: Cinthia Vega

Condon, Joe — Lipman MS**Powerful Formative Assessment-Big R and Little r Re-engagement**

We will learn to use re-engagement lesson design strategies (Big R) and impromptu Math Talk strategies for on-the-spot re-engagements (little r). We will discuss how this type of instruction responds to student needs, engages them at deeper levels and promotes more discourse in class. All students will see how instruction responds to their needs and includes their ideas. Teachers will leave with planning documents and strategies to incorporate re-engagements into their teaching practices.

6–8 | INT | 212 | Saturday, 9:20–10:20 | Dolphin | BT

Co-presenter: Sarah Pape

Davalos-Lemus, Erika — Merced COE**Let’s Count! Building the Power of Counting**

The Counting Collection instructional routine allows all students to engage in high quality mathematics while accessing mathematical content which creates an inclusive and rigorous learning environment. It also affords students the opportunity to participate in rich mathematical discourse while engaging in the mathematical practices. Experience with counting provides a solid foundation with place value. Participants will learn and experience the basics of a counting collection routine.

PreK–2 | INT | 107 | Saturday, 8:00–9:00 | Acacia | BT

Co-presenter: Robyn Woods-Palumbo

Deutsch, Kevin — UC Santa Cruz**Whole Classroom Math Games for Thinking and Discourse**

Get students in your classroom to think and communicate mathematically with these “no-prep and low-prep” games! These are games and puzzles that the entire classroom plays as a whole group, where every student is engaged simultaneously. We’ll play them together and develop teacher moves that generate good mathematical discourse. Some might be familiar, but how we play them is the key. High school and upper elementary teachers will find these games perfect for their classrooms too.

6–8 | INT | 412 | Saturday, 1:00–2:00 | Dolphin | BT

Dueck, Jonathan — Office of the Fresno County Superintendent of Schools**Family Engagement in the Primary Classroom**

The California Early Math Initiative (CAEMI) is a multi-agency effort which promotes math outcomes amongst children birth–3rd grade, builds positive math identities and increases confidence and capacity of educators and families to support children’s early math development. Since 2019 CAEMI has implemented a professional learning and coaching model, developed resources for families and educators, and piloted family engagement efforts. Learn how we celebrate the math that is all around us.

PreK–2 | INT | 207 | Saturday, 9:20–10:20 | Acacia | BT

Ebrahimian, Suzanne — California Math Project**CANMEE Lesson Study for Equity and Excellence in TK–2**

California Action Network for Excellence and Equity supports teachers, leaders, and schools, in a structured Lesson Study that uses equity-driven mathematics learning opportunities to establish a strong foundation for number sense, operations, and algebraic thinking through Counting Collections. Our Lesson Study Team will share successful activities they used in their classrooms- that you can try next week!

PreK–2 | INT | 307 | Saturday, 10:40–12:00 | Acacia | BT

Co-presenter: Daniel Brenner

Eisenberg, Gary — Retired**The Power of the Visual Story in Math Instruction**

Participants will leave this high energy, entertaining session with practical, ready-to-use ideas and activities to aid students in gaining power in addition, subtraction, place value, multiplication, and division. Participants will learn how to use manipulatives, songs, and Youtube videos to bring joy and student power to their math instruction. Participants will come away with math stories that will increase their students' retention of math facts and math skills. PreK–3 too.

Ldr/TE | INT | 216 | Saturday, 9:20–10:20 | Nautilus East | BT

Enriquez, Veronica — Merced COE**Create Problem Solvers: Incorporate Manipulatives with BTC**

This is a hands-on workshop where we will model incorporating manipulatives while implementing strategies from Building Thinking Classrooms. You will explore adding integers and solving one- and two-step equations using concrete manipulatives and pictorial representations to create a deeper understanding of abstract concepts. By using these tools in conjunction with one another, students will be able to enhance their mathematical understanding and problem-solving abilities.

6–8 | INT | 510 | Saturday, 2:20–3:20 | Curlew | BT

Co-presenter: Erika Davalos-Lemus

Finding the Power of Making Sense of the Infinite Pieces

This is a hands-on workshop that will take you through the progression of fractions from 3rd through 6th grade. After this session you will be able to lead students into explorations of mathematical concepts that will promote student learning, retention and to address conceptual understanding with the use of hands-on and virtual manipulatives and pictorial representations. You will be able to leave the workshop with tools and strategies that are ready to be implemented in your classroom.

3–5 | INT | 610 | Saturday, 3:40–5:00 | Curlew | BT

Co-presenter: Erika Davalos-Lemus

Espinosa, Joseph — Los Angeles Unified SD**Pathways to Powerful Place Value**

Come and see powerful student thinking as we engage in Choral Counting, Ways to Make a Number, and Story Problems with Number Choices to consider purposeful ways to develop place value understanding. See how these instructional activities support your students to build a joy and love for numbers in ways that are meaningful to them.

PreK–2 | INT | 402 | Saturday, 1:00–2:00 | Heather | BT

Co-presenter: Theodore Sagun

Fetter, Annie — 21st Century Partnership for STEM Education**Sense-making: Is it at the Core of Your Classroom?**

Are your students making sense of the mathematics they explore? Do they feel that mathematics is an inherently sensible endeavor? We'll look at ways in which students don't make sense of mathematics, consider why, and discuss strategies for making it a larger part of the expectations in your classroom.

GI | PRS | 500 | Saturday, 2:20–3:20 | Chapel | BT



tea and coffee

Available during the conference at Merrill Hall, Fred Farr, Chapel and Scripps on Friday and Saturday.

Foster, Hallie — Terra Linda HS**BQF: Big Questions First**

What if every unit opened with a thumper: a big question that introduces a new concept in a way that develops curiosity and projects a path for learning? This session will give examples of on Big Questions, or thumpers, that can be used to launch new ideas specifically in Algebra 2 and Geometry, will give guidance on how to use them, and will give suggestions on how to develop your own.

9–12 | PRS | 305 | Saturday, 10:40–12:00 | Evergreen | BT

**Franklin, Jim — Slide-A-Round Math Manipulatives, LLC
Number Line to 10,000,000, Other Math Manipulatives, and STEAM**

Join us for a hands-on presentation by Jim Franklin, teacher of special education at the 21st elementary school to be STEAM certified by the Georgia DOE. Jim will model his number line to help students round numbers up to 10,000,000 that he invented. View his other math manipulatives and learn differentiation strategies and tips that address the standards of fractions, decimals, money, elapsed time, capacity, and weight. Nationally recognized STEAM activities will be shared and discussed.

3–5 | INT | 310 | Saturday, 10:40–12:00 | Curlew | BT

Gale, Mardi — WestEd**Purposeful Questioning = Access, Ownership, Understanding**

Are you asking questions that focus or funnel student thinking? What questions reflect the power of mathematics and address equity, increase understanding, maintain rigor, build ownership? Called for by Principles to Actions. Purposeful questioning also guides productive struggle and gives all students the opportunity to think, communicate, and immerse themselves in the content. Practice focusing questions and tweak funneling questions to support students.

GI | PRS | 102 | Saturday, 8:00–9:00 | Heather | BT

Coaching to Support Understanding and Content Access for All

How do we coach/teach to create pathways for equitable access to content? What dimensions matter? Examine successful coaching models from SVMU and TRU that support teachers to shift their practice providing access and deeper understanding for all. Applicable for coaches and teachers. Documents can guide PLCs.

Ldr/TE | PRS | 315 | Saturday, 10:40–12:00 | Triton | BT

Gamino, Liz — CMC-Central**Building Children's Mathematical Knowledge Via Play**

Children naturally desire to learn; much of their learning happens through play. In the words of Fred Rogers, "Play is often talked about as if it were a relief from serious learning. But for children, play is serious learning." In this interactive session, we will engage in academic work via play to explore different math concepts and consider practical ways to optimize mathematical play in our classrooms.

PreK–2 | INT | 607 | Saturday, 3:40–5:00 | Acacia | BT

CRP+ SMP=Equitable Access to Big and Bold Mathematical Ideas

Students who are engaged in mathematics as active participants, recognized as capable and able to contribute in meaningful ways, and challenged cognitively will see the content as relevant to their lives. In this workshop, we will discuss ways teachers can reframe the Standards for Mathematical Practice (SMP), enabling students to own their mathematical learning, use their knowledge to think deeply, create connections and be active in problem-solving inside and outside the classroom.

GI | INT | 407 | Saturday, 1:00–2:00 | Acacia | BT

Co-presenters: Tim Weekes, Johnnie Wilson

Garcia, Isabel — Santa Clara COE**The Mathematics for Social Justice Toolkit: Take Action!**

The session aims to enhance awareness of how inequity can be disguised in language and actions that may conceal implicit biases and racism. We will explore strategies to encourage actions that confront such inequities and support transformations of systemic practices that impede students' math achievement and involvement. Bravery takes many forms, let's explore them together!

GI | PRS | 117 | Saturday, 8:00–9:00 | Nautilus West | BT

Co-presenter: Lora Carey

Goldstein, Mark — Center for Mathematics and Teaching**Bring Joy Back to the Classroom with Games and Card Sorts**

We will launch our work in the algebraic world of patterns and linear functions with a fun and challenging game, then do a "pattern talk" and a card sort. All will be hands-on, collaborative, and engaging, with plenty of discussion and sharing of ideas.

6–8 | INT | 112 | Saturday, 8:00–9:00 | Dolphin | BT

Co-presenters: Cynthia Raff, Shelley Krieglger

Green, Sara — Alameda COE**Developing Students' Math Identities**

We've all had students who groan when math class starts. We've witnessed students trying to make themselves invisible, terrified they will be called on to share their thinking in front of their peers. In this workshop, we'll explore strategies that promote positive mathematical identities and delve deeper into the 5 Equitable and Engaging Teaching Practices outlined in the draft California Mathematics Framework.

3–5 | INT | 210 | Saturday, 9:20–10:20 | Curlew | BT

Harris, Sarah — Ceres Unified SD**The Power of Leading by Doing**

We will focus on how instructional leaders can meet teachers where they are with mathematics instruction and move them forward with strategies that value their questions, comments, and concerns. Participants will have the opportunity to engage with strategies that are effective in professional development, as well as in the math classroom. Throughout the session, we will reflect on how to transform professional development into a teacher-centered learning environment.

