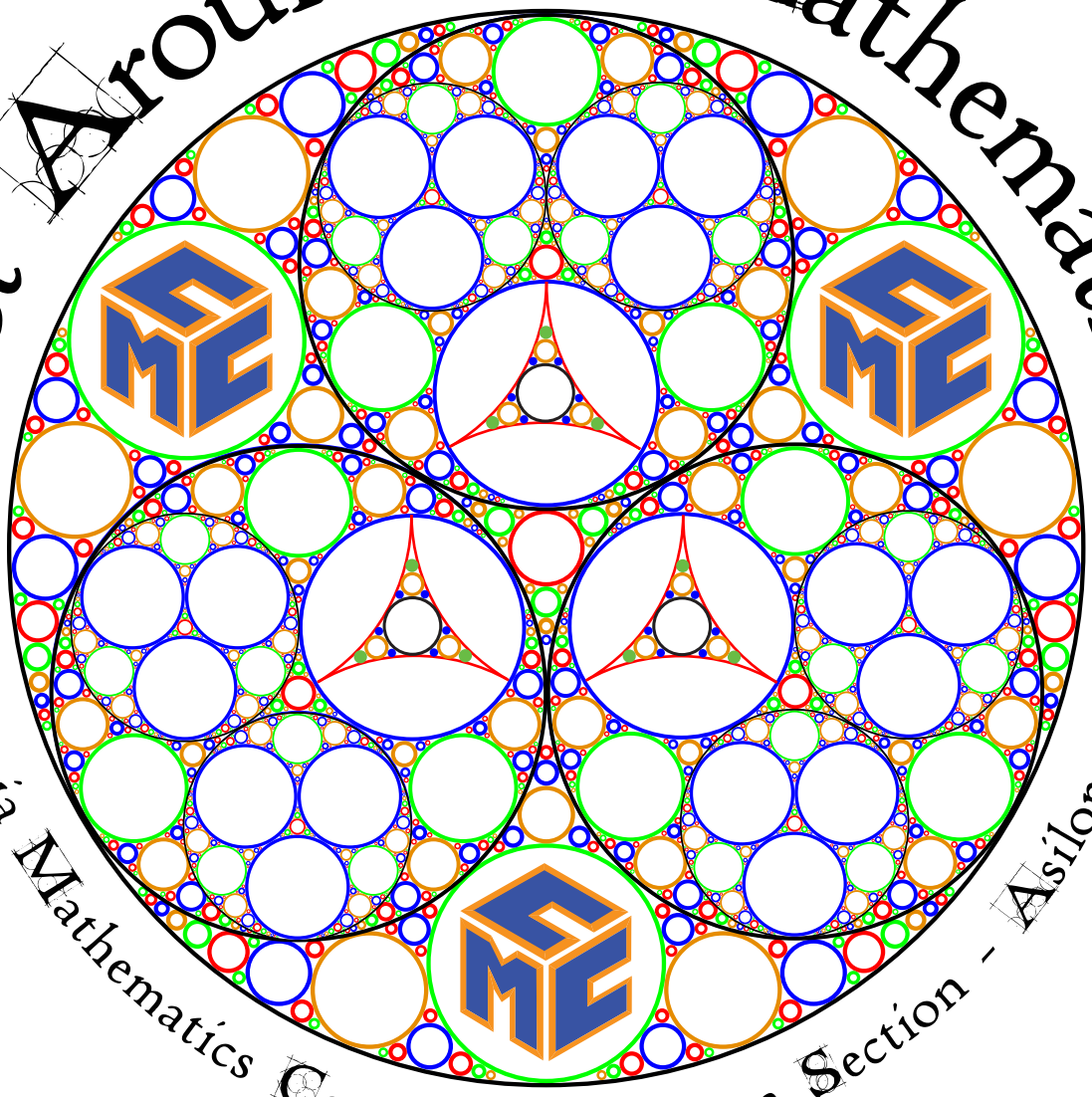
ASILOMAR Mathematics Conference 2012

www.cmc-math.org

Get Around to Mathematics!



California Mathematics Council - Northern Section - Asilomar 2012

Friday, November 30 - Sunday, December 2, 2012

Asilomar Conference Grounds • Pacific Grove Middle School, Pacific Grove

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 nearly 200 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...

Several 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!

Table of Contents

Conference Evaluation Form Now Online!

Go to **www.surveymonkey.com/s/asilomar** by December 31, 2012 and you will be entered in a drawing for FREE conference registration and on grounds housing for next year.

The winners for this year's free registration and housing are Kirsten Choy and Stephanie Willshon-Butler

A Special Thanks To!

Conference Coordinator	Registration	Program Chair
Christine Robles	Julie Crozier	Rebecca Lewis

Mini Conference at Asilomar

FRIDAY | 1:30-4:30 PM

Speaker	Topic	Grade Level	Room
Asturias, Harold	Constructing Viable Arguments in Middle School Mathematics	6-8	Curlew
Callahan, Patrick	Constructing Viable Arguments in High School Mathematics	8-12	Evergreen
Easterday, Joan	CMP CCSS Task Force: Bridging from Counting to Algorithms K-2	Pre-K-2	Acacia
Hull, Ted	Transforming Classroom Instruction	Ldrshp	Oak Shelter
Meyer, Dan	Teaching Applied Math with Digital Media	6-8	Scripps Conference
Parker, Ruth	Enhancing Teaching and Learning with the Standards for Mathematical Practice	3-5	Toyon

Program

	Time	Event	Location
Friday	3:00-7:00 PM	Registration	Surf & Sand, Asilomar
	4:30-7:00 PM	Commercial Exhibits **(materials for purchase)**	Merrill Hall, Asilomar
	4:00-6:00 PM	Newcomers' Session	Marlin, Asilomar
	5:30-7:15 PM	Commercial Exhibits **(materials for purchase)**	Gym, Pacific Grove MS
	6:00-7:00 PM	Dinner	Dining Hall, Asilomar
	7:30-9:00 PM	**Keynote Session:** (information on page 7) Kyndall A. Brown — Accessing, Equity, and the Standards for Mathematical Practice	Auditorium, Pacific Grove MS
Saturday	7:00-8:15 AM	Breakfast	Dining Hall, Asilomar
	7:30 AM-12:00 PM	Registration	Surf & Sand, Asilomar
	7:45-9:00 AM	Newcomers' Session	Surf & Sand, Asilomar
	8:00 AM-5:30 PM	Commercial Exhibits **(materials for purchase)**	Gym, Pacific Grove MS
	8:00 AM-4:00 PM	Commercial Exhibits **(materials for purchase)**	Merrill Hall, Asilomar
	8:00 AM-12:00 PM	Sessions **(matrix begins on page 10, speaker section begins on page 14)**	
	12:00-1:30 PM	Lunch **(refer to page 4)**	Dining Hall, Asilomar
	1:30-5:00 PM	Sessions **(matrix begins on page 10, speaker section begins on page 14)**	
	6:00-7:00 PM	Dinner	Dining Hall, Asilomar
	7:30-10:00 PM	**Ignite!** and **President's Party** - Everyone Welcome!	Merrill Hall, Asilomar
Sunday	7:30-9:00 AM	Breakfast (pickup box lunch)	Dining Hall, Asilomar
	8:00-8:45 AM	CMC-N Membership Meeting	Surf & Sand, Asilomar
	9:00-10:15 AM	**Morning Keynote Session:** Michael J. Shaughnessy — Infusing the Classroom with Reasoning and Sense Making: Keys to Student Engagement	Merrill Hall, Asilomar
	10:15-10:45 AM	Coffee Break	
	10:45 AM - Noon	**Mid-Morning Keynote Session:** Harold Asturias- Math Language, and the Pursuit of Happiness	Merrill Hall, Asilomar

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 warm hospitality, a welcoming introduction, and a hearty thank you at the end of each session. Presiders are one of the ones to keeping speakers coming back to Asilomar.

The Exhibitors—for contributing to your conference experience by bringing new curriculum materials, teaching ideas, technology, products, and free demonstrations to you and your fellow conference goers.

The Staffs of Pacific Grove Middle School and the Asilomar Conference Grounds—for welcoming conference participants to your sites and for your support in making our conference a great success.

Ignite! and President's Party

We're very excited to offer an Ignite session sponsored by Key Curriculum Press. What is Ignite? This fast-paced, fun, thought-provoking, high-energy series of 5-minute talks with 20 self-advancing slides by people with the guts to get onstage and talk about something they are passionate about! Stay for the President's Party afterwards.

Co-presenters: Jennifer North-Morris, Bill Finzer, Mike Shaughnessy, Harold Asturias, Ruth Parker and Megan Taylor

Saturday, 7:30 - 10:00 | Asilomar, Merrill Hall

Lunch Options

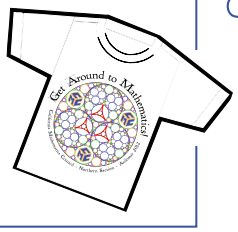
There will be food available for purchase at the Middle School! From 8:00 a.m. till about 2:00 p.m., student organizations will be selling various snacks and refreshments. Coffee, sodas and water will be available, as well as sandwiches and pastries. Please support these local school groups. A limited number of meal tickets are available for purchase at the Asilomar front desk and light snacks can be purchased in the Asilomar Social Hall.

First Time at Asilomar

Come to the **Marlin** for a 20-minute orientation session on how to navigate your first conference at Asilomar. We will show you all you need to know. Friday, 4:00-6:00 p.m. and Saturday 7:45-9:00 a.m.

T-shirts and Sweatshirts

Displaying this year's Asilomar Mathematics Conference logo will be available for purchase in Surf & Sand. Don't miss your opportunity to bring home a memento of your conference participation.



CONFERENCE EVALUATION FORM NOW ONLINE!

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IMPORTANT NOTE

Although you have likely planned your schedule ahead of time, it is important that you verify the session information with what appears in this book. The information here reflects some unavoidable changes. Some sessions have changed speakers and/or topics, some have changed times and some have changed location. Please be sure to check on the very last minute information that is posted in the Asilomar registration area.

ASK ME! Need assistance on the day of the conference? Look for the attendees with "**Ask Me**" button.

CMC-North Officers

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Vice President ..... Rebecca Lewis
Treasurer ..... Chris Tsuji
Secretary ..... Rita Nutsch

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Newcomers' Orientation
Sherry Rodgers and Linda Shumate

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John Martin

Conference Program
Connie Anderson

Conference Information

Sessions
You will find four session types: Presentations, Hands-on Workshops, Interactive and Make-It, Take-It sessions.

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

Hands-on Workshops (WkS)
Limited enrollment. Tickets are no longer needed for admission. Seats available on a first-come, first-served basis.

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. **Materials fee may be charged.**

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 10-13) for the seating capacity of each room. All seats are available on a first-come, first-served basis.

First Time at Asilomar?
Come to the **Marlin** for a 20 minute orientation session on how to navigate your first conference at Asilomar. We will show you all you need to know to get the most out of the experience. Friday 4:00-6:00 p.m. and Saturday 7:45-9:00 a.m.

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

Friday	Merrill Hall	4:30 - 7:00 p.m.
	PGrove MS	5:30 - 7:15 p.m.
Saturday	Merrill Hall	8:00 a.m. - 4:00 p.m.
	PGrove MS	8:00 a.m. - 5:30 p.m.

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 or at the Middle School.

Disabled Services
Jitney service and white courtesy phones are available on Asilomar Grounds. Disabled access is available on the Asilomar grounds and at the Middle School.

College Credit
Course details and registration information are found on page 45.

Bus Service
Buses run between Asilomar and the Middle School on Friday 4:30 to 9:30 p.m. and 7:15 a.m. - 6:00 p.m. on Saturday.

Cell Phones and Pagers
Out of respect for presenters and other participants, please turn off cell phones and pagers during sessions.

Conference Day Assistance
Look for the attendees with "**Ask Me**" button! They can assist you.

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.

Lunch Options
There will be food available for purchase at the Middle School. From 8:00 a.m. till about 2:00 p.m., student organizations will be selling various snacks and refreshments. Coffee, sodas and water will be available, as well as sandwiches and pastries. Please support these local school groups.

Meal Tickets
Participants staying on-grounds receive a meal ticket with their housing, covering Friday dinner through Sunday lunch. For participants staying off-grounds a limited number of meal tickets will be available for purchase at the Asilomar front desk.

T-shirt and Sweatshirt Sales
T-shirts and sweatshirts displaying this year's Asilomar Mathematics Conference logo will be available for purchase in Surf and Sand. Don't miss your opportunity to bring home a memento of your conference participation.

Walking
It is one mile from Asilomar to Pacific Grove Middle School. A map of this area of Pacific Grove is provided on page 46.

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 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.

Kick-off Mini-conference

Asilomar, 1:00-4:30pm

Asturias, Harold — Director of the Center for Mathematics Excellence and Equity
Constructing Viable Arguments in Middle School Mathematics
Students are expected to explore conjectures, use definitions, and build logical progressions of statements. They are also expected to communicate, justify, and reason inductively about data situated in context. This session will explore techniques for middle school teachers to create opportunities for all students to construct arguments and provide feedback to increase the viability of these arguments. 6-8 | PRS | 10 | Curlew

Callahan, Patrick — Co-Director of Special Projects, California Mathematics Project
Constructing Viable Arguments in High School Mathematics
Viable arguments in the Common Core go beyond familiar, but narrow, notions of *proof* in high school. Students are expected to explore conjectures, use definitions, and build logical progressions of statements. They are also expected to communicate, justify, and reason inductively about data situated in context. This session will explore techniques for HS teachers to create opportunities for all students to construct arguments and provide feedback to increase the viability of these arguments.
8-12 | WkS | 5 | Evergreen

Easterday, Joan — Mathematics Consultant, Sonoma COE
CMP CCSS Task Force: Bridging from Counting to Algorithms
The presentation will include activities, literature, games for K-2 teachers for counting, addition, subtraction and place value focused on the CCSS. PK-2 | PRS | 7 | Acacia *Co-presenter: Sherri Willebrand — CMC Past President*

Hull, Ted — Author and Consultant, Leadership Coaching Mathematics
Transforming Classroom Instruction
Change is difficult, but clearly not impossible. Furthermore, if the California Mathematics Content Standards are successfully implemented, then instructional change is required. This session provides four strategies for managing change through the lens of the Common Core State Standards for Mathematical Practice. The strategies are based on research and experience.
Ldrshp | INT | 4 | Oak Shelter *Co-presenter: Ruth Harbin Miles — Author and Consultant, Leadership Coaching Mathematics*

Meyer, Dan — Digital Mathematics Curriculum Consultant and Ph.D. Candidate, Education, Stanford University
Teaching Applied Math with Digital Media
Our students like to solve problems they've already seen. They are impatient with new problems. That impatience owes to a curriculum that is too helpful, that does too much for our students, and asks them for too little. We will define the tools, skills, and habits of the modern curriculum designer, someone who can convert any interesting thing into a challenge for her students. We will emphasize the multimedia and modern technology essential to that role. 6-12 | PRS | 6 | Scripps Conference | BT

Parker, Ruth — Co-founder and CEO, Mathematics Education Collaborative
Enhancing Teaching and Learning with the Standards for Mathematical Practice
The Standards for Mathematical Practice are at the heart of the new Common Core State Standards. Participants will be actively engaged as learners as we examine instructional decisions and teacher moves that help ALL students develop productive mathematical dispositions. Teaching in ways that reveal student understandings and misconceptions will be emphasized, as will ways to help students learn to make mathematically convincing arguments. 3-5 | WkS | 8 | Toyon

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 for the seating capacity of each room. All seats are available on a first-come, first-served basis.

Keynote Sessions

Friday Evening — Pacific Grove Middle School, Auditorium

7:30 - 9:00

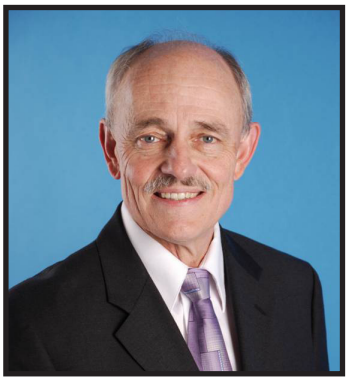
Kyndall Brown, Director of the Center for Mathematics Excellence and Equity, University of California, Los Angeles

Access, Equity, and the Standards for Mathematical Practice

In the year 2000, the National Council of Teachers of Mathematics published the Principles and Standards for School Mathematics. The first principle referred to in the document was the Equity Principle; Providing high expectations and strong support for all students. Twelve years later, there continues to be huge disparities in the performance and achievement between low-income students of color, second language learners, and students with exceptional needs, and affluent students. The Standards for Mathematical Practice outlined in the Common Core Standards in Mathematics describe the varieties of expertise that mathematics educators should seek to develop in their students. Engaging all students in the Standards for Mathematical Practice is one way to ensure students are gaining access to high level, cognitively demanding mathematics. The Standards for Mathematical Practice also lend themselves to the use of culturally and socially relevant tasks. GI | W | 53

Sunday Morning — Asilomar, Merrill Hall

9:00 - 10:15



J. Michael Shaughnessy, NCTM Past President, Portland State University

Infusing the Classroom with Reasoning and Sense Making: Keys to Student Engagement

Mike has made Infusing the Classroom with Reasoning and Sense Making one of the primary goals during his term as president of NCTM. Reasoning and Sense Making are student centered. It all begins with the students themselves, listening to student thinking is critical for teachers because it provides feedback on the what, how, and why of our students' thinking. Students must be encouraged to question, experiment, estimate, explore, and suggest explanations. NCTM's new resources in Reasoning and Sense Making include a series of publications, a web-based bank of reasoning and sense making tasks, and the launch of a digital library of practice with video clips of students engaged in reasoning and sense making in their classrooms. This talk will inspire all educators to get the students to do the thinking and reasoning in their mathematics classrooms. GI | PRS | 1018

10:45 - Noon

Harold Asturias, Director of the Center for Mathematics Excellence and Equity

Math, Language, and the Pursuit of Happiness

This session will focus on how to take into account the variety of prior mathematics knowledge and language proficiency of students. Variation in language proficiency takes on more urgency with the close link between language and knowledge in the CCSS as we design and implement mathematics instruction. What are the challenges and the opportunities facing students as schools shift to the CCSS-mathematics? Starting from the 8 Standards for Mathematical Practice (pages 6-8, CCSS), the session will examine implications for ALL students, EL students, and instructional strategies. GI | PRS | 1118

Saturday Highlighted Sessions

Time	Speaker	Session	Grade Level	Type	Room
8:00 - 9:00	Biagetti, Stephanie	Using Student Work as a Window to Student Understanding	PK-2	INT	Kiln
	Cook, Marcy	What's Cooking in a Live Math Classroom?	6-8	INT	Fred Farr Forum
	Fulton, Brad	Developing Number Sense Through Engaging Activities	6-8	PRS	PGMidS Auditorium
	Giganti, Paul	Learn Geometry Vocabulary as You Fold & Cut	3-5	INT	Heather
9:30 - 10:30	Eisenberg, Gary	The Power of the Visual Story in Math	PK-2	PRS	Kiln
	Goldenstein, Donna	Mathematics and The Arts: Thinking and Reasoning Through Art	3-5	PRS	Heather
	Jacobs, Harold	Mathematical Snapshots of 2012	8-12	PRS	Fred Farr Forum
	Meyer, Dan	Tools and Technology for Modern Math Teaching	GI	PRS	PGMidS Auditorium
11:00 - 12:00	Callahan, Patrick	Defining Achievement: Rethinking Teacher/Student Evaluations	GI	PRS	Heather
	Cook, Marcy	Algebraic Thinking Experiences For All	3-8	INT	PGMidS Auditorium
	Fulton, Brad	Fast Facts and Fractions	6-8	PRS	Fred Farr Forum
	Michell, Suzanne	Powerful Actions to Enrich the Implementation of the CCSS	Ldrshp	PRS	Kiln
1:30 - 3:00	Carlyle, Ann	Expanding Math Talk with Our Youngest Students (Pre K-K)	PK-2	INT	Kiln
	Farrand, Scott	Problem Solving as Professional Development for the CCSS	GI	INT	PGMidS Auditorium
	Humphreys, Cathy	Learning Practices Together: Number Talks in High School	GI	PRS	Fred Farr Forum
	Tucher, Philip	Fast-Tracking to the Common Core: One District's Experience	Ldrshp	PRS	Heather
3:30 - 5:00	Childs, Leigh	Engaging, Effective Strategies = Numerically Nimble Students	PK-2	INT	Heather
	Erickson, Sheldon	Animated Algebra: Activities, Animation, and Apps	6-8	INT	PGMidS Auditorium
	Harbin Miles, Ruth	Visible Thinking in the 3-8 Mathematics Classroom	3-8	INT	Fred Farr Forum
	Schaffer, Karl	Dancing with Mathematics: Exploring the Symmetry of the Body	GI	INT	Kiln

Call For Speakers

CMC-North 55th Annual Conference

Asilomar and Pacific Grove Middle School, Pacific Grove

Modeling Mathematics from Many Angles

December 6-8, 2013

Proposals will be accepted online at **www.cmc-math.org/activities/north_speakers.html** from January 30 to April 30, 2013. 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: Rebecca Lewis at asilomarprogramchair@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 $185,000 to support student activities throughout California since 1983. All contributions should be mailed to:

Gayle Spencer
CMC Student Activities Trust Fund
3617 Dayton Avenue, Fresno, CA 93726

Applications

For information on how to apply for these funds to support student activities, visit: **www.cmc-math.org/awards**, contact your affiliate president at **nmejiamusd.org** or mail:

Natalie Mejia
4518 Hummel Drive
Santa Maria, CA 93455

How To Use The Conference Time Planner

The Conference Time Planner is designed to help you "map out" your sessions so you can enjoy the conference without the frustration of running from place to place, arriving late for a session, or missing one completely. It cannot, of course, help you decide which of the many sessions for your grade level to select in each time slot, nor can it make the very popular sessions less crowded. We hope it will help you enjoy the conference just a little bit more.

Below are some ideas to be aware of as you check your plan for the day:

- If this is your first Asilomar math conference, be sure to drop in at the newcomers' session Friday or Saturday morning.
- The lunch hour is 90-minutes and does not overlap any session.
- Don't forget to visit the commercial exhibits in Merrill Hall and at Pacific Grove Middle School.

Conference Day and Time Planner

	Time	Speaker / Topic	Location
Friday	6:00-7:00 PM	Dinner	Dining Hall, Asilomar
	7:30-9:00 PM	**Keynote Session:** (information on page 7) Kyndall A. Brown — Accessing, Equity, and the Standards for Mathematical Practice	Auditorium, Pacific Grove MS
Saturday	7:00-8:15 AM	Breakfast	Dining Hall, Asilomar
	8:00-9:00 AM	**1st Choice:**	
		2nd Choice:	
	9:30-10:30 AM	**1st Choice:**	
		2nd Choice:	
	11:00 AM-12:00 PM	**1st Choice:**	
		2nd Choice:	
	12:00-1:30 PM	Lunch / Commercial Products	
	1:30-3:00 PM	**1st Choice:**	
		2nd Choice:	
	3:30-5:00 PM	**1st Choice:**	
		2nd Choice:	
	7:30-10:00 PM	**Ignite!** and **President's Party** - Everyone Welcome! (information on page 4)	Merrill Hall, Asilomar
Sunday	7:30-9:00 AM	Breakfast	Dining Hall, Asilomar
	9:00-10:15 AM	**Morning Keynote Session:** (information on page 7) Michael J. Shaughnessy — Infusing the Classroom with Reasoning and Sense Making: Keys to Student Engagement	Merrill Hall, Asilomar
	10:45 AM-Noon	**Mid-Morning Keynote Session:** (information on page 7) Harold Asturias —Math, Language, and the Pursuit of Happiness	Merrill Hall, Asilomar

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Asilomar Conference Grounds—Saturday Sessions