Ldr/TE | INT | 215 | Saturday, 9:20–10:20 | Triton

Co-presenter: Melanie Roche

Hoffmier, Susan — CPM Educational Program**Get MAD! Making Decisions with Mean Absolute Deviation**

Join us in exploring how to engage middle school students beyond collecting and displaying data using Mean Absolute Deviation (MAD) as a decision-making tool. Data literacy has become a consequential life skill. Modeling with mathematics is essential for data-literate citizens to construct viable arguments and critique the reasoning of others. Understanding how and why data is collected increases students' agency by knowing they can be empowered or manipulated by data.

6–8 | INT | 421 | Saturday, 1:00–2:00 | Afterglow | BT

Howie, Hua**How to Make a Better Marketing Team for Math**

It is common for people to share negative thoughts about math, such as "I am not a math person, I cannot do math, math is irrelevant." How can we make a better marketing team for math to show that math is beautiful, applicable, and empowering? In this talk, we will discuss strategies on how to make content more engaging in our classrooms and on social media.

GI | PRS | 400 | Saturday, 1:00–2:00 | Chapel

Jalalpour, Kathleen — The Pi Project**Ditch the Pencils! Teaching Math in K–1st grade**

Put away the pencils in math class! Let's replace worksheets with rich, thinking-based tasks. Come and hear about our experiences in classrooms that minimize the use of pencils, replacing them with manipulatives, games, visualization, and language.

PreK–2 | INT | 507 | Saturday, 2:20–3:20 | Acacia | BT

Kline, Daniel — Julia Robinson Mathematics Festival**Building Community through Julia Robinson Math Festivals**

In this interactive session, you'll get to explore hands-on, play-based, Common Core-aligned math puzzles and games in the same way that students and families do at our math festivals. You'll also learn free, affordable, and stress-free ways to bring these types of activities into your classroom and school communities. At the end of the session, you'll leave with a free coloring-based math activity and mini game kit so that you can start sharing fun math with your community right away.

3–5 | INT | 109 | Saturday, 8:00–9:00 | Marlin | BT

Kossover, Zeke — Exploratorium**Tearing Up Your Dataset to Understand How to Make a Graph**

Graphing real world data inherently jumps from concrete to abstract. For some students that's a tiny hop, but for others, it can be an enormous jump. In this workshop, we'll take some data and literally tear it up to show how to build a graph. In another activity, we'll help students invent graphing for themselves, just to make their own lives easier.

9–12 | INT | 504 | Saturday, 2:20–3:20 | Oak Shelter | BT

Letts, Danielle — Hubbard Media Arts Academy, Alum Rock Union**We Are All Mathematicians**

We are all mathematicians. Too often students enter our classrooms and don't see themselves as mathematicians or as valued members of our math classes. This session will focus on practical strategies teachers can implement in their math classrooms to empower all students and elevate their voices, thinking, and mathematical reasoning. Participants will engage in activities that can immediately be used in their classrooms and have opportunities for exploration and reflection.

3–5 | INT | 110 | Saturday, 8:00–9:00 | Curlew | BT

London, Robert — CSU San Bernardino**Teaching Problem Solving: An Approach Consistent with CCMP**

This interactive session explains implementing a sequence of nonroutine problems emphasizing higher order problem solving in any secondary math course, with access for all students to gradually improve. The use of cooperative groups promotes equity and engagement. Problems allow for adjustments insuring the problem is at the right level of difficulty. Participants will experience solving a nonroutine problem and be provided with extensive guidance/handout with many examples for their context.

9–12 | INT | 622 | Saturday, 3:40–5:00 | Embers | BT

Loomis, Caroline — Da Vinci Charter Academy**Quick Routines to Foster Collaboration**

Got a penny for a hint? Does your team's work "Add Up"? Join us for a fast paced session to learn some quick routines you can use to foster collaboration in your classroom on Monday!

9–12 | INT | 306 | Saturday, 10:40–12:00 | Scripps Conference | BT

Co-presenter: Elizabeth Broughton

Out of respect for presenters and other participants, please silence or turn off electronic devices during sessions.

Macfarlane, Mary — Marvelous Mathematics**Just the Facts**

Number Talk progression to help students master and retain the basic multiplication and division facts.

3–5 | INT | 209 | Saturday, 9:20–10:20 | Marlin | BT

Mattoon, David — Hemet USD**Visual Power! A Pathway to Understand Equations and Fractions**

How can you fill gaps in understanding, build number sense and accelerate learning at the same time? Is it possible to reengage students in conceptual understanding of fractions while teaching equations? Can we leverage the Standards for Mathematical Practice, the Effective Mathematical Teaching Practices and the Teaching for Robust Understanding framework at the same time? Come harness the power of visuals and begin your own trip down the path so you can empower all your students to do the same.

6–8 | PRS | 416 | Saturday, 1:00–2:00 | Nautilus East | BT

McCaw, Shannon — EdGems**MathStorylines that Inspire Meaningful Mathematical Connections**

Many students struggle to see themselves as mathematical thinkers and doers. Explore how the use of stories in the math classroom invites all learners to make connections and view the learning of mathematics as useful, worthwhile, and relevant.

6–8 | MITI | 516 | Saturday, 2:20–3:20 | Nautilus East | BT

Co-presenter: Lauren Mottles

McConchie, Liesl — Math With the Brain in Mind**Four Ways to Center Your Math Intervention Around Math Identity**

Tired of hearing students say, “I’m just not a math person”? A positive math identity is the gateway to all paths leading to mathematical power. A student’s emotional relationship with math will either accelerate or impede their math learning. Join international brain expert for an engaging session that will unpack the elements the brain needs to heal and build a positive math identity. Leave with intentional tools to unlock student potential in your classroom or math intervention program.

6–8 | PRS | 616 | Saturday, 3:40–5:00 | Nautilus East | BT

McGarrah, Jolene**Leave Better Children for Our Future**

We shape the future one day at a time in our classrooms. Through consistency and reliable expectations, student learn how to build a place where they can trust the system and feel safe to learn. By instilling strong systems in our students, they build skills that will last a lifetime. Look at the systems you have in place and open yourself to new possibilities. We will, through hands on learning, discover what works and what doesn’t when it comes to classroom management systems.

6–8 | INT | 621 | Saturday, 3:40–5:00 | Afterglow | BT

McHugh, Maggie — Univ. of Wisconsin-La Crosse**Bringing Project-Based Learning to Life in Math**

Think back on your own education. What do you remember? I bet at least one project from school comes to mind. How can we create those lasting memories for our students? Come explore the driving question, “How can I bring Project-Based Learning (PBL) to Life in the mathematics classroom?” Engage in a mini PBL experience. Leave with several resources to get started on PBL in your classroom.

6–8 | INT | 220 | Saturday, 9:20–10:20 | Hearth | BT

Co-presenter: Jennifer Kosiak

McNamara, Julie — CSU East Bay**Fraction Sense: What Is It and How Do We Develop It?**

Fractions are by far one of the most challenging topics for both students and teachers. Most of us have never had the opportunity to develop our own “fraction sense” in the same way that we’ve developed (whole) number sense. Participants will deepen their understanding of principles for developing part/whole understanding, learn strategies for supporting students to consider fractions as numbers, and consider methods for calculating with understanding, not tricks.

3–5 | INT | 606 | Saturday, 3:40–5:00 | Scripps Conference | BT

Menon, Beena — Hand2Mind**Collaborative Problem Solving on VNPS Using Manipulatives**

Participate in an interactive learning opportunity focused on developing understanding of the benefits of collaborative problem solving especially when combined with hands-on manipulative clings. Engage in group problem-solving tasks, utilizing pattern blocks and other manipulatives on vertical non-permanent surfaces (VNPS).

This approach is influenced by the BTC research conducted by Peter Liljedahl. Learn to apply these techniques in classrooms to enhance student engagement and learning.

3–5 | INT | 509 | Saturday, 2:20–3:20 | Marlin | BT

Co-presenter: Gail Standiford

Meyer, Dan — Amplify**Use Your Technology: Don’t Let Your Technology Use YOU**

We think we make technology work for us but the technology and its designers are constantly shaping our ideas about math, students, teaching, and learning. A former math teacher and current education technologist will give you a behind-the-scenes look at how this industry tries to build teacher-proof technology. We’ll then look at technology that works with teachers instead.

9–12 | PRS | 100 | Saturday, 8:00–9:00 | Chapel | BT

Morris, Steve — Retired Educator**I’m Pro Choice...Boards! Designing CBs Based on DOK**

Up your choice board game by attending this workshop! Come learn how you can design choice boards based on Depth of Knowledge (DOK) using multiple math apps. You will learn what choice boards are and how you incorporate DOK into those choice boards. Templates included!

GI | PRS | 612 | Saturday, 3:40–5:00 | Dolphin | BT

Moss, Diana — University of Nevada, Reno**Units Coordination in Hands-on Activities for Primary Grades**

Join us for an exploration of rich primary activities that promote embodied mathematics focused on coordinating units in the primary grades. You will experience the activities, connect to units coordination reasoning, and discuss teacher moves that promote higher order thinking in our young learners. Our tasks develop the deep level thinking needed to master place value and other conceptually essential mathematics. The activities presented are great for centers!

PreK–2 | INT | 506 | Sunday, 3:40–5:00 | Scripps Conference | BT

Co-presenter: Claudia Bertolone-Smith

Although this book contains the latest information available as of the printing deadline, some last-minute **program changes** are inevitable. We apologize for any inconvenience that may result, and we appreciate your understanding.

Muller, Eric — Exploratorium Teacher Institute**Feeling Pressured: The Amazing Math of Air Pressure**

Come expose yourself to the math in air pressure. This workshop will combine fun hands-on activities, principles of algebra and geometry, and the basic science of gases to solve some interesting math and engineering problems. We will figure out how much air force is on your body right now as well as determine the immense forces on vessels like planes, spacecraft and submarines. These activities were created at the Exploratorium Teacher Institute in San Francisco.