Facility		8:00 - 9:00	9:30 - 10:30	11:00 - 12:00	1:30 - 3:00	3:30 - 5:00
FIRESIDE	Fred Farr Seats 140	**Marcy Cook** What's Cooking in a Live Math Classroom? 6-8 | INT | 101 B	**Harold Jacobs** Mathematical Snapshots of 2012 8-12 | PRS | 201 B	**Brad Fulton** Fast Facts and Fractions 6-8 | PRS | 301 B	**Cathy Humphreys** Learning Practices Together: Number Talks in High School GI | PRS | 401	**Ruth Harbin Miles** Visible Thinking in the 3-8 Mathematics Classroom 3-8 | INT | 501 B
	Kiln Seats 100	**Stephanie Biagetti** Using Student Work as a Window to Student Understanding PK-2 | INT | 102 B	**Gary Eisenberg** The Power of the Visual Story in Math PK-2 | PRS | 202 B	**Suzanne Mitchell** Powerful Actions to Enrich the Implementation of the CCSS Ldrshp | PRS | 302 LDRSHP	**Ann Carlyle** Expanding Math Talk with Our Youngest Students (Pre K-K) PK-2 | INT | 402	**Karl Schaffer** Dancing with Mathematics: Exploring the Symmetry of the Body GI | INT | 502 B
NORTH WD	Heather Seats 110	**Paul Giganti** Learn Geometry Vocabulary as You Fold & Cut 3-5 | INT | 103 B	**Donna Goldenstein** Mathematics and The Arts: Thinking and Reasoning Through Art 3-5 | PRS | 203	**Patrick Callahan** Defining Achievement: Rethinking Teacher/Student Evaluations GI | PRS | 303	**Philip Tucher** Fast-Tracking to the Common Core: One District's Experience Ldrshp | PRS | 403 LDRSHP	**Leigh Childs** Engaging, Effective Strategies = Numerically Nimble Students PK-2 | INT | 503 B
FIRESIDE	Oak Shelter Seats 36	**Diana Herrington** No Child Left Hiding in your Classroom 8-12 | PRS | 104 B	**Kathy Morris** Create & Critique Viable Arguments via Mathematical Modeling GI | INT | 204 B	**Lori Lambertson** Carbon Cycle by the Numbers 6-8 | WkS | 304 B	**John Jacob** Classroom Mathematics Experiments for Precalculus Courses 8-12 | INT | 404 B	
	Evergreen Seats 36	**Gena Richman** Unusual Teacher Moves in a Common (Core) World! GI | INT | 105 B	**Suzanne Damm** Develop Mathematical Habits of Mind with CCSS Math Practices GI | PRS | 205	**Francis Ogata** Common Core Math Practices & Math Games: Do They Go Together? PK-5 | INT | 305 B	**Andre Mathurin** Engaging Activities and Ideas for Teaching Discrete Math 8-12 | INT | 405	**Justine Wong** Preschool Math Matters: Early Concept Connections PK-2 | INT | 505 B
NORTH WOODS	Scripps Seats 36	**Amy Ellis** Laying a Foundation for Learning to Prove (NCTM Learn Reflect Strand) GI | PRS | 106 NCTM	**Harold Asturias** Using SMP as Scaffolding for Academic Language Development 6-8 | PRS | 206 TODOS	**Barbara Novelli** Games to Teach Important Math Concepts and Skills 3-5 | PRS | 306 B	**Barbara Novelli** Science Brings Meaning and Purpose to Math PK-5 | INT | 406 B	**Cathy Carroll** Developing Specialized Content Knowledge: Doing Math with Teachers in PD 3-8 | WkS | 506 TODOS
	Acacia Seats 36	**Sean Nank** The Making of a Presidential Mathematics and Science Teacher Tchr Ed | PRS | 107 B	**Sean Nank** CCSS Access, Achievement, and Assessment: Lessons via ICME12 8-12 | PRS | 207 B	**Jorge Garcia** Technology Activities for Algebra Teachers 8-12 | PRS | 307 B	**Judith Kysh** More Tasks that Turn Algebra Procedures into Good Group Work 8-12 | PRS | 407 B	**Jeanne Ramos** Building Students' Confidence as Persevering Problem Solvers 6-8 | WkS | 507 B
	Toyon Seats 36	**Susan McReynolds** Conditional Probability and Proving Independence: High School 8-12 | WkS | 108	**Scott Nelson** Discovery of 2-D & 3-D Equations Using Computer Modeling 8-12 | PRS | 208 B	**Dwight Heirendt** Digital Math Tools to Support the Common Core Mathematical Practices 8-12 | PRS | 308 B	**Jeff Tobes** Accessing Mathematics through Walking... Step by Step 3-8 | PRS | 408	**Kevin Rees** How to Avoid Being *Boxed In* 8-12 | INT | 508 B

New This Year! NCTM Learn & Reflect Strand

The strand begins with a Kickoff session featuring Amy Ellis. In the Kickoff session, attendees will be presented with a set of questions for their personal reflection throughout the strand. Following the Kickoff session, participants can attend Learn«Reflect sessions for the elementary level (grades PK-6) and the secondary level (grades 7-12). Two sessions will be available for each level. The Reflection session at the end of the strand will be a discussion based on these questions. The reflection questions for the strand are:

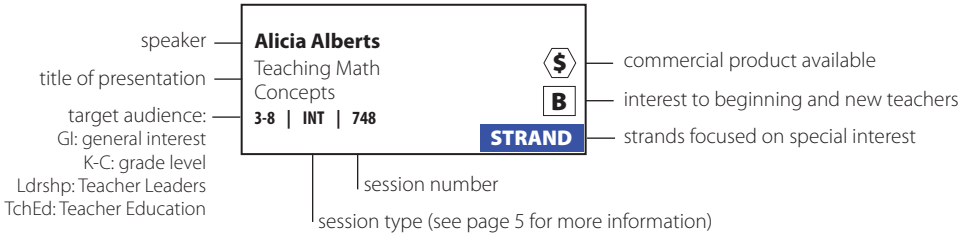
All those who attend the Kickoff session, at least one Learn-Reflect session, and the Reflection session will be eligible for an NCTM personalized certificate of their participation. Forms will be distributed at the Kickoff session, and certificates will be mailed to strand completers after the conference.

Asilomar Conference Grounds—Saturday Sessions

Facility		8:00 - 9:00	9:30 - 10:30	11:00 - 12:00	1:30 - 3:00	3:30 - 5:00
VIEW CRESCENT	Marlin Seats 40	**Newcomers' Session** PRS | 109	**Fred Dillon** Reasoning, Sense Making and Proof 6-12 | PRS | 209 NCTM	**Jeffrey Wanko** Developing Proof Readiness with New Logic Puzzles 6-12 | PRS | 309 NCTM	**Camilla Barry** Make a Sundial That Really Works 6-8 | WkS | 409 B	**Jeffrey Simpson** Filling Concept and Skill Gaps in High School Geometry 8-12 | PRS | 509 B
	Curlew Seats 40	**Julie Yu** Geometry Through Mirrors 6-8 | WkS | 110 B	**Hannah Slovin** Let's Be Reasonable: Using Units to Build Convincing Arguments K-5 | PRS | 210 NCTM	**Mary Swarthout** Encouraging Evidence: Using Technology to Unlock Student Reasoning PK-5 | PRS | 310 NCTM	**NCTM Speaker Panel** Learn Reflect Reflection Session GI | PRS | 410 NCTM	**Blanche Malankowski-Smith** They Know How to Count! Move Them Past Counting on Fingers PK-2 | INT | 510 B
SEA GALAXY	Sanderling Seats 40	**Ana England** Mathematical Practices: An Opportunity for English Language Learners GI | PRS | 111 TODOS	**Emiliano Gomez** Rate and Percent Problems Through the Lens of the CCSS-SMP 8-12 | INT | 211	**Susana Davidenko** ELL Interaction Using Problems Within Familiar Contexts B 3-8 | PRS | 311 TODOS	**Katie Salguero** Making Middle School Mathematics Accessible to English Learners B 6-8 | INT | 411 TODOS	**Allan Bellman** Multiple Representations = Multiple Models and Approaches 8-12 | WkS | 511 B
	Dolphin Seats 40	**Elmano Costa** Meeting the Common Core Standards for English Learners PK-5 | INT | 112 B	**Shelley Kriegler** Integers on the Number Line: A CCSS-M Approach $ B 3-8 | INT | 212	**Mike Jackson** Identifying Gaps in CCSS with Technology 3-8 | PRS | 312	**Victor Selby** The STEM Effect: Making Sense of How Math Shapes Science 8-12 | PRS | 412 B	**Tere Hirsch** ELLS & the CCSS: Access and Achievement 3-8 | INT | 512 B

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.



Special Interest Strands

LDRSHP The leadership strand focuses on areas of interest to mathematics teacher leaders and coaches as well as district and site administrators.

TODOS In collaboration with TODOS: Mathematics for All!, an affiliate of NCTM, the sessions in this strand focus on issues related to equity and providing all students with high quality mathematics learning opportunities.

MITI In the Make-It, Take-It 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.**

NCTM NCTM Professional Development Focus of the Year Learn Reflect Strand. NCTM is pleased to cooperate with CMC-North to present a Professional Development Focus of the Year Learn-Reflect Strand. CMC-North conference attendees are invited to participate in this strand dedicated to the theme of "Reasoning and Proof: Is it true? Convince me!", which is the NCTM Professional Development Focus of the Year topic in 2012-13.

Bus Service

On Friday, bus service will run between the Asilomar grounds and Pacific Grove Middle School from 4:30-9:30 p.m.

Busses will run between Asilomar and Pacific Grove Middle School from 7:15 a.m. - 6:00 p.m. on Saturday.

ASK ME!
Need assistance on the day of the conference? Look for the attendees with "**Ask Me**" button.

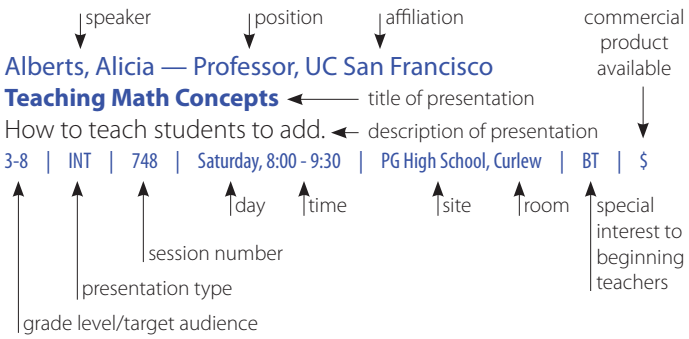
Pacific Grove Middle School—Saturday Sessions

Room	8:00 - 9:00	9:30 - 10:30	11:00 - 12:00	1:30 - 3:00	3:30 - 5:00
Library Seats 25	**Lisa Miller** Preparing Students for the High School Exit Exam in Math 8-12 | PRS | 130 B	**Ron Larson** Real Math, Real Life: A New Course for High School Students 8-12 | PRS | 230 B	**Ron Larson** College Prep Algebra for Seniors 8-12 | PRS | 330 B	**Lisa Miller** Reaching At-Risk Students in Algebra Using Best Practices and The CCSS 8-12 | PRS | 430 B	**Richard Capone** What are the Technology Implications of the New State Test? 3-8 | PRS | 530 B
Room 1 Seats 30	**David Pugalee** STEM Contexts to Develop HS Students' Mathematical Practices 8-12 | INT | 131 B	**Marty Valentine** Make Logic Meaningful: Engage Students in the Rigors of Logic 8-12 | PRS | 231 B	**Gloria Brown Brooks** The Journey from Flatland to Zometown 3-8 | INT | 331 B	**Cathy Myers** Slopes of Modern Art 6-8 | MITI | 431 B MITI	**Erich Zeller** Build Student Visual Schema for Solving Word Problems PK-5 | INT | 531 $ B
Room 4 Seats 30	**Ron Larson** Using the Mathematical Practices to Promote Active Learning... 6-8 | WkS | 133 $ B	**Gretchen Treuting** I Can Do This! Strategies for Learning Disabled Students 3-8 | PRS | 233 B	**Deb Stetson** Use Practica: Move Teachers Mathematically and Pedagogically Ldrshp | PRS | 333 LDRSHP	**Hope Bjerke** Activate CCSS for Mathematical Practice with NCSM's PD Model Ldrshp | WkS | 433 LDRSHP	**Siva Heiman** New Three-Step Method to Teach the Addition and Subtraction Facts PK-2 | PRS | 533 B
Room 5 Seats 30	**Julie McNamara** Fractions: What's There to Talk About? 3-8 | INT | 134 B	**Dave Youngs** Problem Solving and the Standards for Mathematical Practice 3-5 | WkS | 234 B	**Bob Petersen** Making Functions in Algebra Active and Interesting 8-12 | INT | 334 B	**Sandra Robins** Making a Mini-Me: Using Ratios and Proportions 3-8 | WkS | 434 B	**Halcyon Foster** Tetrahedrons in Space 8-12 | MITI | 534 B MITI
Room 6 Seats 30	**Richard Sgroi** Advanced Algebra with Financial Applications 8-12 | PRS | 135 $ B	**Marie Hogan** My Students Can Notice/Wonder: Now What? 6-8 | INT | 235 B	**Suzanne Alejandre** Unsilence Students' Voices 3-8 | INT | 335 B	**Jack Dapkewicz** The Language of Math: Using Math Vocabulary in Grades 2-7 3-8 | WkS | 435	**Barbara Schallau** Making Sense of Beginning Algebraic Ideas and Properties 6-8 | WkS | 535 $ B
Room 7 Seats 30	**Mardi Gale** Algebra Intervention and Common Core: What's the Intersection? 8-12 | PRS | 136 B	**Ralph Connelly** Sizzling School Starters 3-8 | INT | 236 B	**Sherry Rodgers** Number Talks: Developing Mathematically Powerful Students 3-5 | INT | 336		**Marc Roth** Quadratic Equations by Completing the Square Backwards 8-12 | WkS | 536 B
Room 12 Seats 30		**Ivona Grzegorczyk** Dancing Fractions and Touching Algebra Activities 6-8 | WkS | 239 B	**Melissa Gilbert** Motivation and the Common Core Standards GI | PRS | 339 B	**Jenny Belcher** Making Sense of Fractions and Operations with Fractions 3-8 | WkS | 439 $ B	**Tom Murray** Writing in Mathematics: Preparing for Future Assessment 3-8 | WkS | 539 B
Room 13 Seats 30	**Karen Mayfield-Ingram** Engaging Parents in the Transition to the Common Core Standards 3-8 | INT | 140	**Greisy Winicki Landman** Look for and Make Use of Structure: What Does It Mean? 3-8 | WkS | 240 B	**Christopher Yakes** Teaching Linear Equations Through Proportional Reasoning 6-8 | PRS | 340 B	**Stuart Moskowitz** Circular Reasoning: 2πr and πr^2: Which is Which? 6-8 | WkS | 440 B	**Darin Beigie** No Child Left Unchallenged: Problem Solving with Core Content 6-8 | INT | 540 B
Lab 21 Seats 30	**Shelley Carranza** Making Math Visual with Geogebra 8-12 | PRS | 141 B	**Michael Richardson** Making Math Visual in the Higher Level Math Class 8-12 | PRS | 241	**Clay Dagler** Turning Worksheets into Engaging Puzzles 8-12 | MITI | 341 B MITI	**Elizabeth DeCarli** Help Students Dig into Data and Tinker with their Plots! 6-8 | INT | 441 $ B	**Francesca DeFazio** Learning Algebra Using C/C++ in the Interpreter Ch 8-12 | INT | 541 B
Lab 22 Seats 30	**Ruth Chamberlin** What's Vocabulary Got to Do with Mathematical Precision? 6-8 | INT | 142 B	**Andres Marti** Make Math Move: Modeling Algebra and Geometry with Sketchpad 8-12 | PRS | 242 $ B	**Brandy Wiegers** Slide Rules Rule! 6-8 | INT | 342 B	**Agnes Tuska** GeoGebra: A Common Ground for Mathematical Investigations 8-12 | INT | 442 B	**Cecilio Dimas** Faculty Academy for Mathematics Excellence (FAME): PD Program 6-8 | INT | 542 B
Room 24 Seats 30	**Lisa Nussdorfer** Using the iPad in the Mathematics Classroom 8-12 | PRS | 143 B	**David Lau** Solve Optimization Problems and Interpret Solutions 8-12 | PRS | 243	**Diane Resek** Mixing Data Analysis with Algebra 8-12 | INT | 343 B	**Chris Paulus** Origami Icosahedron: Learn How to Make it and Teach Your Students! 8-12 | MITI | 443 B MITI	**Daren Starnes** Making Sense of Statistics for Common Core: A Four-Step Process 8-12 | INT | 543 B

Pacific Grove Middle School—Saturday Sessions

Room	8:00 - 9:00	9:30 - 10:30	11:00 - 12:00	1:30 - 3:00	3:30 - 5:00
Room 25 Seats 30	**Eric Muller** The Math in Motion 8-12 | WkS | 144 B	**Kathleen Strange** What Textbooks Don't Tell You About Multiplication 3-5 | INT | 244 | BT	**Bill Doherty** The Flipped Math Classroom 8-12 | PRS | 344 B	**Karen Arth** Mathematical Modeling 8-12 | WkS | 444 $ B	**Karen Arth** Little Things Can Make a Big Difference: Foldables and More 6-8 | WkS | 544 $ B
Room 26 Seats 30	**Calisa Holm** Communicator Activities Use CCSS to Improve Math Performance 6-8 | INT | 145 B	**Nancy Blachman** Inspiring Mathematics: V Hart, M Gardner, Math Circles, JRMF 6-8 | PRS | 245 B	**Jim Miller** Multiply Binomials/Factor Trinomials with Strips of Paper 8-12 | INT | 345 B	**Jim Miller** Using Simple Manipulatives to Teach Fractions 3-8 | WkS | 445 B	**Aileen Rizo** Engineering with LEGOS 3-5 | INT | 545 B
Room 27 Seats 30	**Carol Dorf** Core Connections: Poetry in the Mathematics Classroom 8-12 | WkS | 146 B	**Travis Bower** Projects Showcase Beginner 8-12 | PRS | 246 B	**Jack Bloom** Student Centered Classrooms: Common Core Needs Them! GI | PRS | 346 B	**Lew Douglas** Connecting Math and Music GI | PRS | 446 B	**Mark McAlister** Focusing on Conic Sections for Better Access 8-12 | PRS | 546 B
Room 28 Seats 30	**Brigitte Lahme** Professional Work Around the Common Core: Illustrative Math GI | INT | 147 B	**Jennifer North Morris** Middle School Math Techies: Turn it On! 6-8 | WkS | 247 B	**Amy Callahan** Differentiation Through Project-Based Math 8-12 | PRS | 347 B	**Travis Bower** Nspire Geometry Essentials 8-12 | INT | 447 B	**Gail Standiford** Using Graphing Technology to Teach the Common Core Standards 8-12 | WkS | 547 B
Room 29 Seats 30	**Lynda Holm Holman** Kindergarten Algebra PK-2 | WkS | 148 B	**Jody Anderson** Assessment + Goal Setting = Achievement at Number CAMPP PK-2 | INT | 248 B	**Bridget Quinn** Math Workshops: Tools for Tomorrow's Success PK-2 | INT | 348 B	**Kathy Bradley** Making Sense of Division of Fractions 3-8 | INT | 448 B	**Barbara Parr** Problem Solving-Shifting to a Common Ground! 6-8 | INT | 548 B
Room 32 Seats 30	**McLean, Peggy** Mathematical Reasoning Across the Strands with Pattern Blocks 3-5 | INT | 150 B	**Robert Preston** The Mathematical Practices of Everyday Mathematics PK-5 | INT | 250	**Sara Moore** Teach Algebraic Thinking to ELL Students 3-5 | INT | 350 B	**Janet Gillespie** Do I Add or Subtract? Building Operation Sense Day-by-Day PK-2 | INT | 450 $ B	**Christopher Casey** Algebraic Thinking in Grade Four 3-5 | INT | 550 B
Room 33 Seats 30	**Alison Mazzola** Developing Algebraic Thinking in the Younger Grades PK-5 | INT | 151 B	**Kim Kirley** Embracing the Kindergarten CCCS PK-2 | PRS | 251 B	**Brian Lim** Mathematics in TV shows GI | PRS | 351 B	**Vicki Vierra** Inviting Participation for Access and Achievement 6-8 | WkS | 451 B	**Monica Johnson Rock** Accessing Geometry Through Origami 3-5 | WkS | 551 B
Room 36 Seats 30	**Ivan Cheng** Designing Classroom Assessments Aligned with CCSS 8-12 | INT | 154 B	**Tony Alteparmakian** The Black Sheep Chronicles 8-12 | PRS | 254 B	**Tony Alteparmakian** A Tale of Two iPads 8-12 | PRS | 354 B	**Emma Trevino** The True Intent of the Standards for Mathematical Practices 6-8 | INT | 454 B	**Carmen Whitman** It's All Connected: Proportionality in the Standards 6-8 | INT | 554 B
Room 37 Seats 30	**Louanne Myers** Number Sense, Reasoning, Common Core: Help Me Get Started! PK-5 | INT | 155 B	**Megan Taylor** From Tsuruda to Sicherman: A Sample of the Best Problems Ever 8-12 | INT | 255 B	**Megan Taylor** Comparing the Current Standards with the Common Core: What Changed? GI | PRS | 355 B	**Andrea Van Dunk** *Log* in to the Common Core 8-12 | INT | 455 B	**Patricia Rogers** Let's Talk About It! 6-8 | INT | 555
Room 38 Seats 30		**Janet Bales** Adaptive Technology Targets Math Fluency 3-8 | PRS | 256 $ B	**Laurie Boswell** Direct Variation is Not a Slippery Slope 6-8 | INT | 356 B	**Avery Pickford** The *Invent Your Own* Project: Student Created Problems 8-12 | INT | 456	**Marla Mattenson** Homework, Classwork and Assessments that Embed the Eight Math Practices 8-12 | PRS | 556 B
Room 39 Seats 30	**Risa Wolfson** Making Connections with the Common Core Standards GI | PRS | 157	**Matthieu Hamo** Design Lessons and Activities That Make Students Learn! 6-8 | INT | 257 B	**Sandy Silverman** It's a Mathematical World (for Preschool and Kindergarten) PK-2 | INT | 357 B	**Zaur Berkaliev** Early Algebra Through Measurement and CCS PK-2 | PRS | 457 B	**Mele Sato** The Essential Question: A Project-Based Approach to Learning 8-12 | INT | 557 B
Auditorium Seats 700	**Brad Fulton** Developing Number Sense Through Engaging Activities 6-8 | PRS | 153 B	**Dan Meyer** Tools and Technology for Modern Math Teaching GI | PRS | 253 B	**Marcy Cook** Algebraic Thinking Experiences for All 3-8 | INT | 353 B	**Scott Farrand** Problem Solving as Professional Development for the CCSS GI | INT | 453 B	**Sheldon Erickson** Animated Algebra: Activities, Animation, and Apps 6-8 | INT | 553 B

How To Read Speaker List



Alejandre, Suzanne — Director of Professional Development, The Math Forum at Drexel

Unsilence Students' Voices

Picture a classroom...The teacher presents a problem and initiates a discussion. Some students look attentive but are quiet. A few students have hands raised, posed to talk. And at least one or two students seem disengaged. Every classroom has silenced voices...*Why?* We'll share activities to increase California Common Core State Standards practices, in particular, 1) making sense of problems and persevering; and 3) constructing viable arguments and critiquing focused on students' accountable math talk. Handouts will be provided.

3-8 | INT | 335 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 6 | BT

Co-presenter: Marie Hogan — Teacher, Traweek MS

Alteparmakian, Tony — Math Department Chair, Foothill HS, Kern HSD

The Black Sheep Chronicles

By continually asking *"why?"* I started to make changes in my classroom that raised the eyebrows of my colleagues but ended up being good for kids. We'll talk about why homework is dangerous, why we don't spend a lot of time factoring and why my grade book doesn't look like a grade book anymore.

8-12 | PRS | 254 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 36 | BT

A Tale of Two iPads

After spending time in a classroom with a 1:1 iPad to student ratio, we will discuss the benefits and pitfalls of iPad use in the math classroom, some must have Apps, strategies for effective use and how to integrate this piece of technology into a classroom that presents high cognitive demand tasks to students.

8-12 | PRS | 354 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 36 | BT

Anderson, Jody — Kindergarten Teacher, Sargeant ES

Assessment + Goal Setting = Achievement at Number CAMPP

See how to turn your assessment data into student goals and boost student achievement using math games matched to the California State Standards. Number CAMPP is an acronym for Counting, Algebra, Measurement, Probability and Problem Solving. Create a Number CAMPP Board in your classroom. Assess quickly and efficiently while motivating your students to achieve their goals.

PK-2 | INT | 248 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 29 | BT

Arth, Karen — Director of the San Joaquin Valley Mathematics Project, California State University, Fresno

Little Things Can Make a Big Difference: Foldables and More

Something as simple as a carefully crafted foldable (graphic organizer) can provide students access to large tasks and help them become more independent problem solvers. In this session we will create foldables and use them for gaining access to large tasks, explore other methods to get students to work more effectively as a team, increase their mathematical discourse, and enjoy the process. Discussion of Standards for Mathematical Practice #1, 3 and 6 will be embedded in this session.

6-8 | WkS | 544 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 25 | BT

Mathematical Modeling

Mathematical modeling, what does this really mean and why is it both a Standard for Mathematical Practice and its own conceptual category? Why is it embedded in the other high school categories rather than its own collection of topics? In this session we will answer these questions as we become familiar with modeling, solve modeling problems while learning methods to make these problem types accessible to high school students and how we can bring it to a clear focus in our classrooms.

8-12 | WkS | 444 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 25 | BT

Asturias, Harold — Director of the Center for Mathematics Excellence and Equity, Lawrence Hall of Science

Using SMP as Scaffolding for Academic Language Development

Teachers who know the mathematics they are teaching and who understand the language challenges of developing Mathematics Academic English are better at giving their English Language Learners opportunities to communicate and think through language. In this session, we will explore the interplay of language, culture, and mathematics understanding.

6-8 | PRS | 206 | Saturday, 9:30 - 10:30 | Asilomar, Scripps Conference

Bales, Janet — Regional Math Director, Scholastic

Adaptive Technology Targets Math Fluency

Students' algebra-readiness is influenced early in their learning. Mastering the foundations of fluency impacts each students' potential. The goal of this session will be to provide educators with an innovative path to help place their students on a trajectory of success. Attendees will gain knowledge of best practices and adaptive technology solutions, using Scholastic's newest teacher-friendly technologies, which will help them differentiate instruction for basic fact and fraction fluency.

3-8 | PRS | 256 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 38 | BT | $

Barry, Camilla — Edna Maguire, Mill Valley SD

Make a Sundial That Really Works

Here is a wonderful example of practical geometry—use a protractor to make a portable sundial and learn how to set it so that it tells accurate time at your latitude. Sundials connect geometry, astronomy and history of navigation. In this workshop, you'll learn how sundials work (astronomy) and why navigators used them on ocean voyages. Plus, you'll get lots of practice with a protractor.