GI | INT | 217 | Saturday, 9:20–10:20 | Nautilus West | BT

Co-presenter: Megan Taylor

Nank, Sean — CSU San Marcos**Standards Based Grading (SBG): Seven Years of Lessons**

It's my seventh year using SBG in a traditional system. Come learn how to use SBG in any setting, avoid potential pitfalls and resistance, and formatively use every assessment while reconceptualizing assessments as empowering and not oppressive. Let's discuss different ways to use SBG. Bring your current grading protocol and a classroom assessment. Let's figure out together how to make this transition! Leave with concrete examples of how to use SBG if your school still uses traditional grading.

GI | INT | 501 | Saturday, 2:20–3:20 | Fred Farr Forum | BT

Nisbet, Nigel — MIND Education**The Power in Struggle: Creating Equitable Access to Math**

Discover how applications of neuroscience-driven insights can enable students to learn math in a new way. Scientific approaches to how the brain learns can empower student learning and provide a solid foundation for solving unfamiliar problems. By starting with rich content accessible to ALL students, they'll feel determined to creatively and collaboratively problem-solve. Encouraging students to have new mathematical experiences leads to deeper learning and sets the stage for equitable impact.

GI | PRS | 311 | Saturday, 10:40–12:00 | Sanderling | BT

Ortega, Courtney — Oakland Unified SD**The Role of Revision in Math Class**

Student discourse is a critical component of learning. So is revision. What if we allowed students the opportunity to explore their changing ideas and understandings and write second or third drafts to represent their mathematical thinking? Come explore ways to build revision into your classroom routines.

6–8 | INT | 101 | Saturday, 8:00–9:00 | Fred Farr Forum | BT

Pauls, Michelle — Kingsburg Elementary Charter SD**Routines, Resources, and Games to Build Primary Number Sense**

Do your K–2 students struggle with number sense? Have you wondered what kinds of things you could do to build a strong foundation with numerical reasoning? This session will explore a variety of daily routines, online resources, and whole-class and small-group games that you can use to develop, practice, and reinforce number sense concepts. Participants will leave with practical low/no-prep ideas to try with students on Monday morning.

PreK–2 | INT | 408 | Saturday, 1:00–2:00 | Toyon | BT

Piccio, Henri — MathEducation.page**Fractions: The Well-chosen Rectangle, Pies, and a Challenge**

I will present how to use well-chosen rectangles to compare, add, subtract, multiply, and divide fractions. Also: how to use pie slices to see equivalence and make connections with angles, time, money, decimals, and percent. These representations are intended to complement, not replace approaches you already use. We'll end with a high-ceiling Egyptian fractions challenge.

3–5 | PRS | 410 | Saturday, 1:00–2:00 | Curlew | BT

Pinkerton, Ken — Humboldt Math Festival**Organizing a Community Math Festival: Humboldt Math Fest**

Sharing 14+ years of successful community math festivals. Build enthusiasm and appreciation of math by sharing the wonders, power and joy of mathematics in a "community celebration of math." I will share info on how the Humboldt Math festival is organized, funded, and supported. Includes hands-on activities and tried and true info on how to create your own festival.

Ldr/TE | INT | 415 | Saturday, 1:00–2:00 | Triton | BT

Preston, Robert — Mt. Lassen**Bridging Elementary and Middle School Mathematics**

As coaches, we have the capacity to influence others practice in ways that can be profoundly impactful for not only them but their students, both present and future. As I move back into coaching after 6 years in middle school, we will examine how to engage student in the mathematical practices while conning back to models they may have learned in elementary school.

Ldr/TE | PRS | 515 | Saturday, 2:20–3:20 | Triton | BT

Pugalee, David — UNC Charlotte**Lesson Imaging for Deeper Student Learning**

Effective student-driven discussions require mindful planning and imaging around how an activity plays out in class. Lesson imaging builds on the relationship between teacher beliefs and goals and the way the teacher anticipates how a lesson will unfold in the classroom. This session explores this process of anticipating how students will engage in activities, the questions from students and the questions that teachers may ask to promote deeper mathematical reasoning.

6–8 | INT | 420 | Saturday, 1:00–2:00 | Hearth | BT

Raff, Cynthia — Center for Mathematics and Teaching**Make Middle School Statistics Come Alive**

Participants will be part of a hands-on 6th grade statistics activity that will bring statistics and its many terms to life. This activity is accessible to all students and allows for class discussions and interaction. Division will be connected to the statistics work through a chunking method to assist in solving the mean, opening the door for a look at how division grows through middle school.

6–8 | INT | 221 | Saturday, 9:20–10:20 | Afterglow | BT

Co-presenter: Mark Goldstein

Reidy, Sean — Legends of Learning**Math Moments: Harnessing Fun to Build Grit and Understanding**

Math can be fun and challenging! Using number sense and different learning strategies including game-based learning, see how students persevere through challenges and are self-motivated to advance through harder math concepts.

PreK–2 | INT | 308 | Saturday, 10:40–12:00 | Toyon | BT

Restani, Rachel — Univ. of California, Davis**How Does Peer Feedback Support Understanding of Fractions?**

We will share transcripts and audio of partner feedback from elementary students' conversations to explore how multilingual learners respond, clarify, and negotiate as they support each other to persevere in making sense of fraction problems. We use pedagogies that stem from Cognitively Guided Instruction (CGI) to examine EL children's explanations of strategies used to solve equal-sharing fraction problems and how their peers respond to and guide revisions of their explanations.

3–5 | INT | 502 | Saturday, 2:20–3:20 | Heather | BT

Co-presenter: Suzanne Abdelrahim

Reyes, Jessica — EdGems Math**Engage and Explore! Access to Deep Math Understanding for All**

Let's enable all learners to notice patterns, make connections, and form big mathematical ideas! In this session, participants will experience guided explorations that support all students in the Comprehension phase of the UDL framework.

6–8 | INT | 121 | Saturday, 8:00–9:00 | Afterglow | BT

Co-presenter: Lauren Mottles

Rockwood, Jessica — Greenfield Learning Inc.**Creating Systems for Effective Math Intervention**

What does great math intervention look like? In this session we will explore and develop systems for successful math intervention with specific attention to making the most of instructional minutes and differentiating for student needs. We'll begin by establishing a few key best practices. Then, utilizing mini-lesson, station/rotation, and small group formats, participants will collaborate and plan for effective classroom math intervention that will fit any schedule and reach all students.

3–5 | INT | 409 | Saturday, 1:00–2:00 | Marlin | BT

Rosier, Soren — Stanford Univ.**Unleashing the Potential of Peer Tutoring in Math Education**

Dive into the power of peer tutoring in this interactive workshop based on our research at Stanford. Learn how to train students as effective peer tutors, explore key considerations for matching tutees, and engage in hands-on activities to integrate peer tutoring into your curriculum. By the end of this workshop, you'll have all the tools you need to empower your students to become better leaders, helpers, and communicators in math class.

6–8 | INT | 521 | Saturday, 2:20–3:20 | Afterglow | BT

Co-presenter: Kreg Moccia

Ruiz, Brianna — CPM Educational Program**Activating Agency for Multilingual Learners**

Participants will examine beliefs about Multilingual Learners and discuss common assumptions and misconceptions that may impact the way in which multilingual learners are positioned for mathematical success. Participants will engage in a collaborative math task as a Multilingual Learner in an equitable, asset-based environment. They will experience Math Language Routines as a strategy to position Multilingual learners as capable and confident doers of mathematics.

9–12 | INT | 603 | Saturday, 3:40–5:00 | Kiln | BT

Co-presenter: Susan Hoffmier

Rusgal, Arienne — Santa Clara COE**Ramp Up for Student Success: Accelerate Learning**

Join us for an exciting session on Learning Acceleration for grades TK–5 mathematics! In this session, we will dive into the principles of learning acceleration and collaboratively explore practical strategies and tools to address gaps in student learning while promoting a positive and engaging environment. In addition to experiencing hands-on practice, participants will leave with a toolkit of resources and community of support.

3–5 | INT | 309 | Saturday, 10:40–12:00 | Marlin | BT

Co-presenter: Isabel Garcia

Do you need easy walking directions from room to room while at Asilomar? Try Google Maps!

**Sagun, Theodore — UCLA****Slaying the Middle School Class with Number Sense Routines**

Hang with us to participate in middle school math routines to engage your kids. See student thinking, engage with questions about how you would build these routines for your class, and consider how these math tasks are helpful for supporting your kids to see themselves as mathematicians. Collaborate with others and leave with new ideas—no matter where your kids are!

6–8 | INT | 321 | Saturday, 10:40–12:00 | Afterglow | BT

Co-presenters: Jennifer Camacho, Janet Lee-Ortiz, Guadalupe Portillo Deras

Salgarino, Ma Bernadette — Santa Clara COE**Mathematics Framework: R.E.A.L. Math**

Is your Mathematics R.E.A.L. - Restorative, Emancipatory, Accessible, and Limitless? #BoldEducators cultivate student and teacher agency by honoring student voices in the mathematics learning spaces and teacher voices in the planning and implementation of teaching and learning opportunities. Come explore tools to actualize #REALMath, a vision of the CA Mathematics Framework.

GI | INT | 403 | Saturday, 1:00–2:00 | Kiln | BT

Schrager, Howard — LemonTree Press**King Maximo and the Number Knights-Setting the Table for Math**

Each number has an innate quality based in nature that makes sense to children. Follow the Number Knights' quest to find 'The Greatest Number'. Make shields and recite short poems that embody these archetypes. See how this provides an imaginative context which kindles children's interest in math concepts they will subsequently encounter.

PreK–2 | PRS | 508 | Saturday, 2:20–3:20 | Toyon | BT

Schuler, Becca — Laurel Tree Charter School**Periodic Table: The Math is Elemental!**

There are mild, medium and spicy levels of math tucked away in the periodic table. Your math and science students will learn to look at the elements in a new way. Learn a great way to teach the periodic table's mathematical structure. Living by Chemistry curriculum will be showcased.

6–8 | INT | 512 | Sunday, 2:20–3:20 | Dolphin | BT

Sebek, Nicole — Univ. Preparatory Academy**Equity in Real World Data Using Lines of Best Fit**

A week long lesson with hooks, vocabulary and practice to scaffold learning lines of best fit. Group work to help students use mathematical language to investigate data equitable data using salaries and SAT scores.