6-8 | WkS | 409 | Saturday, 1:30 - 3:00 | Asilomar, Marlin | BT

Beigie, Darin — Mathematics Teacher, Harvard-Westlake School
No Child Left Unchallenged: Problem Solving with Core Content
Learn six methods to create problem solving opportunities with core math content. Emphasis is on accessible problem solving experiences intimately connected with daily math content and designed to foster creativity, critical thinking, and perseverance. Plenty of examples in a middle grades context will be worked through and discussed.
6-8 | INT | 540 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 13 | BT

Belcher, Jenny — Educational Consultant, South Valley MS
Making Sense of Fractions and Operations with Fractions
Presentation will show how to teach equivalent fractions and fraction operations for understanding—especially division. Classroom activities are based on the three stages of learning: concrete, representational and abstract.
3-8 | WkS | 439 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 12 | BT | $

Bellman, Allan — Associate Professor of Mathematics, University of Mississippi
Multiple Representations = Multiple Models and Approaches
A word problem does not make a situation contextual for your Algebra class. We'll use video, digital images and hands-on data collection to set the context for three algebra problems. In groups we'll model and solve the problems with each group using different tools, representations and approaches. Once the original problem is solved, we'll add depth to the problem by playing *what-if* with problem specifications. Playing *what-if* encourages solutions to be generalized.
8-12 | WkS | 511 | Saturday, 3:30 - 5:00 | Asilomar, Sanderling | BT

Berkaliev, Zaur — Associate Professor, California State University, Chico
Early Algebra Through Measurement and Common Core Standards
This session discusses findings from an National Science Foundation Discovery Research (NSFDR) K-12 exploratory project addressing an innovative approach to pre-K students' development of algebraic and quantitative reasoning in the context of California Common Core Standards. This approach builds on measurement concepts and algebraic design of the pre-numeric stage of instruction found in the successful Elkonin-Davydov elementary mathematics curriculum from Russia.
PK-2 | PRS | 457 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 39 | BT

Biagetti, Stephanie — California State University, Sacramento
Using Student Work as a Window to Student Understanding
In this interactive session, participants explore student work generated from problem-solving tasks aligned with the Common Core curriculum. We will analyze work with the perspective that it provides access to the students' current mathematical understanding and can serve as a guide to future teaching. Topics will include number sense, addition, subtraction, and fractions. Participants will ascertain what makes a good problem-solving task and how to recognize big ideas within student work.
PK-2 | INT | 102 | Saturday, 8:00 - 9:00 | Asilomar, Kiln | BT

Bjerke, Hope — NCSM Western 2 Regional Director, Shasta COE
Activate CCSS for Mathematical Practice with NCSM's PD Model
The workshop will use student work to stimulate teacher conversation focused on mathematical structure. Teachers will learn to analyze student work and recognize mathematical structures being used by their students. Materials used come from the Inside Mathematics Web site. Participants can use the PowerPoint in Professional Learning with others.
Ldrshp | WkS | 433 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 4

Blachman, Nancy — Founder, Julia Robinson Mathematics Festival
Inspiring Mathematics: V Hart, M Gardner, Math Circles, JRMF
Vi Hart is banishing the notion that math is boring via her Internet videos, inspiring millions, including many girls. Martin Gardner, through his *Mathematical Games* column in Scientific American and books, may be responsible for many people becoming mathematicians. Math Circles provides a setting that encourages kids to become passionate about math. The Julia Robinson Mathematics Festival inspires students to investigate diverse areas of math not ordinarily encountered in classrooms.
6-8 | PRS | 245 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 26 | BT

Bloom, Jack — Coordinator, Monroe HS, Los Angeles USD
Student Centered Classrooms: Common Core Needs Them!
As we approach the Common Core math standards it is not only what we teach but how we teach that is going need to change. Teachers have become used to the *I do, We do, You do* model of instruction. Using this model we have found some success in taking a multiple choice test (as long as the questions look just like what we practiced). This session will give participants a look at other possible teaching strategies where the student's thinking is the central part of the lesson.
GI | PRS | 346 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 27 | BT
Co-presenter: Miki Nakamura, Math Teacher, Los Angeles USD

Boswell, Laurie — Head of School/MS Math Teacher, The Riverside School
Direct Variation is Not a Slippery Slope
This session will present a series of carefully designed activities that help students make sense of slope as a constant rate of change. The connection between slope and direct variation will be made. Applications of skate ramps, TV screens, and protein shakes will be used. Inverse variation will also be discussed.
6-8 | INT | 356 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 38 | BT

IMPORTANT NOTE
Although you have likely planned your schedule ahead of time, it is important that you verify the session information with what appears in this program. The information here reflects some unavoidable changes. Some sessions have changed speakers and/or topics, some have changed times and some have changed location. Please be sure to check on the very last minute information that is posted in the Asilomar registration area.

Bower, Travis — Mathematics Teacher, Dos Pueblos HS

Nspire Geometry Essentials

Common Core expects students to use dynamic geometry software. Learn the essentials in order to leverage Nspire for the topics generally covered in Geometry. We will cover polygons, area, perimeter, coordinate geometry, constructions, scaled drawings, formulas and circles.

8-12 | INT | 447 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 28 | BT

Projects Showcase Beginner

Looking for project ideas to move students into Quadrant D? Do you want to harness Nspire and move towards NGAssessments? Come and learn about some differentiated projects for Geometry and Algebra II. We will also discuss how I have used EDU2.0 for online submission/grading. Projects: Initials, Logo, Concurrency, Famous Curves, Triangle Areas.

8-12 | PRS | 246 | Saturday, 9:30-10:30 | PG Middle School, Rm 27 | BT

Bradley, Kathy — Math Coach, San Francisco USD

Making Sense of Division of Fractions

Let's move division of fractions into the conceptual! Deepen your understanding of this difficult topic and move beyond algorithms. 5th and 6th grade teachers will be empowered to give meaning to the entire concept of division for their students. Participants will be actively involved through the use of manipulatives and group work. The session will also highlight the CCCSS Practice Standards. These concepts will be covered: division of whole numbers, patterns, models and diagrams, algorithms.

3-8 | INT | 448 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 29 | BT

Co-presenter: Glenn Kenyon — Math Coach, San Francisco USD

Brown Brooks, Gloria — Teacher, Santa Ana Opportunity

The Journey from Flatland to Zometown

Manipulating a flat piece of paper, we will journey from the second dimension to the third. Using Exploring Geometric Solids by Illuminations, we will derive Euler's formula. We use the paper to make sense of creating the platonic solids.

3-8 | INT | 331 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 1 | BT

Callahan, Amy — High Tech HS

Differentiation Through Project-Based Math

At High Tech High School, we serve a variety of students from diverse backgrounds. There are no textbooks and no tracking of math students. I use projects as the primary platform for my classroom. I will share with you some of the successful projects I have done, how I planned them, and what specifically made them good projects. I will also provide you with what obstacles to avoid when planning projects. These projects range from *math only* projects to integrated projects that span across disciplines.

8-12 | PRS | 347 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 28 | BT

Callahan, Patrick — California Mathematics Project

Defining Achievement: Rethinking Teacher/Student Evaluations

Good teachers increase student achievement. But how do we define achievement? Is it a good to post value-added scores of teachers publicly? Are SAT scores valid? How are the new CCSS assessments different? How do we fight The Man? Come find out.

GI | PRS | 303 | Saturday, 11:00 - 12:00 | Asilomar, Heather

Capone, Richard — CEO, Let's Go Learn, Inc.

What are the Technology Implications of the New State Test?

This seminar will first demonstrate in real-time computer-based online adaptive logic assessment and the implications of this technology. Next it will look at real examples of district-wide adaptive testing, the required logistics, and the benefits of real-time diagnostic reporting. Finally, a discussion will follow on the possible look and feel of the SMARTER assessment in 2014.

3-8 | PRS | 530 | Saturday, 3:30 - 5:00 | PG Middle School, Library | BT

Carlyle, Ann — Instructor, University of California, Santa Barbara

Expanding Math Talk with Our Youngest Students (Pre K-K)

Young children are capable of much more mathematical thinking than we usually see in early childhood classrooms. We can encourage math talk by presenting engaging activities and problems, encouraging children's conversations, and using playful materials that draw them into mathematical discourse. We will describe and show various investigative activities where children expand on their own mathematical ideas. Expand number sense and geometry concepts in your preschool and kindergarten.

PK-2 | INT | 402 | Saturday, 1:30 - 3:00 | Asilomar, Kiln

Carranza, Shelley — Mathematics Teacher, Los Altos HS, Mountain View Los Altos HSD

Making Math Visual with Geogebra

Help students make sense of abstract concepts by easily creating visual representations using the free mathematics software Geogebra. The presentation will include an introduction to the software as well as sample lesson plans and connections to the Common Core Standards.

8-12 | PRS | 141 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 21Lab | BT

Co-presenter: Michael Richardson — Math Teacher, Los Altos HS, Mountain View Los Altos HSD

Carroll, Cathy — Senior Project Director, WestEd

Developing Specialized Content Knowledge: Doing Math with Teachers in PD

Teachers need mathematical knowledge beyond just *knowing the math*. This session will examine what constitutes the specialized content knowledge needed for teaching. We will work together on *teacher versions* of a typical student math tasks (one each from elementary and middle school) to consider the specialized knowledge a teacher might need to use the tasks with students.

3-8 | WkS | 506 | Saturday, 3:30 - 5:00 | Asilomar, Scripps Conference

Casey, Christopher — Curriculum Writer

Algebraic Thinking in Grade Four

Common Core State Standards in the Grade 4 Operations and Algebraic Thinking domain will be addressed. Using divisibility rules, pattern blocks and rainbow tiles, students will discover methods to find factors and multiples of numbers as well as identifying step patterns and finding rules for them. This session will be hands on. Teachers will leave with a variety of tools and strategies to teach algebraic thinking in grade four and beyond.

3-5 | INT | 550 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 32 | BT

Chamberlin, Ruth — Olympia SD
What's Vocabulary Got to Do with Mathematical Precision?
Struggling students often lack the requisite math vocabulary. This session will focus on developing precision and key components of embedded vocabulary development. Practical strategies and games to increase mathematical precision and vocabulary will be shared. Many of these strategies can be implemented next week.
6-8 | INT | 142 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 22Lab | BT

Cheng, Ivan — Associate Professor, California State University, Northridge
Designing Classroom Assessments Aligned with CCSS
Are your students ready for the new CST in 2014? Learn how to design problems and activities that promote the Common Core Standards for Mathematical Practice. Participants will receive sample activities and assessments that are ready to use on Monday.
8-12 | INT | 154 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 36 | BT
Co-presenter: Jaspreet Sandha — Teacher, Maclay MS

Childs, Leigh — Consultant, San Diego USD
Engaging, Effective Strategies = Numerically Nimble Students
Work smarter, not harder to improve numeric competence. These strategies promote greater sense-making and participation—ideal for intervention success and *family math* efforts. A ready for immediate use handout includes engaging activities to enhance mathematical reasoning and improve student performance.
PK-2 | INT | 503 | Saturday, 3:30 - 5:00 | Asilomar, Heather | BT | $

Connelly, Ralph — Professor Emeritus, Brock: Faculty of Education
Sizzling School Starters
The Common Core Standards for Number seem to focus heavily on computation, leaving little time for other aspects of number sense and mathematical reasoning. This session will provide teachers with a variety of problem solving, mathematical reasoning, and number sense ideas that will only take a few minutes, but will grab students' attention and get your class off to a great start!
3-8 | INT | 236 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 7 | BT

Cook, Marcy — Author
What's Cooking in a Live Math Classroom?
Create a math environment where all students are actively involved and constant assessment prevails. Have motivational starting activities to keep thinking and basic skills alive. Provide for independent task time to differentiate for the various needs of your students. Focus on reasoning communication, and problem solving. Practical ideas to put to use immediately. (grades 5-8)
6-8 | INT | 101 | Saturday, 8:00 - 9:00 | Asilomar, Fred Farr Forum | BT
Algebraic Thinking Experiences For All
Build mathematical competence and confidence with algebraic thinking. Involve all students in patterns, relationships, variables/unknowns and equations. Provide daily thinking experiences as well as rich independent task time exercises to focus on the various aspects of algebra. This session will address a variety of practical ideas to put to immediate use.
3-8 | INT | 353 | Saturday, 11:00 - 12:00 | PG Middle School, Auditorium | BT

Costa, Elmano — California State University, Stanislaus
Meeting the Common Core Standards for English Learners
English learners can meet the Common Core State Standards when the instruction is especially designed to meet their specific needs. This workshop will show you how to plan and deliver lessons that make instruction comprehensible for EL students at any level. The session begins by presenting the hallmarks of comprehensible input for EL students and then models how to implement them in a math lesson taught in Portuguese.
PK-5 | INT | 112 | Saturday, 8:00 - 9:00 | Asilomar, Dolphin | BT

Dagler, Clay — Luther Burbank HS, Sacramento City USD
Turning Worksheets into Engaging Puzzles
Teachers will learn how to take any worksheet and turn it into a jigsaw puzzle. The students will complete the puzzle by matching each problem with its answer.
8-12 | MITI | 341 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 21Lab | BT

Damm, Suzanne — Lecturer, University of California, Santa Cruz
Develop Mathematical Habits of Mind with CCSS Math Practices
Implementing the *Mathematical Practices* now will start preparing students for the next generation assessments (beginning 2014-15). Come explore classroom practices that encourage the development of habits of mind called for in the *Mathematical Practices*. Leave with sample activities and resources you can implement immediately. Help your students become more like mathematicians and less like implementers of procedures.
GI | PRS | 205 | Saturday, 9:30 - 10:30 | Asilomar, Evergreen

Dapkewicz, Jack — Kormatsu, Willett ES
The Language of Math: Using Math Vocabulary in Grades 2-7
Having a math word vocabulary wall is your first step teaching the language of math in your classroom. But there is so much more you can do to help students *see* what math is about. We will show you strategies for students to internalize the definition and meaning of the word *math* so all students are engaged in learning and improving their number sense. This workshop includes many take home strategies and materials to reach all students in your classroom tomorrow.
3-8 | WkS | 435 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 6

Davidenko, Susana — Associate Professor, SUNY Cortland NYELL
Interaction Using Problems Within Familiar Contexts
A problem solving session conducted with bilingual (Ixil/Spanish) elementary teachers in a Mayan village in Guatemala will be discussed. A *working backwards* problem on multiplication of fractions within a familiar context was given. This eased teachers' communication to interpret the problem, choose an appropriate representation, and find a solution. In addition, many teachers developed a more confident attitude when they discussed the problem among themselves using their native language.
3-8 | PRS | 311 | Saturday, 11:00 - 12:00 | Asilomar, Sanderling | BT

CELL PHONES AND PAGERS
Out of respect for presenters and other participants, please turn off cell phones and pagers during sessions.

DeCarli, Elizabeth — Mathematics Product Manager, Key Curriculum

Help Students Dig into Data and Tinker with their Plots!

Use TinkerPlots to represent and explore real-world data, measures of center, the shapes of distributions, and patterns of association between two variables. Learn how to morph and manipulate graphs to create colorful representations of data. See how TinkerPlots helps make the challenging Statistics and Probability Standards for Grades 6–8 accessible while promoting the Mathematical Practices of constructing viable arguments, modeling with mathematics, and using appropriate tools strategically.

6-8 | INT | 441 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 21Lab | BT | $

Co-presenter: Andres Marti — Mathematics Product Manager, Key Curriculum

DeFazio, Francesca — Mathematics Teacher, Westmore Oaks ES, Washington USD

Learning Algebra Using C/C++ in the Interpreter Ch

Algebra is one of the most difficult topics for students to learn. It is a prerequisite for most courses in science, technology, engineering, and mathematics (STEM). It is considered as the gatekeeper for students to pursue a career in STEM. We will teach you how to use an interactive computing curriculum in an environment called Ch to help students learn Algebra. Like a calculator, Ch is an ideal tool to learn basic math concepts and will make students' learning experience more enjoyable.

8-12 | INT | 541 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 21Lab | BT

Co-presenter: Heidi Espindola — Math Teacher/ Department Chair, University California, Davis K-14 Outreach Center for Computing and STEM Education

Dillon, Fred — Retired, Strongsville HS

Reasoning, Sense Making and Proof

Students need opportunities to make sense of mathematics, to conjecture about possibilities, to prove if their ideas are correct or not, and to communicate their reasoning about why things work. All of these are essential ingredients for any mathematics classroom. Take part in activities that showcase reasoning and proof using functions, data analysis, geometry and more. Reflect on ways that you may incorporate proof across topics and into your classroom.

8-126-8 | PRS | 209 | Saturday, 9:30 - 10:30 | Asilomar, Marlin

Dimas, Cecilio — Mathematics Coordinator, Santa Clara COE

Faculty Academy for Mathematics Excellence (FAME): PD Program

Are your middle school students struggling with algebraic concepts? Need to integrate technology into instruction? Lacking access to those *rich* problems to solve? FAME is the program for you. Come learn about the program and how to replicate a summer institute and follow-up sessions focused on topics that students find challenging while learning to use computer and internet technology. Presenters will include teacher leaders, program designers, and administrators from the Bay Area.

6-8 | INT | 542 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 22Lab | BT

Co-presenter: Jivan Dhaliwal — Mathematics Coordinator, Santa Clara COE

ASK ME!

Need assistance on the day of the conference? Look for the attendees with "**Ask Me**" button.

Doherty, Bill — Campolindo HS

The Flipped Math Classroom

Do your students *get it* during class, then *forget it* when they're trying to do their homework? Consider *flipping* your classroom! The flipped classroom maximizes teacher interaction with students by moving less interactive tasks outside of class time. I'll discuss how I use technology to deliver *video* lectures at home, and most importantly, how that positively impacts student learning by freeing me up to be by their side as they work through what I used to call their *homework* problems.

8-12 | PRS | 344 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 25 | BT

Dorf, Carol — Berkeley HS, Berkeley USD

Core Connections: Poetry in the Mathematics Classroom

Poetry and mathematics share the ability to compress large ideas into small forms. In her poem "Pi," Nobel winner Szymborska considers Pi's expansion: "How feeble the star's ray, bent by bumping up against space!" Thus, the symbol holds infinite meanings. In the classroom, poetry deepens understanding of mathematical language while connecting emotions to mathematics. In this workshop, teachers will read poems and learn writing exercises to increase student understanding and enjoyment of math.

8-12 | WkS | 146 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 27 | BT

Douglas, Lew — University of California, Berkeley

Connecting Math and Music

Rhythm, pitch, volume and symbolic notation are key musical ideas that have strong connections to math and science, connections that are often underutilized. Students find learning about music quite motivating, and there is research to support the positive effects the academic study of music has on math achievement. This session will highlight these connections, include kinesthetic activities, and provide information about additional resources.

GI | PRS | 446 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 27 | BT

Co-presenter: Chip Curry

Eisenberg, Gary — Teacher, Vacaville USD

The Power of the Visual Story in Math

Participants will leave with practical ideas on how to use language, story, and song to help their students achieve mastery in math. Come hear how *Fast Ten* saved a desperate town in the Old West. Thrill to the quest of the son of a farmer as he sets out to win the princess' hand in marriage in *A Thousand in One Hand*. Story topics will include numeral writing and recognition, adding, subtracting, multiplying, dividing, and place value.

PK-2 | PRS | 202 | Saturday, 9:30 - 10:30 | Asilomar, Kiln | BT

Ellis, Amy — Associate Professor, University of Wisconsin

Laying a Foundation for Learning to Prove (NCTM Learn Reflect Strand)

This session will highlight research related to K-12 students' reasoning and proving abilities as well as illustrate instructional practices that both prepare students to engage in reasoning and proving and are integral to reasoning and proving. A goal of the session is to provide teachers with ideas for helping them make reasoning and proving a regular and consistent part of students' mathematics education at all grade levels.

GI | PRS | 106 | Saturday, 8:00 - 9:00 | Asilomar, Scripps Conference

England, Ana — University of California, Santa Cruz
Mathematical Practices: An Opportunity for English Language Learners
When students are asked to "construct viable arguments and critique the reasoning of others", it presents a challenge to English Learners but it also provides an opportunity to develop language skills. We will examine tasks at various grade levels to identify language and mathematical demands and opportunities for students.
GI | PRS | 111 | Saturday 8:00-9:00 | Asilomar, Sanderling

Erickson, Sheldon — Computech
Animated Algebra: Activities, Animation, and Apps
Engaging hands-on activities, videos and animations that vividly present concepts, and interactive Apps encouraging exploration in structure, and fluency. All activitiesdevelop the deep understanding required by the common core standards and practices. Receive materials, methods and strategies for success with pre-algebra classes.
6-8 | INT | 553 | Saturday, 3:30 - 5:00 | PG Middle School, Auditorium | BT

Farrand, Scott — Professor,
California State University, Sacramento
Problem Solving as Professional Development for the CCSS
Join us and work on a fun new math problem that is accessible to everyone. You'll find yourself using the habits of mind described in the Standards of Mathematical Practice as you work on the problem with the teachers around you. After solving the problem, we will reflect about teaching strategies that engaged you and about questions that promoted those Standards of Mathematical Practice.
GI | INT | 453 | Saturday, 1:30 - 3:00 | PG Middle School, Auditorium | BT
Co-presenter: Rick West — University of California, Davis

Foster, Halcyon — Assistant Professor,
San Francisco State University
Tetrahedrons in Space
A simple tetrahedron with faces projected indefinitely into space is the basis for a challenging visualization problem. In this session, we will pose the problem and give you time to experience it, and then present a model and template developed by a student. Afterwards, we will analyze the problem solving experience through the lens of the Common Core Standards for Mathematical Practices.
8-12 | MITI | 534 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 5 | BT
Co-presenter: Kathy Bradley — Mathematics Coach, San Francisco USD

ASILOMAR PATHWAYS

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 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.

Fulton, Brad — Teacher, Mt. Lassen
Fast Facts and Fractions
Four out of three students struggle with fractions! And the other 50% struggle with the times tables. See how I helped my intervention students master all fraction operations and master their multiplication facts. Great handout included.
6-8 | PRS | 301 | Saturday, 11:00 - 12:00 | Asilomar, Fred Farr Forum | BT
Developing Number Sense Through Engaging Activities
The development of number sense is crucial to success in upper mathematics. This presentation will show teachers how they can foster rich number sense using simple and powerful strategies. A ready-for-Monday handout is available.
6-8 | PRS | 153 | Saturday, 8:00 - 9:00 | PG Middle School, Auditorium | BT

Gale, Mardi — Senior Research Associate, WestEd
Algebra Intervention and Common Core: What's the Intersection?
Examine essential elements for conceptually based algebraic intervention that support the CCSS and embeds the Standards for Mathematical Practice. Receive material that models the upcoming CCSS assessments, has a flexible implementation, supports RTI & EL's, and engages students in math.
8-12 | PRS | 136 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 7 | BT

Garcia, Jorge — Associate Professor,
California State University Channel Islands
Technology Activities for Algebra Teachers
We will introduce games and applications that will allow students easy access to algebraic practices. We will show teachers how to use and/or design their own games to target main issues in their classrooms. These games can be used to develop repeatable set of activities focused on students' thinking and practical skills as well as a way of preparing students for testing.
8-12 | PRS | 307 | Saturday, 11:00 - 12:00 | Asilomar, Acacia | BT

Giganti, Paul — Director, Math Festival Program,
California Mathematics Council
Learn Geometry Vocabulary as You Fold & Cut
To become proficient in geometry, students need a thorough understanding of the *many* geometric terms. There is little hope for students on state tests unless know this specialized vocabulary. Discover how a single extended lesson can be used to review and/or introduce almost the entire 3-5 grade geometry vocabulary from the Standards. This lesson is *not* flash cards; *not* word games; *not* memorizing tricks, but a hands-on activity that reveals geometric terms as they come up naturally!
3-5 | INT | 103 | Saturday, 8:00 - 9:00 | Asilomar, Heather | BT

Gilbert, Melissa — Santa Clara University
Motivation and the Common Core Standards
The Common Core Standards, based on the strands of mathematical proficiency, expect students to develop a productive disposition toward mathematics (e.g., self-confident and seeing math as useful). This presentation reviews research relating productive disposition to other strands of mathematical proficiency and shows how teachers can use TARGETTS, a lesson analysis and reflection tool, to promote their students' development of all of the types of knowledge needed to meet the new standards.
GI | PRS | 339 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 12 | BT

Gillespie, Janet — Retired, Portland Schools
Do I Add or Subtract? Building Operation Sense Day-by-Day
Explore the use of skits, daily routines, investigations, and partner games to help children distinguish between adding, taking away, finding a missing part, and comparing situations. In this interactive hands-on language experience approach, children boost their confidence interpreting and solving word problems while using number sentences to record their actions.
PK-2 | INT | 450 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 32 | BT

Goldenstein, Donna
Mathematics and The Arts: Thinking and Reasoning Through Art
This session will focus on math/art activities that encourage students to concentrate on the CCSS Mathematical Practices of perseverance, precision, and using tools strategically. Participants will be introduced to a variety of art projects that deepen the mathematical concepts in an intermediate grade classroom. Participants will see student work as well as a variety of journal prompts that integrate literature, mathematics, and the arts.
3-5 | PRS | 203 | Saturday, 9:30 - 10:30 | Asilomar, Heather

Gomez, Emiliano — University of California, Berkeley
Rate and Percent Problems Through the Lens of the CCSS-SMP
Traditional rate and percent problems have achieved a sad (but maybe fair) notoriety in society for being boring and tedious. We will present a few problems that are more interesting and invite us to engage in the kind of mathematical practices that the CCSS-M advocate.
8-12 | INT | 211 | Saturday, 9:30 - 10:30 | Asilomar, Sanderling

Grzegorczyk, Ivona — California State University Channel Islands
Dancing Fractions and Touching Algebra Activities
We will present kinesthetic activities teaching fractions and operations as well as touch and play technology for pre-algebra and algebra classrooms. These activities increase student participation and improve understanding of the concepts. Additionally, they improve students' attitudes towards mathematics.
6-8 | WkS | 239 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 12 | BT

Hamo, Matthieu — Glenoaks ES
Design Lessons and Activities That Make Students Learn!
Engage students' common core mathematical practices through effective problem solving lessons and meaningful activities. Participants will experience samples of classroom-tested, common core standards-based activities that can be adapted to meet the needs of any student in any curriculum. Leave with ideas that will get your students thinking right away!
6-8 | INT | 257 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 39 | BT
Co-presenter: Jesus Uribe — Teacher, Fullerton School District

Harbin Miles, Ruth — Mary Baldwin College
Visible Thinking in the 3-8 Mathematics Classroom
Do you ever wish your students could read each other's thoughts? Now they can – and so can you. Veteran mathematics educators, Ruth Harbin Miles and Ted H. Hull, explain why making students' thought processes visible is the key to effective mathematics instruction, formative assessment, and just-in-time intervention.
3-8 | INT | 501 | Saturday, 3:30 - 5:00 | Asilomar, Fred Farr Forum | BT
Co-presenter: Ted Hull — LCM Consultant

Heiman, Siva — Mathematics Teacher (retired)
New Three-Step Method to Teach the Addition and Subtraction Facts
You're invited. Come see a new three-step method to teach the addition & subtraction facts. Step 1, Illustrate numbers with number pictures made from manipulatives. Step 2, Learn a magic trick, Pay-At-TEN-Tion, that amazes the audience (as well as the magician) and teaches the pairs of numbers whose sum is 10. Step 3, Use math strategies with the number pictures to facilitate quick mental math. When adults see this three-step Path to Math™ method, many say, *"I wish I'd learned math this way."*
PK-2 | PRS | 533 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 4 | BT

Heirendt, Dwight — Curriculum Specialist, Pearson
Digital Math Tools to Support the CC Mathematical Practices
Come see how you can use digital math tools in your middle and high school classroom. These tools engage students in the mastery of the mathematical practices while supporting a deeper understanding of the math. Participants will receive digital access to all of the tools used in the session.
8-12 | PRS | 308 | Saturday, 11:00 - 12:00 | Asilomar, Toyon | BT | $

Herrington, Diana — Treasurer, California Mathematics Council
No Child Left Hiding in your Classroom
This session will look at how using an iPad and iAuthor in your classroom can impact all of your students learning opportunities. With an iPad you can create a support system for all of your students. Teacher created intervention and problem solving iBooks will be shared, the ideas can be used even if your are not able to utilize iAuthor yet. You will come away with ideas to leave no child hiding in your classroom.
8-12 | PRS | 104 | Saturday, 8:00 - 9:00 | Asilomar, Oak Shelter | BT

Hirsch, Tere
ELLS & the CCSS: Access and Achievement
How do we adapt instructional strategies and provide access to math concepts? How do we help ELs express their learning in a meaningful manner, using the Common Core Practices? Learn about adapting some strategies for use in this new era. (samples)
3-8 | INT | 512 | Saturday, 3:30 - 5:00 | Asilomar, Dolphin | BT

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 for the seating capacity of each room. All seats are available on a first-come, first-served basis.