9–12 | INT | 204 | Saturday, 9:20–10:20 | Oak Shelter | BT

Co-presenter: Joanne Rossi Becker

Please stay on the paved pathways that meander through the grounds or the boardwalks that take you on a delightful journey through the dunes. By keeping people off of the vegetation, Asilomar is able to preserve the natural landscape for all to enjoy for many years to come. You might see some paths that look like walking trails, but if they are not paved, they are simply animal trails created by many hooves walking the same route through the grounds. Thank you very much for your cooperation.



#hashtag **CMCMATH**

@CAMathCouncil

Sgroi, Richard — Bedford Schools, retired math teacher
Financial Applications: Real-World, Real Math, Real Interest™

When will I ever use this? We've all heard students ask that before! Attendees will learn how the course Advanced Algebra with Financial Applications offers answers to that question. This field tested, UC approved "c" level modeling course is set in the financial contexts of spending, banking, credit, auto and home ownership, taxes, investments, budgets and more, drawing on topics from Algebra 2, Precalculus, Statistics and Probability, with only an Algebra 1 prerequisite.
 9–12 | INT | 505 | Saturday, 2:20–3:20 | Evergreen | BT

Using and Creating Guided Discovery Activities

Guided discovery lessons allow students to become "archeologists on a mathematical dig" by sequentially uncovering layers of mathematics, leading up to an Aha! moment. Participants in this session will learn how to create, adapt, and use guided discovery in a variety of math courses. These activities can be customized to fit the needs of all students by differentiating the paths taken leading to the discovery. A file of sample guided discovery activities will be made available to all attendees.
 9–12 | INT | 103 | Saturday, 8:00–9:00 | Kiln | BT

Smith, Pam — EAI Education

Building Numerical Fluency With Visual Number Talks Bars

The purpose of this session is to provide educators with an overview of strategies as they pertain to fluency with Addition and Subtraction Operations and automaticity with basic facts within Pre-Kindergarten through Grade 2. We will focus on the stages of fluency (exploration, procedural reliability, and procedural fluency). Come join the excitement of the Visual Number Talks Bars and how they are helping students develop fluency!

PreK–2 | INT | 208 | Saturday, 9:20–10:20 | Toyon | BT

Numerical Fluency With Visual Number Talks Dot Models

The purpose of this session is to provide educators with an overview of a new tool and strategies as they pertain to fluency in Multiplication and Division Operations and automaticity of the basic facts within Grades 3–5. The session will incorporate the stages of fluency (exploration, procedural reliability, and procedural fluency). Come join this hour of learning and leave with the tool and strategies needed to immediately implement back on your classroom!

3–5 | INT | 302 | Saturday, 10:40–12:00 | Heather | BT

Sola, Tracy — Silicon Valley Mathematics Initiative

Powerful Pathways to Collaborative Student Talk

Do the same students always talk in class? Learn Math Language Routines that provide safe sharing structures for ALL students to equitably discuss and explore high cognitive demand ideas to contribute to the group knowledge bank. Assure that ALL student ideas are surfaced, honored, made public, and used to move learning forward in a heterogeneous instruction model. Experience how to facilitate Math Language Routines so that student sharing protocols are structured and explicit for success.

3–5 | INT | 111 | Saturday, 8:00–9:00 | Sanderling | BT

6–8 | INT | 211 | Saturday, 9:20–10:20 | Sanderling | BT

CMC-North Affiliate Hub will be open Saturday, between 9:00am–5:00pm in Manzanita. Play some really cool math games! Learn about grants to help you teach math, and enjoy some snacks!

Soto, Osvaldo — UC San Diego Math Project
Continual Meaning Making through Discrete Math

Empowering students begins with asking them to engage in mathematical thinking instead of telling them how to think and, consequently, honoring what learners bring. Come experience a different Pathway to Mathematical Power as you solve problems from a Discrete Math course! All are welcome to make up your own terms and representations, tell us what you mean, and construct your own arguments as you explore with math friends... and sometimes skeptics.
 9–12 | INT | 303 | Saturday, 10:40–12:00 | Kiln | BT
Co-presenter: Melody Morris

Soule, Sharon — Eastern Sierra Unified SD

Thin Slicing Curriculum: Getting from Point A to Point B

Peter Liljedahl's methods from Building Thinking Classrooms are taking the math world by storm. Thin slicing can be discovery learning if you set it up right. However, many teachers aren't sure how to sequence the problems, present the problems, or how to introduce them. We'll look at examples of thin sliced lessons from different levels of high school math and discuss how to present the problems in a way that keeps students thinking, and allows them to "uncover" the mathematical concepts.

9–12 | INT | 405 | Saturday, 1:00–2:00 | Evergreen | BT

Standiford, Gail — Fairfield Suisun Unified SD (retired), UC Davis Math Project Teacher Leader

Proportional Reasoning and Manipulatives, It Makes Sense!

Hands-on lessons help build and deepen students' conceptual understanding of proportional reasoning. We'll explore activities using manipulatives to help students make sense of the relationships inherent in proportional reasoning. We'll focus on why providing experiences for middle school students as they mature toward abstract thinking is essential. We'll experience standards-aligned lessons involving engaging manipulatives and easy to implement in whole-class and small-group settings.

6–8 | INT | 620 | Saturday, 3:40–5:00 | Hearth | BT

Stern, Michael — Heritage Peak Charter School, Vacaville
Problems with Hooks (Hook Problems)

They say that every hit song has a hook, some tune or motif that grabs the listener. It's true of math problems too...some have that lure, that intriguing simplicity, disguising a wicked difficulty, that makes them irresistible. In this interactive session we will examine such problems (including the famous proof that $2 = 1$) and discuss the concepts that they incorporate.

9–12 | INT | 417 | Saturday, 1:00–2:00 | Nautilus West | BT

Stone, Robyn — Santa Clara COE

Investigating, Sensemaking, and Communicating Practices

The Mathematical Practices, together with the Science and Engineering Practices are best grouped into three categories: investigating, sensemaking, and communicating practices. Young children in grades PK–2 benefit from an integrated approach to using these practices in hands-on investigations to optimize engagement, and make thinking and learning visible. We will explore teacher moves that support equitable student-centered classrooms and the structures and systems that amplify students' voices.

PreK–2 | INT | 602 | Saturday, 3:40–5:00 | Heather | BT

Thompson, Meagan — Fresno County Superintendent Schools
Bringing Mathematical Reasoning to Life

Attendees will participate in the instructional routine Decide and Defend featured in the book, *Teaching for Thinking* by Grace Kelemanik and Amy Lucenta. This routine supports students to construct arguments, critique the reasoning of others and has ELD strategies embedded. A video will showcase how students become defenders and skeptics to justify and form chains of reasoning. Participants will walk away with resources and example problems to implement this routine in their classrooms.

GI | INT | 411 | Saturday, 1:00–2:00 | Sanderling | BT

Tobey, Cheryl — Maine Mathematics and Science Alliance
Empowering Students through Formative Routines

A student-centered formative environment is central to equitable learning when opportunities empower students to become active agents in advancing their own learning. Come experience formative techniques designed to activate thinking, promote metacognition, and uncover students' magnificent misconceptions, partial conceptions, and fully developed ideas. Leave with a collection of powerful yet easy-to-implement formative probes and student consolidation and reflection routines.

3–5 | INT | 511 | Saturday, 2:20–3:20 | Sanderling | BT

6–8 | INT | 611 | Saturday, 3:40–5:00 | Sanderling | BT

Torres, Angela — UC San Diego Mathematics Project
Coaching from Teachers' Strengths to Empower Students

Coaching is often practiced as identifying problems to fix, delivering information and making suggestions for change based on the coach's expertise. We advocate for strengths' based coaching practices because student engagement and thus learning are strongly connected to the assets teachers bring. This session uses video and considers what counts as a teacher-strength, where do we find these strengths in the classroom and how do we notice, name, and leverage them when we are supporting teachers?

Ldr/TE | INT | 615 | Saturday, 3:40–5:00 | Triton | BT

Co-presenter: Lisa Jilk

Treglio, Carol — CMC South and MDTP Consultant
Know Your Students = Pathway to Mathematical Power

Know your students means that you know their strengths as well as misconceptions and gaps in understanding of pre-requisite content. A plan includes addressing misconceptions and gaps along with using their strengths to learn the new content. Participants will determine skills necessary for success in a lesson, analyze data and create a plan to address student needs. They will be introduced to MDTP open-ended tasks and other strategies that can be used to move students along the pathway.

9–12 | INT | 605 | Saturday, 3:40–5:00 | Evergreen | BT

Virmani, Rajeev — Sonoma State Univ.
Sacred Spaces: Male Educators of Color in the Classroom

There is a scarcity of culturally sustaining spaces within school sites for teachers of color to feel connected and engaged in the continued development of their pedagogies while navigating the ongoing inequities that exist in education settings. We will share stories from mathematics educators who belong to Male Educators of Color (MEC), an "intergenerational" community, that supports each other to navigate the system, remove barriers, and feel a sense of belonging to thrive in their careers.

GI | PRS | 116 | Saturday, 8:00–9:00 | Nautilus East | BT

Co-presenters: Michael Suarez, Damien Mason, Lorenzo Rivera, Juan Gonzalez

Vriesman, Robert — Retired Mathematics Teacher
An Intuitive Approach to the Unit Circle

This session will demonstrate how to easily and intuitively get you students familiar with the Unit Circle. Rather than memorize the special angles students can visualize the Unit Circle mentally and access the value of the sine, cosine and tangent as quickly as if they had it memorized. You will also learn how students can visualize the Pythagorean Identities on the Unit Circle without having to memorized them. You will learn fun activities that you can do with your students.

9–12 | INT | 617 | Saturday, 3:40–5:00 | Nautilus West | BT

Wallace, Matt — UC Davis
Rethinking Formative Assessment to Promote Equity

Much attention is given to the ways Formative Assessment (FA) can improve student learning. Less attention is given to issues of FA and educational equity. How does FA impact students' math identities? How can FA affirm and strengthen students' math identities as effective and capable learners? We'll consider the importance of equity-based FA, and discuss ways to rethink FA practices to promote educational equity. Come explore how to use assessment for learning and for educational equity!

9–12 | PRS | 422 | Saturday, 1:00–2:00 | Embers | BT

Weekes, Timothy — California Commission on Teacher Credentialing
Math Talks for Agency, Identity and Ownership

This workshop will present a mathematical classroom discourse protocol, Math Talks, which highlights the intellectual diversity of every student while supporting agency, increasing ownership, and nurturing student identities as mathematicians. Math Talks promote students' ability to reflect on and discuss their innate mathematics problem-solving strategies through the dimensions of: Orientation, Organization, Execution and verification, Flexibility, Persistence, and Holistic/Analytical reasoning.

GI | INT | 202 | Saturday, 9:20–10:20 | Heather | BT

White, India — Big Ideas Learning LLC
Equitable Math Instruction through Cultural Relevance

Scores from the National Assessment of Educational Progress suggest that if current educational practices in math classrooms remain the same, the achievement gap between Caucasians and African descent demographics will be eliminated in approximately 217 years. To close the academic achievement gap for all students, teachers must be equipped with methods to conduct equitable instruction that is culturally relevant.

GI | INT | 520 | Saturday, 2:20–3:20 | Hearth | BT

Woodford, David
Number Line Probability with Dice

Games grab students' interest, and many games are dice (or some other random result generator) driven. Learn a game that my students, grades 6–11, have never failed to enjoy while I introduced or reinforced probability concepts along with using graphs to keep track of results and make predictions. This game is easily modified or extended to different situations. You will have fun, leave with a game and dice, and your students will have fun too!

6–8 | INT | 322 | Saturday, 10:40–12:00 | Embers | BT

Stop by the **CMC Affiliate Hub** at Manzanita, Saturday, between 9:00–5:00 and **pick up your swag.**

Wong, Cam — Lodi Unified SD**Multicultural Math Games and Activities**

Are you looking for Mathematics games and activities to engage your culturally diversified students? Come play and explore various games and activities around the world. Bring some to share and take some back to play with your students to enhance their cultural backgrounds and exposing them to the ethnic heritage of others.

6–8 | INT | 222 | Saturday, 9:20–10:20 | Embers | BT

Zamora, Lupe — Oxnard Union HSD**Math Journey through the Years**

This journey will take participants through an exciting exploration of rich math activities through the years. Explorations include looking at patterns, building a model, depicting art, and understanding trigonometry. All activities are hand on so that you can take them back to your classrooms and share them with your students.

9–12 | MITI | 604 | Saturday, 3:40–5:00 | Oak Shelter | BT

Co-presenter: *Terrie Romines*

Zaragoza, Diana — Math Project at UC Davis**Fun with Fractions: Games to Build Understanding**

Does the mere mention of the word “fraction” evoke anxiety for you or your students? Are you interested in exploring ways to increase student engagement and learning? Join the fun and explore games that give students a chance to develop conceptual understanding of fraction in a fun and engaging way. Participants will play and take away many games.

3–5 | MITI | 206 | Saturday, 9:20–10:20 | Scripps Conference | BT

What’s in Grandma’s Purse: A Counting Collections Activity

How do we support children’s development of number sense around counting, count sequence, cardinality and 1:1 correspondence? This session guides participants through research about number sense development and provides them with make and take activities to see how literature can launch exploration of Counting Collections and number sense. Participants will: listen to a story, engage in a counting collections activity, make their own sample, and investigate ways to explore counting collections.

PreK–2 | MITI | 106 | Saturday, 8:00–9:00 | Scripps Conference | BT

MEMORIAL SCHOLARSHIPS**The Gretchen Muller Memorial Scholarship**

This award will enable up to three teacher leaders or mathematics coaches who work with teachers TK-12 (one from each CMC section) to attend one of the annual CMC Conferences within their section. This

scholarship will cover up to \$650 in conference expenses such as registration, travel, room, and meals.

**The Mike Contino Memorial Scholarship**

University or College professors who work with preservice teachers can apply for up to \$2000 in funds to support the costs of bringing a group of preservice teachers to one of the CMC conferences.

Donations to the Gretchen Muller Memorial Scholarship or the Mike Contino Memorial Scholarship can be sent to Erin Fraser, CMC Executive Secretary, 243 S Escondido Blvd. #132, Escondido, CA. 92025. Please note the name of the scholarship on your check.

THE LURIE CENTER SCHOLARSHIP

The California Mathematics Council supports three annual scholarships honoring the memory of Lurie Center who dedicated her career as a teacher to improving the mathematical literacy of students. This award will enable three teachers of color (one from each CMC section) to attend any CMC section conference.

This Lurie Center Scholarship will cover up to \$500 in conference expenses such as room, board, travel, and instructional materials (with no more than \$100 of the award to be used for instructional materials). Each awardee will also receive complimentary conference registration and a one year subscription to the ComMuniCator with CMC membership.

Criteria: ✓ K–14 teacher of color ✓ Teaching assignment includes mathematics ✓ Commitment to help students learn mathematics

The application is due on May 1st each year. Check the CMC website for more information. CMC-South members should also check on The Lurie Center Elementary Teaching Award, which has different qualification criteria.

If you enjoyed this conference and want to attend another CMC section conference, consider filling out an application next year!

Code of Conduct

Member and Events Code of Conduct

This professional code of conduct outlines CMC's expectations for all CMC members and participants at CMC events as adopted by the CMC State Board.

CMC expects its members and event participants to communicate professionally and constructively, whether in person or virtually, handling dissent or disagreement with courtesy, dignity and an open mind, being respectful when providing feedback, and being open to alternate points of view.

When sharing information about the organization or via public communication channels, CMC expects its members and event participants to share responsibly and clearly distinguish individual opinion from fact.

CMC members and event participants are committed to providing a friendly, safe, supportive and harassment-free environment for all CMC members and participants, regardless of gender, age, sexual orientation, gender identity, gender expression, disability, physical appearance, body size, race, ethnicity, religion or other group identity.

Unacceptable Behavior

CMC does not tolerate harassment of CMC members, staff, or other persons involved in CMC events and activities.

Harassment includes offensive verbal or written comments and negative behavior, either in real or virtual space, including those that are related to or are based upon gender, age, sexual orientation, gender identity, gender expression, disability, physical appearance, body size, race, ethnicity, relation or other group identity. Harassment also includes display of sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, and unwelcome physical contact or sexual attention. Sexual language and imagery are not appropriate for any member venue, including events, talks, workshops, social events and social media.

Adapted from the International Society for Technology in Education Codes of Conduct
<https://www.iste.org/membership/codes-of-conduct>



Enter to win a **free registration** and **free housing** at next year's conference by completing the **Conference Evaluation** go to <https://bit.ly/AsilomarConfEval>

Your **feedback** is important to us! Please take a moment to complete the **Speaker evaluation** at <http://bit.ly/AsilomarSpeakerEval>



CMC-North would like to express its sincere gratitude to:

The Asilomar Program Committee—for preparing an enriching program with speakers who are experts in their field, a variety of presentations to energize and expand the skills and talents of each mathematics educator, and a feeling of renewed enthusiasm for teaching.

The Speakers—for providing stimulating presentations and sharing new ideas, teaching methods, and tools. We acknowledge the many hours of preparation they have spent to provide you with valuable handouts and with this opportunity for growth and networking.

The Asilomar Committee Chairs and Volunteers—for providing you with the best support to help make your experience at this year's conference go smoothly through their help with equipment, signs, logistics, and more.

The Presiders and Pre-service Teacher Volunteers—for providing speakers with a warm welcome, an introduction, and a hearty thank you at the end of each session. Presiders are the ones that keep speakers coming back to Asilomar.

Thank You

Access & Equity strand will develop Awareness in Equity and Social Justice in Mathematics and The Five Dimensions of Powerful Classrooms encompassing Equitable Access to Content and Agency, Authority, and Identity.

Coaching strand will focus on the coaches role in supporting all aspects of the teaching and learning of mathematics.

Each hour during the day different elementary, middle, and high school teachers will share **games** they have been using with their students. There are games for practice, strategy games from the ComMuniCator, and hand games.

In the **Make-It, Take-It (MITI)** strand you can make your own models for classroom projects and activities. Each session is limited to 25 participants. There may be a small materials fee for some sessions.

Framework strand focuses on teaching strategies and resources to incorporate the “big ideas” detailed in the California Math Framework into effective lessons.

Lesson Design strand will provide specific strategies to support student learning in a variety of applications and contexts that you can use to enhance your classroom content.

Technology and Manipulatives strand utilizes physical and virtual tools to build conceptual understanding from concrete to representational to abstract.

■ **Access & Equity**

- | | |
|--------------------------|------------------|
| Alsberg, Beth | McConchie, Liesl |
| Anderson, Stacy | McNamara, Julie |
| Arth, Karen | Morris, Steve |
| Aston, Robin | Moss, Diana |
| Asturias, Harold | Nank, Sean |
| Becker, Joanne | Nisbet, Nigel |
| Bertolone-Smith, Claudia | Ortega, Courtney |
| Brown, Kyndall | Picciotto, Henri |
| Burrill, Gail | Raff, Cynthia |
| Byrd, LaToya | Restani, Rachel |
| Campos, Ed | Ruiz, Brianna |
| Cheng, Ivan | Sagun, Theodore |
| Davalos-Lemus, Erika | Sebek, Nicole |
| Dueck, Jonathan | Sola, Tracy |
| Espinosa, Joseph | Soto, Osvaldo |
| Fetter, Annie | Stern, Michael |
| Gale, Mardi | Stone, Robyn |
| Gamino, Liz | Tobey, Cheryl |
| Garcia, Isabel | Treglio, Carol |
| Green, Sara | Virmani, Rajeev |
| Jalalpour, Kathleen | Vriesman, Robert |
| Letts, Danielle | Wallace, Matt |
| London, Robert | Weekes, Timothy |
| McCaw, Shannon | White, India |

■ **Coaching**

- Gale, Mardi
- Harris, Sarah
- Torres, Angela

■ **Framework**

- Burrill, Gail
- Hoffmier, Susan
- Salgarino, Ma Bernadette

■ **Games**

- Bolognese, Chris
- Deutsch, Kevin
- Gamino, Liz
- Kline, Daniel
- Pauls, Michelle
- Reidy, Sean
- Wong, Cam
- Woodford, David
- Zaragoza, Diana