Hogan, Marie — The Math Forum
My Students Can Notice/Wonder: Now What?
The Notice/Wonder strategy helps all students engage comfortably so that they are able to communicate their mathematical reasoning. It helps students who would race to finish the problem, slow down, while it helps students who would give up immediately have something that hooks them in. Once students are comfortable with that strategy, there are many more to introduce. Participants will leave with resources that keep students motivated, engaged, and communicating at higher levels of thinking.
6-8 | INT | 235 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 6 | BT
Co-presenter: Suzanne Alejandre — Director of Professional Development, The Math Forum @ Drexel

Holm, Calisa — Teacher, Pacific Union ES
Communicator Activities Use CCSS to Improve Math Performance
Presenter will focus on the CCSS for Algebra & 7th grade math. The real power of the activities engages your students in the eight Standards for Mathematical Practice. Pulling from Communicator issues, 1990s to present, I will share activities to engage and develop mathematically proficient students. These activities will be ready for next Monday's class.
6-8 | INT | 145 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 26 | BT
Co-presenter: Stuart Moskowitz — Teacher, Humboldt State University

Holm Holman, Lynda — K-5 Math Specialist and Instructional Coach, Marietta City Schools
Kindergarten Algebra
The new Common Core Standards address algebraic operations and thinking in primary grades. Join a hands-on session to explore strategies for strengthening mathematical problem solving and algebraic thinking in kindergarten. Provide opportunities for students to explore patterns and their relationship to number quantities, make generalizations about addition and subtraction, and create multiple representations for quantities. Participants will leave with a set of tasks appropriate for grades K-2.
PK-2 | WkS | 148 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 29 | BT

Humphreys, Cathy — Stanford University
Learning Practices Together: Number Talks in High School
Number talks can be challenging for teachers and students. Teachers use new teaching practices as they respond to, represent, and build on student thinking; students use often unfamiliar mathematical practices as they learn to make sense of operations and algebraic properties, and explain their thinking clearly to others. In this session, we will watch the classroom lessons and planning sessions of two preservice teachers as they enact number talks with their high school geometry students.
GI | PRS | 401 | Saturday, 1:30 - 3:00 | Asilomar, Fred Farr Forum

Jackson, Mike — Regional VP, iLearn Math
Identifying Gaps in CCSS with Technology
Identifying Gaps in Common Core Standards by utilizing a cutting edge technology based assessment for-Universal Screening, Progress Monitoring. iKnow MathFill these gaps with mastery by implementing a California State Adopted Math Intervention and Algebra Readiness Solution -iPASS MathPresentation by a California School District using iPASS Math for their Intervention solution. Suitable for grades 2-12.
3-8 | PRS | 312 | Saturday, 11:00 - 12:00 | Asilomar, Dolphin | $

Jacob, John — Instructor of Mathematics, College of Marin
Classroom Mathematics Experiments for Precalculus Courses
The speaker will guide the participating audience through these three mathematics experiments that use his specially designed *lab* equipment: the gradient of a plane and its relation to the two slope numbers m1 and m2, tools that can be used with a topographic map to determine the location of possible obstructions to straight line visibility, and mapping certain curves and regions in the plane onto the cylinder and the cone.
8-12 | INT | 404 | Saturday, 1:30 - 3:00 | Asilomar, Oak Shelter | BT

Jacobs, Harold — Teacher, Grant HS, Los Angeles USD
Mathematical Snapshots of 2012
This talk will center around surprising and timely examples that can help you pull your students into your lessons. It will present ideas that can be used to motivate the review of old concepts as well as the introduction of new ones. Participants will receive a CD of the talk so that they can prepare visuals for use in their own classroom.
8-12 | PRS | 201 | Saturday, 9:30 - 10:30 | Asilomar, Fred Farr Forum | BT

Johnson Rock, Monica — Hayward SD
Accessing Geometry Through Origami
Why Origami? Children learn concepts best when they have time to explore and create their own thinking to build understanding. Origami allows students to create models that represent complex concepts. This workshop will show a systematic approach in how to create models to teach students geometrical concepts and vocabulary. This approach will use the CCSS (Common Core State Standards) Standards for Mathematical Practice of perseverance, precision, and abstract reasoning.
3-5 | WkS | 551 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 33 | BT

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

ASK ME!
Need assistance on the day of the conference? Look for the attendees with "**Ask Me**" button.

Kirley, Kim — Kindergarten Teacher, Park School, Mill Valley SD
Embracing the Kindergarten California Common Core Standards
Come and explore hands-on and engaging lessons which meet the Kindergarten California Common Core State Standards. I'll share ideas about how to adapt your current activities to meet the new standards. I'll show how we make and use a *math tool kit* for students to use in class.
PK-2 | PRS | 251 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 33 | BT

Kriegler, Shelley — President,
Center for Math and Teaching, Inc.
Integers on the Number Line: A CCSS-M Approach
Come explore adding and subtracting integers on the number line. Learn approaches that are tactile, visual, sense-making, and will help you move forward into a Common Core world. Activities are connected to CCSS and the Standards for Mathematical Practice.
3-8 | INT | 212 | Saturday, 9:30 - 10:30 | Asilomar, Dolphin | BT | $

Kysh, Judith — San Francisco State University
More Tasks That Turn Algebra Procedures into Good Group Work
There are many rich algebra problems that can engage students in the core practices, but it is difficult to find or create problems that generate good math discussions focused on algebraic procedures. Sample tasks designed to probe understanding of procedural exercises of Algebra I and II will be discussed, and a video clip will be used to show how students can be engaged in reasoning, discussion, and the use of academic language to gain a deeper understanding than practice alone can give.
8-12 | PRS | 407 | Saturday, 1:30 - 3:00 | Asilomar, Acacia | BT

Lahme, Brigitte — Sonoma State University
Professional Workaround the Common Core: Illustrative Math
The Common Core Standards are just a bunch of words until we make them meaningful by connecting the words with tasks and student work, and discussing our teaching with colleagues. We will explore how the Illustrative Mathematics initiative helps teachers study the new standards through illustrative tasks and involves them in shaping the standards' implementation. Ultimately, teachers are able to submit their own tasks, comment on other peoples' tasks and discuss their practice with colleagues.
GI | INT | 147 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 28 | BT

Lambertson, Lori — Staff Teacher, Exploratorium
Carbon Cycle by the Numbers
Math is at the core of our understanding of current science. We will use quantitative data to build concrete models that help students visualize the numbers. We will explore the major carbon reservoirs on earth, use rice to build a model representing the relative abundance of carbon in each reservoir, and model the exchanges between reservoirs. We will also model the composition of our atmosphere, including carbon dioxide, and examine the data from Mauna Loa showing the changing CO_2 levels.
6-8 | WkS | 304 | Saturday, 11:00 - 12:00 | Asilomar, Oak Shelter | BT

CELL PHONES AND PAGERS
Out of respect for presenters and other participants, please turn off cell phones and pagers during sessions.

Larson, Ron — Professor of Mathematics,
Pennsylvania State University
College Prep Algebra for Seniors
The two largest math courses in college are remedial Algebra I (Elem Alg) and remedial Algebra II (Inter Alg). Most of the students in these courses took no mathematics as high school seniors. This course seeks to solve this problem by providing a refresher course in algebra for high school seniors. Sample materials will be distributed at the talk.
8-12 | PRS | 330 | Saturday, 11:00 - 12:00 | PG Middle School, Library | BT
Real Math, Real Life: A New Course for High School Students
This session will demonstrate a new type of high school course that is available for free online. The new course places emphasis on the real life applications of mathematics and requires no algebra. Topics include business and consumer math, taxation, probability, statistics, sports and fitness, and patterns in nature.
8-12 | PRS | 230 | Saturday, 9:30 - 10:30 | PG Middle School, Library | BT
Using the Mathematical Practices to Promote Active Learning and Higher-Order Thinking
The Common Core Standards for Mathematical Practice are based on research that suggests that students need to do more in the mathematics classroom than listen. Students need to be actively involved in the learning: reading, writing, and discussing. In this workshop, participants will look at the Mathematical Practices and put into place instructional strategies that promote active learning and higher-order thinking. The workshop will also address existing barriers to instructional change and how those barriers can be successfully overcome through careful, thoughtful planning.
6-8 | WkS | 133 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 4 | BT

Lau, David
Solve Optimization Problems and Interpret Solutions
Using LINGO software to set up and solve optimization problems with emphasis on interpreting the solutions in the context of the problem. Notations and formatting of the software along with various types of graphical displays will be discussed. This is a course work in Finite mathematics focusing on applications with the use of matrices and the Simplex method in optimization.
8-12 | PRS | 243 | Saturday, 9:30-10:30 | PG Middle School, Rm 24

Lim, Brian — Professor, California State University, Sacramento
Mathematics in TV shows
In this presentation, we will watch a collection of video clips of TV shows and movies in which mathematics appear. We will discuss how these clips can be used to teach different mathematical topics as well as to get students interested in mathematics.
GI | PRS | 351 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 33 | BT

CONFERENCE EVALUATION FORM
Complete conference evaluation online **www.surveymonkey.com/s/asilomar** by December 31, 2012 and you will be entered in a drawing for FREE conference registration and on grounds housing for next year. The winners for this year's free registration and housing are Kirsten Choy and Stephanie Willshon-Butler.

Malankowski-Smith, Blanche — Mathematics Teacher/Coach/Consultant, West Contra Costa USD

They Know How to Count! Move Them Past Counting on Fingers

Let's take a fresh look at accomplishing some of the Common Core Standards. This workshop will share Dr. Robert Wirtz' Think/Talk/Read cards. The intent is to foster rational thinking. Using objects/drawings/dice/ten frames/arrays, students will acquire mental images and with language experiences, they will come to understand powerful number relationships. Make a ten. doubles plus one, fact families are just a few of the strategies students will learn as they discuss what they see on the cards.

PK-2 | INT | 510 | Saturday, 3:30 - 5:00 | Asilomar, Curlew | BT

Marti, Andres — Mathematics Product Manager, Key Curriculum

Make Math Move: Modeling Algebra and Geometry with Sketchpad

The Common Core defines modeling as a Mathematical Practice and a conceptual category best interpreted in relation to other content standards, including those in Algebra, Functions, and Geometry. Learn how to create animated models with Sketchpad that bring dynamic visualization to the study of algebraic representations, functional relationships, and transformational geometry. We'll focus on models to use for demonstrations and activities in which students develop their own modeling skills.

8-12 | PRS | 242 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 22Lab | BT | $

Mathurin, Andre — Bellarmine College Prep

Engaging Activities and Ideas for Teaching Discrete Math

Looking for ways to engage students in authentic mathematics regardless of their algebraic competence? Come see how graph theory and number theory can provide realistic, understandable opportunities for students to engage in rich mathematics regardless of their algebra ability.

8-12 | INT | 405 | Saturday, 1:30 - 3:00 | Asilomar, Evergreen

Mattenson, Marla — Math Department Chair/Teacher, Helen Bernstein HS, Los Angeles USD

Homework, Classwork and Assessments that Embed the Eight Math Practices

Learn innovative methods for homework, classwork, and assessments that engage students in finding their own errors and reflecting and thinking critically about their work and the work of other students. Understand the rationale behind each method, the connection to the eight Mathematical Practices from the Common Core, and how they give students multiple opportunities for comprehension and success. Student work will be shown with specific instructions on how to implement in your classroom ASAP.