■ **Lesson Design**

- Andino, Melisa
- Aoki, Marisa
- Baker, Beth
- Boaler, Joe
- Beatini, Tom
- Becker, Dean
- Condon, Joe
- Ebrahimian, Suzanne
- Foster, Hallie
- Loomis, Caroline
- Mattoon, David
- McHugh, Maggie
- Muller, Eric
- Preston, Robert
- Pugalee, David
- Reyes, Jessica
- Rockwood, Jessica
- Rosier, Soren
- Rusgal, Arienne
- Schuler, Becca
- Sgroi, Richard
- Soule, Sharon
- Thompson, Meagan

■ **Make It, Take It**

- Mcgarrah, Jolene
- Zamora, Lupe
- Zaragoza, Diana

■ **Technology & Manipulatives**

- Abell, Steven
- Bower, Travis
- Eisenberg, Gary
- Enriquez, Veronica
- Franklin, Jim
- Kossover, Zeke
- Menon, Beena
- Meyer, Dan
- Smith, Pam
- Standiford, Gail

We have made every attempt to provide adequate seating for participants at the conference. However, to ensure your safety and adhere to fire regulations, the number of participants allowed in each meeting room will be limited to the number of seats approved by the Fire Marshall. Anyone sitting on the floor or standing will be asked to leave the room. Please check the Program Matrix for the **seating capacity** of each room. All seats are available on a first-come, first-served basis.

Do you need easy walking directions from room to room while at Asilomar? Try Google Maps!



Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience						Beginning Tch.
		K-2	3-5	6-8	8-12	Ldship/ChEd	GI	
Abell, Steven	How Operator Precedence *Really* Works					√		√
Alsberg, Beth	Data: More than Just Numbers—A Data Visualization Project			√				√
Anderson, Stacy	Building Subtraction Fluency without Going Next Door	√						√
Andino, Melisa	Reimagining Fluency through Powerful Routines			√				√
Aoki, Marisa	Problem Solving + Portfolios = Amazing Student Growth		√					√
Arth, Karen	Building Number Routines with Numberblocks	√						√
Aston, Robin	Assessments that Matter: Rethinking Tests				√			√
Asturias, Harold	Linking Learning Language and Math						√	√
Baker, Beth	Venn Diagrams: A Power Tool			√	√			√
Beatini, Tom	Exploring Limits of Sequences Using “Cool Problems”				√			√
	Want to Develop Fluency with Functions? Algebrafy Patterns!			√				√
Becker, Dean	Classroom Ready Statistics Projects				√			√
Becker, Joanne	When is Equal Not Equitable: Modeling in Geometry				√			√
Bertolone-Smith, Claudia	Give Math a Fair Chance!		√					√
Boaler, Joe	Math-ish – Enchant Your Students with the ish Version of Maths!	√	√	√	√			
Bolognese, Chris	Exploring Expected Value with Strategic Games						√	√
Bower, Travis	Nspire App for iPad: Best Practices				√			√
Brown, Kyndall	Mapping with Mathematics: YPAR in the Math Classroom				√			√
Burrill, Gail	Algebra Across the K-12 Curriculum						√	√
	Building Mathematical Power: Interactive Dynamic Technology				√			√
	What Mathematics Belongs in Algebra II?				√			√
Byrd, LaToya	Supporting Culturally Responsive Pedagogy with IM K-5 Math™					√		√
Cagle, Peg	PLC: Purposely Leveraging Community to Serve Our Students						√	√
Callahan, Patrick	Asset-Based Assessments: Tools for Advocacy Not Judgement						√	√
Campos, Ed	Design for Diversity: Solve Inequities with Creativity						√	√
Champagne, Zachary	Making Math More Social						√	√
Cheng, Ivan	How to Do Less Work and Get Better Results: Use the AFL Method				√			√
Condon, Joe	Powerful Formative Assessment-Big R and Little r Re-engagement			√				√
Davalos-Lemus, Erika	Let’s Count! Building the Power of Counting	√						√
Deutsch, Kevin	Whole Classroom Math Games for Thinking and Discourse			√				√
Dueck, Jonathan	Family Engagement in the Primary Classroom	√						√
Ebrahimian, Suzanne	CANMEE Lesson Study for Equity and Excellence in TK-2	√						√
Eisenberg, Gary	The Power of the Visual Story in Math Instruction					√		√
Enriquez, Veronica	Create Problem Solvers: Incorporate Manipulatives with BTC			√				√
	Finding the Power of Making Sense of the Infinite Pieces		√					√
Espinosa, Joseph	Pathways to Powerful Place Value	√						√
Fetter, Annie	Sense-making: Is it at the Core of Your Classroom?						√	√
Foster, Hallie	BQF: Big Questions First				√			√

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience						Beginning tchr.
		K-2	3-5	6-8	8-12	Ldship/TchEd	GI	
Franklin, Jim	Number Line to 10,000,000, Other Math Manipulatives, and STEAM		√					√
Gale, Mardi	Coaching to Support Understanding and Content Access for All					√		√
	Purposeful Questioning = Access, Ownership, Understanding						√	√
Gamino, Liz	Building Children's Mathematical Knowledge Via Play	√						√
	CRP+ SMP=Equitable Access to Big and Bold Mathematical Ideas						√	√
Garcia, Isabel	The Mathematics for Social Justice Toolkit: Take Action!						√	√
Goldstein, Mark	Bring Joy Back to the Classroom with Games and Card Sorts			√				√
Green, Sara	Developing Students' Math Identities		√					√
Harris, Sarah	The Power of Leading by Doing					√		
Hoffmier, Susan	Get MAD! Making Decisions with Mean Absolute Deviation		√					√
Howie, Hua	How to Make a Better Marketing Team for Math						√	
Jalalpour, Kathleen	Ditch the Pencils! Teaching Math in Kg/1st grade	√						√
Kline, Daniel	Building Community through Julia Robinson Math Festivals		√					√
Kossover, Zeke	Tearing Up Your Dataset to Understand How to Make a Graph				√			√
Letts, Danielle	We Are All Mathematicians		√					√
London, Robert	Teaching Problem Solving: An Approach Consistent with CCMP				√			√
Loomis, Caroline	Quick Routines to Foster Collaboration				√			√
Macfarlane, Mary	Just the Facts		√					√
Mattoon, David	Visual Power! A Pathway to Understand Equations and Fractions			√				√
McCaw, Shannon	Storylines that Inspire Meaningful Mathematical Connections			√				√
McConchie, Liesl	Four Ways to Center Your Math Intervention Around Math Identity			√				√
Mcgarrah, Jolene	Leave Better Children for Our Future			√				√
McHugh, Maggie	Bringing Project-Based Learning to Life in Math			√				√
McNamara, Julie	Fraction Sense: What Is It and How Do We Develop It?		√					√
Menon, Beena	Collaborative Problem Solving on VNPS Using Manipulatives		√					√
Meyer, Dan	Use Your Technology: Don't Let Your Technology Use YOU				√			√
Morris, Steve	I'm Pro Choice...Boards! Designing CBs Based on DOK						√	√
Moss, Diana	Units Coordination in Hands-on Activities for Primary Grades	√						√
Muller, Eric	Feeling Pressured: The Amazing Math of Air Pressure						√	√
Nank, Sean	Standards Based Grading (SBG): Seven Years of Lessons						√	√
Nisbet, Nigel	The Power in Struggle: Creating Equitable Access to Math						√	√
Ortega, Courtney	The Role of Revision in Math Class			√				√
Pauls, Michelle	Routines, Resources, and Games to Build Primary Number Sense	√						√
Picciotto, Henri	Fractions: The Well-chosen Rectangle, Pies, and a Challenge		√					√
Pinkerton, Ken	Organizing a Community Math Festival: Humboldt Math Fest					√		√
Preston, Robert	Bridging Elementary and Middle School Mathematics					√		√
Pugalee, David	Lesson Imagining for Deeper Student Learning			√				√
Raff, Cynthia	Make Middle School Statistics Come Alive			√				√
Reidy, Sean	Math Moments: Harnessing Fun to Build Grit and Understanding	√						√
Restani, Rachel	How Does Peer Feedback Support Understanding of Fractions?		√					√

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience						Beginning Tch.
		K-2	3-5	6-8	8-12	Ldsip/TchEd	GI	
Reyes, Jessica	Engage and Explore! Access to Deep Math Understanding for All			√				√
Rockwood, Jessica	Creating Systems for Effective Math Intervention		√					√
Rosier, Soren	Unleashing the Potential of Peer Tutoring in Math Education			√				√
Ruiz, Brianna	Activating Agency for Multilingual Learners				√			√
Rusgal, Arienne	Ramp Up for Student Success: Accelerate Learning		√					√
Sagun, Theodore	Slaying the Middle School Class with Number Sense Routines			√				√
Salgarino, Ma Bernadette	Mathematics Framework: R.E.A.L. Math						√	√
Schrager, Howard	King Maximo and the Number Knights-Setting the Table for Math	√						√
Schuler, Becca	Periodic Table: The Math is Elemental!			√				√
Sebek, Nicole	Equity in Real World Data Using Lines of Best Fit				√			√
Sgroi, Richard	Financial Applications: Real-World, Real Math, Real Interest				√			√
	Using and Creating Guided Discovery Activities				√			√
Smith, Pam	Building Numerical Fluency With Visual Number Talks Bars	√						√
	Numerical Fluency With Visual Number Talks Dot Models		√					√
Sola, Tracy	Powerful Pathways to Collaborative Student Talk		√	√				√
Soto, Osvaldo	Continual Meaning Making through Discrete Math				√			√
Soule, Sharon	Thin Slicing Curriculum: Getting from Point A to Point B				√			√
Standiford, Gail	Proportional Reasoning and Manipulatives, It Makes Sense!			√				√
Stern, Michael	Problems with Hooks (Hook Problems)				√			√
Stone, Robyn	Investigating, Sensemaking, and Communicating Practices	√						√
Thompson, Meagan	Bringing Mathematical Reasoning to Life						√	√
Tobey, Cheryl	Empowering Students through Formative Routines		√	√				√
Torres, Angela	Coaching from Teachers' Strengths to Empower Students					√		√
Treglio, Carol	Know Your Students = Pathway to Mathematical Power				√			√
Virmani, Rajeev	Sacred Spaces: Male Educators of Color in the Classroom						√	√
Vriesman, Robert	An Intuitive Approach to the Unit Circle	√			√			√
Wallace, Matt	Rethinking Formative Assessment to Promote Equity							√
Weekes, Timothy	Math Talks for Agency, Identity and Ownership						√	√
White, India	Equitable Math Instruction through Cultural Relevance						√	√
Wong, Cam	Multicultural Math Games and Activities			√				√
Woodford, David	Number Line Probability with Dice			√				√
Zamora, Lupe	Math Journey through the Years				√			√
Zaragoza, Diana	Fun with Fractions: Games to Build Understanding		√					√
	What's in Grandma's Purse: A Counting Collections Activity	√						√

Zip-up hoodies, long and short sleeve shirts

displaying this year's Asilomar Mathematics Conference logo will be available for purchase in Merrill Hall, Friday and Saturday. Don't miss your opportunity to bring home a memento of your conference participation.



If you know a great math teacher, go to the PAEMST portal to nominate a K-6th grade teacher of mathematics or computer science for the 2024 award. To nominate a teacher or to download an application visit www.paemst.org. The nomination period is open until January 8, 2024. The application must be completed by February 6, 2024.

California Mathematics Council — North
CERTIFICATE OF ATTENDANCE

is hereby granted to

in recognition of attendance and participation at the

*CMC-N Mathematics Conference at Asilomar
Pacific Grove, CA | December 1–3, 2023*

Mary Ann Sheridan
Mary Ann Sheridan, CMC-N President



CALL FOR SPEAKERS



You get to vote on next year's conference theme!

QR code takes you to survey, answer three short questions and it takes less than a minute! Respond by Sunday, December 3, 2024

.....

CMC-North 67th Annual Conference
Asilomar Conference Grounds, Pacific Grove

2024 Theme TBD
December 6–8, 2024

Proposals will be accepted online at <https://www.cmc-math.org/north-speakers> from January 30 to May 1, 2024. We welcome new and returning speakers to submit proposals. Speaking at a conference is a great way to share your ideas and expertise with your colleagues.

For further information, please contact: Nicole Sebek at northprogram@cmc-math.org.

CMC STUDENT ACTIVITIES TRUST

Tax Deductible Contribution

Remember your year-end tax deductible contribution to the CMC Student Activities Trust Fund. So far we've spent \$200,000 to support student activities throughout California since 1983. All contributions should be mailed to:

Chris Tsuji
CMC Student Activities Trust Fund
670 Choctaw Drive, San Jose, CA 95123

Applications

Many of the past activities supported have been math fairs and various math contests, however funds are not limited to these two type of events. For information on how to apply for these funds to support student activities in mathematics, visit www.cmc-math.org/awards or www.cmc-math.org/awards-grants-scholarships or contact Brian Lim at blim128@yahoo.com

Award | Nominations

It is time to nominate those individuals who might be recognized for their contributions to mathematics education. CMC has three awards (see below). For more information about the nomination process, check the CMC-Math website under Awards and Recognition. Nominations are due September 1, 2024. Awards for 2023 will be presented at the President's party Saturday night!

1 The **George Polya Memorial Award** may be conferred upon a teacher K–16, who has been deemed as an outstanding teacher of mathematics over a sustained period of time, has supported CMC activities, has been an active participant in CMC, and has high visibility throughout the state of CA.

2 The **Edward Begle Memorial Award** may be conferred on an educator who has, for a sustained period of time, been supportive of CMC activities, has offered continual encouragement, and has been actively involved in California mathematics.

3 The **Walter Denham Memorial Award** may be presented to a person who is recognized as an advocate for mathematics education, not only at the local level, but also at the broader state and national levels.

2024 PAEMST Award | Finalists

The Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) are the nation's highest honors for teachers of mathematics and science. Since 1983, more than 5,200 teachers have been recognized for their contributions in the classroom and to their profession. This year the state panel has selected four 7-12 teachers to go forward as finalists in mathematics and computer science. A national panel of distinguished mathematicians and educators make the final recommendation to the White House and one of the four will be selected to receive the award for California. The finalists are:

Mrs. Kristie Donovan

Kristie teaches math at Woodbridge High School in the Irvine Unified SD in Irvine. She has been teaching for fifteen years and is presently teaching Enhanced Math III (Honors), AP Calculus BC, and Integrated Math I. Kristie previously worked as a Teacher on Special Assignment where she built relationships with secondary math teachers across the district and led district math teams in creating integrated math courses, implementing research-based instructional strategies, and reexamining high school grading practices. As a teacher and mentor, she has created guidelines for Standards-Based Grading and supported teacher candidates and early career teachers. Kristie is a National Board Certified Teacher and has presented at numerous conferences, including CMC-South, CMC-North, and Orange County Math Council, as well as at the NCTM annual conferences in 2018 and 2022. Kristie was a previous Finalist in 2021. The lesson Kristie taught in her Enhanced Math III Honors class was on students discovering the relationship between Cartesian graphs and their corresponding polar graphs.

Mrs. Cheyanne Freitas

Cheyanne teaches math at Dixon High School in the Dixon Unified SD. She has been teaching for eight years and is currently teaching AP Calculus, Integrated Math 2, and Integrated Math I Support. She is the department chair as well as a mentor teacher. The Math I Support class is an intervention class that 9th-grade students take in addition to their Integrated Math I class. Cheyanne is a Teacher Leader with the UC Davis Math Project. She has presented professional development on effective math teaching strategies to teachers throughout the state. She also has published articles and presented on equitable mathematics teaching strategies in Edutopia, the California Teachers Association Educator magazine, and the CMC CoMmuniCator. The lesson Cheyanne taught in her Math I Support class was showing linear functions using multiple representations of a graph, table, and equation.

Mr. Richard Kick

Richard teaches at Newbury Park High School in the Conejo Valley Unified SD. He has been teaching for forty-three years. He teaches AP Computer Science A and AP Computer Science Principles (a course he helped develop). He is currently a member of the Computer Science Teachers Association (CSTA) Editorial Panel. He has written and presented several papers for regional and national CSTA conferences. Richard served as a writer on the K-12 Computer Science Framework and as a committee member on the California State Standards Committee for Computer Science Education. Richard was a contributor to both the Illinois Council of Teachers of Mathematics (ICTM) and NCTM Journals. He was a member of the Special Interest Group on the Computer Science Education (SIGCSE) and NCTM International Conference Committees and published and presented several papers on math and computer science education at international conferences. Richard is also a sponsor of the Code Nation Club and the American Computer Science League Club. The lesson he taught in his AP Computer Science Principles class was on using programming abstractions to create computer simulations.

Jonathan Southam

Jonathan teaches at New Technology High School in the Napa Valley Unified SD. He has been teaching for eleven years. He currently teaches Math I, Math III, and Precalculus. He has spoken at both CMC North and South, as well as the NCTM Annual Conference in 2017. He served as a STEM teacher mentor with Trellis Education in the San Francisco Bay Area to support middle school and high school STEM teachers in their first five years of teaching. The lesson Jonathan taught in his Math III class was exploring the product law of logarithms.

If you know a great math teacher, go to the PAEMST portal to nominate a K-6th grade teacher of mathematics or computer science for the 2024 award. To nominate a teacher or to download an application visit www.paemst.org. The nomination period is open until January 8, 2024. The application must be completed by February 6, 2024.

For more information about awards, or to nominate, visit Presidential Awards at www.paemst.org



Exhibitors

Company	Merrill Hall	Company	Merrill Hall
Amplify Desmos Math	701-702	Great Minds	304
Arte Piel Morena	J01	hand2mind	204-205
Benjamin Banneker Association	F01	Heinemann	901-902
brising.com	704-705	Houghton Mifflin Harcourt	804-805
California Retired Teachers Association	303	Imagine Learning	502-503
California Teachers Association	1004	Kiddom	904-905
Carnegie Learning	504-505	Legends of Learning	1005
Center for Math and Teaching	H01	Illustrative Mathematics	G01
CMC-N Exhibits		McGraw Hill	103-105
CMC-N t-shirts	101-102	MidSchoolMath	305
College Board	501	National Council Teachers of Mathematics	301-302
ComMuniCator	201-202	National Geographic Learning/Cengage	1001-1003
CPM	801-802	NextGenMath, LLC	903
CSU/UC Mathematics Diag. Testing Project (MDTP)	604	PeerTeach	203
Curriculum Associates	602-603	Rounded Learning	703
Derivita	B01	Savvas Learning Company	403-405
EAI Education	601	ST Math, Created by MIND Education	D01
EdGems Math	401-402	STEMscopes Math by Accelerate Learning Inc.	M01
ExploreLearning	C01	The Math Learning Center	K01
First Time at Asilomar	A01	TODOS: Mathematics for ALL	803
GeoGebra	L01	UCSC COSMOS	605

Merrill Hall at Asilomar
Friday, 1:30–7:30pm **and** Saturday, 7:30am–4:30pm
Saturday, drawings start at 12 noon

Exhibits close promptly at times listed above so visit early!

Zip-up hoodies, long and short sleeve shirts

displaying this year's Asilomar Mathematics Conference logo will be available for purchase in Merrill Hall, Friday and Saturday. Don't miss your opportunity to bring home a memento of your conference participation.



Name badges must be worn at all times while attending the conference. Badges are required for entry into the sessions and the exhibit hall.

WIN AN AWESOME PRIZE!

Pick up your drawing tickets in Merrill Hall. Thanks to the exhibitors offering various prizes! Make sure to check your texts, the app, or the exhibits Saturday afternoon to see if you've won.

Must pick up prize by 4:00pm!



Do you need easy walking directions from room to room while at Asilomar? Try Google Maps!



STAGE

J01
Arte
Piel
Morena

1001 National Geographic Learning/Cengage	1002	1003	1004 California Teachers Association	1005 Legends of Learning
--	------	------	---	-----------------------------

M01
STEMscopes
Math
by Accelerated Learning

H01
Center for
Math
and
Teaching

901 Heinemann	902	903 Nextgen Mathematics	904 Kiddom	905
801 CPM	802	803 TODOS Mathematics for ALL	804 Houghton Mifflin Harcourt	805

L01
GeoGebra

D01
ST Math
MIND
Education

701 Amplify Desmos Math	702	703 Rounded Learning	704 brising.com	705
601 EAI Education	602 Curriculum Associates	603	604 CSU/UC Math Diagnostic Testing	605 UCSC COSMOS

K01
The
Math
Learning
Center

C01
Explore
Learning

501 College Board	502 Imagine Learning	503	504 Carnegie Learning	505
401 EdGems Math	402	403 Savvas Learning Company	404	405

G01
Illustrative
Mathematics

B01
Derivita

301 National Council Teachers of Mathematics	302	303 California Retired Teachers Association	304 Great Minds	305 MidSchoolMath
201 ComMuniCator	202	203 PeerTeach	204 hand2mind	205

F01
Benjamin
Banneker
Association

A01
First
Time
at
Asilomar

101 CMC-N T Shirts	102	103	104 McGraw Hill	105
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Women room
downstairs

Men room
Downstairs



Did you know....The conference is entirely run by a small team of volunteers-mostly full time teachers! To get involved, drop by the CMC-North Affiliate hub in Manzanita!

Board Members

2023	State	PresidentBruce Grip	North	PresidentMary Ann Sheridan
		President-electMa Bernadette Salgarino		President-electTim Weekes
2024	State	SecretaryChristina Lincoln-Moore	North	Vice President.....Beth Baker
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2024	State	Immediate Past President.....Bruce Grip	North	SecretaryJinne Webb
				Treasurer.....Dennis Kombe

Calendar of Math Events



March 8-9, 2024

CMC Central Mathematics Symposium, Bakersfield, CA

September 23-24, 2024

NCSM Annual Conference, Chicago, IL

September 25-28, 2024

NCTM Annual Conference and Exposition, Chicago, IL

November 8-9, 2024

CMC South Mathematics Conference, Palm Springs, CA

December 6-8, 2024

CMC North Mathematics Conference at Asilomar, Pacific Grove, CA

For information and links to these math events go to:

www.cmc-math.org

Affiliated Groups

Contact your local affiliate to find out more about their organization and become involved at a local level!

Alameda Contra Costa Council of Math Educators
Tim Weekes, timw0890@yahoo.com

California Math Council to the Far North
Gwen Neu, glneu3@gmail.com

Math Educators of Solano County
Linda L Flood, lflood6@comcast.net

Monterey Bay Counties Math Educators
James Schierer, jschierer@smcjuhsd.org

Northern Nevada Mathematics Council
Glenn Waddell, gwaddell@unr.edu

Sacramento Area Math Educators
Dave Chun, dchun@scoe.net

San Francisco Math Teachers' Association
Angelica Trejo-Ortiz, trejo-ortiza@sfusd.edu

Mt Lassen Math Council
Leah Hoyer, lhoyer@northernsummitacademy.org

Santa Clara Valley Math Assoc
Steven Blasberg, steve.blasberg@wvm.edu

Sonoma County Math Council
Josh Deis, jdeis@petk12.org

Exhibits

Be sure to make time in your schedule to visit the exhibits at Merrill Hall. You'll find a remarkable collection of mathematics education books, curriculum materials, teaching resources, games, manipulatives, and technology and services. Exhibit hours allow ample opportunity to explore, try out, and purchase product/services for use in your classroom or to help you meet your career goals. You'll also have the opportunity to get fresh ideas, valuable information and resources and to see demonstrations of how products work. Be sure to check the list of exhibits and map of the exhibit hall on page 31.

California Mathematics Council–Northern Section

Purpose:

CMC-N wishes to encourage creativity and innovation among Northern California educators for the purpose of developing mathematically powerful students.

Who May Apply:

CMC-N members from any public or private school or district whose membership has been paid for the current school year.

Requirements:

- √ Can only apply once per school year
- √ Should have additional sources of funding
- √ Application completed in full

Deadlines:

November 1–up to \$500 **and** March 1–up to \$500

Application:

1. Title Page

- a. Title of Grant
- b. Name of Grant Leader, CMC Member #, home phone and home email
- c. School name, address, fax and email
- d. Grant impact–number of students, teachers and percent members of minorities
- e. Maximum amount requested to implement the grant

2. Description of Materials Use

- a. How will materials be used and with what goals in mind?
- b. Statement of need as related to your students
- c. Projected activities and timeline, if applicable
- d. Impact–Who and how many will be affected?

3. Materials Budget

- a. Items to be purchased
- b. Expected vendor and prices
- c. Additional funding sources available to you
(Grant requests may be only partially funded.)
- d. Total amount requested

4. Approval Signatures

- a. Grant Leader and Building Site Administrator and title

End Report:

Submit a short report to the Mini-Grant committee by the end of the year on how the purchased materials were used and the effectiveness of the purchased materials in order to be considered for a grant in the future.

Apply online:

<https://camc.memberclicks.net/northminigrants>
(application cover page with signatures should be scanned)

NOTE:

- Grant covers materials only, not teacher work time or compensation.
- Only one Mini-Grant can be awarded per applicant per school year.
- Grant is limited to current CMC-N members and to school sites in the CMC-N area.

Name badges must be worn at all times while attending the conference. Badges are required for entry into the sessions and the exhibit hall.

STAY CONNECTED WITH CMC

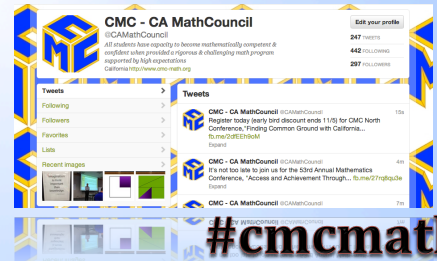
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www.cmc-math.org

CMC-North Conference Committee

Wishes to thank all of the speakers for contributing to an amazing conference.

Thank You

SAVVAS

Now that the **California Mathematics Framework** has been adopted by the State Board of Education, Savvas authors are busy developing our next generation of California specific mathematics programs.

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- Virtual manipulatives and interactive math tools that foster mathematical practices
- Digital tasks, practice, and assessment for real-time feedback and data to inform instructional decisions
- Live virtual instruction within the platform with LiveLearn

Find out more



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John Hopkins | jhopkins@hand2mind.com | 916.662.396

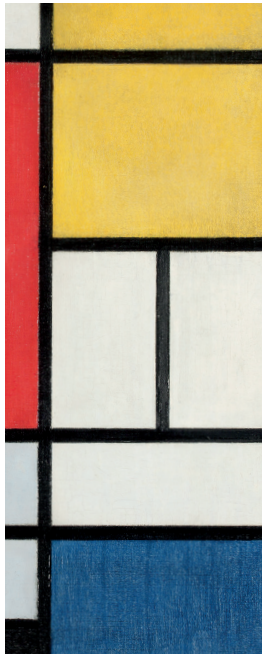




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Asilomar Math Conference Room Guide

A – North Woods (Heather, Manzanita, Oak Knoll, Toyon, Willow)
B – View Crescent (Chapel, Curllew, Sanderling)
C – Merrill Hall
D – Sea Galaxy (Nautilus East & West, Triton)
E – Fireside (Afterglow, Embers, Evergreen, Fred Farr, Hearth, Kiln)



LODGING	MEETING ROOMS
Afterglow Rooms 101-512	Acacia B4
Breakers East Rooms 821-832	Chapel Auditorium D5
Breakers West Rooms 833-840	Curllew C4
Cypress Rooms 717-724	Dolphin C5
Deer Lodge Rooms 121-150	Evergreen F1
Director's Cottage Rooms 133-1324	Fred Farr Forum E2
Engineer's Cottage Rooms 1202-1211	Heathar E2
Guest Inn Rooms 901-903	Kiln E2
Hearth Rooms 1325-1336	Madrone G3
Live Oak Rooms 101-110	Manzanita I & II B4
Lodge Rooms 2.01-218	Marlin D4
Long View North Rooms 101-110	Merrill Hall G4
Long View Middle Rooms 111-120	Nautilus H4
Long View South Rooms 121-130	Oak Knoll I & II C4
Manzanita Rooms 1001-1012	Oak Shelter F1
Oak Knoll Rooms 103-1024	Sanderling C6
Pirates' Den Rooms 501-510	Scripts D4
Sand Rooms 605-610	Surf & Sand G5
Scripts Rooms 301-323	Toyon B4
Shores Rooms 709-716	Triton H4
Spindrift North Rooms 849-856	Willow I & II B4
Spindrift South Rooms 841-848	Whitehead G3
Stuck-up Inn Rooms 401-414	OTHER
Surf Rooms 601-604	BBQ Area E6
Tree Tops Rooms 111-120	Crocker Dining Hall F6
Whitecaps North Rooms 809-820	Fire Pits H5
Whitecaps South Rooms 801-808	Guest Check-In E5
Willow Inn Rooms 1025-1036	Hearst Social Hall F1
Windward Rooms 701-708	Human Resources A3
Woodside Rooms 1212-1223	Meditation Space A3
	Mott Training Center G2
	Park Ranger Office G1
	Park Store E5
	Phoebe's Cafe E5
	Seascope F6
	Swimming Pool A5
	Conference and Event Sales E4
	Viewpoint E4
	Volleyball Court F5
	Woodlands A3
	Yoga Room A3
	PARKING LOTS
	Parking Lot A E5
	Parking Lot B G5
	Parking Lot C H4
	Parking Lot D F2
	Parking Lot E E3
	Parking Lot F D4
	Parking Lot G D3
	Parking Lot H B3
	Parking Lot J A4
	Parking Lot K B4
	Parking Lot L B5
	Parking Lot M E2
	Parking Lot N H2
	Parking Lot P I3

LEGEND

- Information/Guest Check-In
- Disabled Parking
- EV Charging Station
- Beverage Vending Machine
- Ice Machine
- Julia Morgan Historic Building
- Roadway
- Pedestrian Pathway
- Outdoor Group Activity Area