8-12 | PRS | 556 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 38 | BT

Mayfield-Ingram, Karen — EQUALS Associate Director, Lawrence Hall of Science

Engaging Parents in the Transition to the Common Core Standards

Implementation of the Common Core State Standards for Mathematics will provoke changes in curriculum, instructional strategies, and assessment systems. It will be important during this transitional period that all parents understand what these changes will mean for their child's mathematics education. Come experience engaging activities that can be used with parents that model the Standards for Mathematical Practice. Participants will also receive assessment information to share with families.

3-8 | INT | 140 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 13

Mazzola, Alison — Math Specialist, St. Matthew's Episcopal

Developing Algebraic Thinking in the Younger Grades

The Common Core Standards call for algebraic thinking from kindergarten on up through the grades. We know what algebra looks like in high school but how do we develop algebraic thinking in the younger grades? Come learn hands-on activities in patterning, proportional reasoning, and balancing equations that you can do with your students. I will also share some literature connections. You will broaden your students' mathematical toolboxes by learning to teach these skills.

PK-5 | INT | 151 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 33 | BT

McAlister, Mark — Tutor

Focusing on Conic Sections for Better Access

Many advanced Algebra students stumble over Conic Sections; they need not. In this workshop, we'll present a brief history of the conic sections and show some of their many applications. We will emphasize methods that empower teachers to maximize their students' success and delight in graphing the conics by scaffolding on what they already know. Finally, we'll show how anyone can instantly create a circle, ellipse, parabola or hyperbola with just a flick of a switch.

8-12 | PRS | 546 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 27 | BT

McLean, Peggy — Peggy McLean Consulting

Mathematical Reasoning Across the Strands with Pattern Blocks

Participants will discover the relationships between the pieces and how these factors can be utilized to strengthen several math concepts. The will compose and decompose numbers, perform the four basic operations, and extend this reasoning to the invention of various bases. Paying attention to the edges of the blocks, participants will solve puzzles involving area and perimeter, symmetry, and measurement of angles. Building sequences will provide opportunities to enhance algebraic reasoning.

3-5 | INT | 150 | Saturday, 8:00-9:00 | PG Middle School, Room 32 | BT

CALL FOR SPEAKERS!

Interested in presenting at the 2012 Asilomar Mathematics Conference? The theme is Modeling Mathematics from Many Angles. Speaker proposals will be accepted between January 30 - April 30, 2013. Go to: **www.cmc-math.org/activities/north_speakers.html** to submit your online proposal.

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.

McNamara, Julie — Education Specialist, Math Solutions

Fractions: What's There to Talk About?

The Practice Standards from the CCSS present a view of math class focused on reasoning and discourse. What does this look like in the domain of Fractions? In this session we will engage participants in discussing their reasoning about fractions, share strategies for encouraging students to do the same, and show video of student interviews and classroom discussions about fractions. Strategies for encouraging ALL students, including ELLs, to engage in mathematical discussions will be shared.

3-8 | INT | 134 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 5 | BT

Co-presenter: Le'Vada Gray — Professional Development Specialist, Math Solutions

McReynolds, Susan — Mathematics Teacher, Castro Valley HS, Castro Valley USD

Conditional Probability and Proving Independence: High School

This workshop explains different methods to determine the independence of events in your Algebra II classroom. You'll also be given hands-on materials that you can use to facilitate better understanding of Conditional Probability.

8-12 | WkS | 108 | Saturday, 8:00 - 9:00 | Asilomar, Toyon

Meyer, Dan — Doctoral Candidate, Stanford University

Tools and Technology for Modern Math Teaching

You have a concrete understanding that the landscape in which our students live and learn is changing. You also understand that a lot of new tools and technology exist to help our students learn more meaningful mathematics. The question we all have now is, "Which tools deserve our limited time and resources?" The presenter has struggled with the question and will offer a practical framework for guiding math teachers towards more modern math teaching.

GI | PRS | 253 | Saturday, 9:30 - 10:30 | PG Middle School, Auditorium | BT

Miller, Jim — Professor, Central Washington University

Using Simple Manipulatives to Teach Fractions

Manipulatives are key to helping students understand fractions. But often the manipulatives are misused or have natural limitations. Learn how to use the manipulatives you may have or can acquire very inexpensively to effectively guide students to a deeper and more meaningful understanding of fractions through a constructivist approach.

3-8 | WkS | 445 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 26 | BT

Co-presenter: Virginia Erion — Department Chair, Central Washington University

Multiply Binomials/Factor Trinomials with Strips of Paper

Use a constructivist approach to scaffold from two-digit multiplication, area and manipulative use to trinomial factoring. This systematic approach to factoring removes the guess work for students, allows them to factor with confidence, provides simple strategies for your students and is simpler to teach. This approach reduces the mental gymnastics required by traditional approaches and allows greater access for all students

.8-12 | INT | 345 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 26 | BT

Miller, Lisa — Math Teacher/Math Coach, Napa HS, Napa USD

Preparing Students for the High School Exit Exam in Math

Preparing tenth graders for the Exit Exam, which tests middle school standards, while not compromising high school math curriculum is a challenge. Learn how a math department systematically prepares their students for the Exit Exam while beginning to incorporate the mathematics from the Common Core State Standards. This system has resulted in gains in their tenth grade pass rate with significant growth among English Language Learners and economically disadvantaged students.

8-12 | PRS | 130 | Saturday, 8:00 - 9:00 | PG Middle School, Library | BT

Reaching At-Risk Students in Algebra Using Best Practices and The CCSS

How do we help our at-risk students be successful in Algebra? How do we help students who have experienced previous math failure to have confidence in their Algebra skills? Examine how a team of Algebra teachers are using research informed best practices and the Common Core State Standards to develop student understanding of math concepts and drastically improve the Algebra I pass rate and the High School Exit Exam pass rate of at-risk math students.

8-12 | PRS | 430 | Saturday, 1:30 - 3:00 | PG Middle School, Library | BT

Mitchell, Suzanne

Powerful Actions to Enrich the Implementation of the Common Core State Standards

Learn about the latest resources from NCSM that support powerful actions to implement the Common Core State Standards. Resources include example mathematical tasks, research, position papers, instruction that promotes students' proficiency in mathematical practice, and a tool for analyzing instructional materials.

Ldrshp | PRS | 302 | Saturday, 11:00 - 12:00 | Asilomar, Kiln

Moore, Sara — Director Math and Science, ETA hand2mindTeach

Algebraic Thinking to ELL Students

This teacher-driven, classroom-based project integrates literacy and mathematics. Specifically, an interrelated set of instructional strategies uses high-quality literature and hands-on manipulatives to teach algebraic thinking to English Language Learners (ELL). We will describe lessons learned from this project, as well as discuss implications for developing integrated curriculum, teaching with manipulatives, and using literature-based instruction to teach mathematics in ELL classrooms.

3-5 | INT | 350 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 32 | BT

Co-presenter: William Bintz — Professor, Kent State University

Morris, Kathy — Sonoma State University

Create & Critique Viable Arguments via Mathematical Modeling

Ever wonder how to figure out how many meals McDonalds serves a year? Or how soon an injury will heal? For many of us, *mathematical modeling* is the most unfamiliar element in the new Practice & Content Standards. What is the connection between modeling problems and *real-world* problems? Where do they fit in our curriculum? We will explore captivating problems like the one above, discuss key features of modeling problems, and consider implications for incorporating these into our teaching.

GI | INT | 204 | Saturday, 9:30 - 10:30 | Asilomar, Oak Shelter | BT

Co-presenter: Brigitte Lahme — Associate Professor, Sonoma State University

Moskowitz, Stuart — Lecturer, State University
Circular Reasoning: 2πr and πr^2: Which is Which?
The Common Core Standards state that sixth-graders will know and understand the derivation of the formulas for circumference and area of circles. But both formulas have the same three symbols: π, r, and two. We'll investigate both modern and historical methods to help us (and our students) better understand which is which.
6-8 | WkS | 440 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 13 | BT
Co-presenter: Calisa Holm — Teacher, Pacific Union ES

Muller, Eric — Senior Science Math Educator, Exploratorium
The Math in Motion
Explore the relationship between math and motion. We will use algebra, geometry and maybe a little bit of simple trigonometry to investigate how objects move. Using Newton's laws of motion and associated equations, we will drop, shoot and accelerate things. Participants will engage in hands-on activities from the Exploratorium Teacher Institute. All activities presented are rich in math and physics content, simple to assemble, and created with easily obtainable, cheap materials.
8-12 | WkS | 144 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 25 | BT

Murray, Tom — Math Facilitator, San Mateo-Foster City SD
Writing in Mathematics: Preparing for Future Assessment
This workshop will present ideas, strategies, and techniques for using performance based and open-ended written assignments in order to help prepare our students for the new CCSS written assessments. Alignment to the CCSS Eight Mathematical Practices and samples of student work will be discussed. Come prepared to share your experiences with student writing and to compose your own solutions to an array of problems.
3-8 | WkS | 539 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 12 | BT

Myers, Cathy — Teacher, Sequoia MS, Redding SD
Slopes of Modern Art
Participants will create and graph linear equations in an artistic expression that targets vital Algebraic concepts using several components of the Common Core Mathematical Practice Standards. Opportunities to create your own two and three-dimensional models will be provided with several ideas to modify for various situations. This activity provides students with a more conceptual understanding of graphing linear equations. A formal written lesson plan of the activity will be provided for participates.
6-8 | MITI | 431 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 1 | BT

Myers, Louanne — San Lorenzo ES
Number Sense, Reasoning, Common Core: Help Me Get Started!
Within the Common Core Standards for Mathematical Practice are multiple references to development of mathematical reasoning and number sense skills. How do I start? How do I fit this into my math lessons? This workshop will focus on using short, fun, differentiated, daily activities to facilitate discovery of mathematical relationships and number sense. CGI theory, Number Talks, math wall, calendar and other ideas will be presented. Show your students how fun math can be!
PK-5 | INT | 155 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 37 | BT

Nank, Sean — Presidential Awardee,
El Camino HS, Oceanside USD
CCSS Access, Achievement, and Assessment: Lessons via ICME12
A Presidential Awardee and USA representative at ICME-12 shares lessons learned, as they pertain to the Common Core, while he was in Korea. Impacts assessments have on ELL students' abilities and perception of mathematics coupled with the impact on the classroom climate will be discussed. Strategies for aligning curricula and pedagogical strategies with the Common Core while closing the achievement gap between the USA and other countries will be detailed.
8-12 | PRS | 207 | Saturday, 9:30 - 10:30 | Asilomar, Acacia | BT
The Making of a Presidential Mathematics and Science Teacher
What motivates teachers to become great? A Presidential Awards for Excellence in Mathematics and Science Teaching recipient shares excerpts from autobiographies of 50 Awardees, summarizing strategies to being an outstanding educator. Attendees may take strategies for intervention and support to their communities. The presentation will include readings and participants will be able to provide their evaluation and analysis of the autobiographies for possible inclusion in the subsequent volume.
Tchr Ed | PRS | 107 | Saturday, 8:00 - 9:00 | Asilomar, Acacia | BT

NCTM Speaker Panel
Learn Reflect Reflection Session
This culminating Learn Reflect Strand session is based on the questions distributed at the Kickoff session. The session will be a facilitated discussion of the reflection questions. All those who attend the kickoff session, at least one Learn Reflect session, and the Reflection session will be eligible for an NCTM personalized certificate of their participation.
GI | PRS | 410 | Saturday, 1:30 - 3:00 | Asilomar, Curlew

Nelson, Scott — Mathematics Teacher,
Urban School of San Francisco
Discovery of 2-D & 3-D Equations Using Computer Modeling
Modeling lines in Cabri 3-D enabled precalculus students to see the vector relations and derive equations. Similarly distance of points from lines and planes is more accessible with 3-D modeling. We use 2-D modeling of loci and conics from distance properties to discover polar, parametric and Cartesian equations. This enabled both wider access and deeper student understanding of these topics. We will end with student solutions to the sunrise/sunset problem.
8-12 | PRS | 208 | Saturday, 9:30 - 10:30 | Asilomar, Toyon | BT
Co-presenter: Henri Picciotto — Math Teacher, Urban School

North Morris, Jennifer — Consultant
Middle School Math Techies: Turn it On!
Tackle the Common Core with technology with your middle school students. Using classroom-tested lessons with real world applications of mathematics, we will cover topics ranging from fractions and order of operations to growth rates and investigating rates of change. Using scientific and graphing calculators, your middle school students will take charge of their own learning using the power of technology.
6-8 | WkS | 247 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 28 | BT

Novelli, Barbara — Consultant, George Fox University
Science Brings Meaning and Purpose to Math
Good Science requires the use of mathematics. Students love Science and therefore it provides a meaningful context for teaching important math concepts and skills. Science is motivating to the reluctant learner as well as the student who is strong in math. Come explore ways to integrate these two important subjects in your curriculum.
PK-5 | INT | 406 | Saturday, 1:30 - 3:00 | Asilomar, Scripps Conference | BT

Games to Teach Important Math Concepts and Skills
Games are a wonderful way to teach or reinforce important math concepts and skills. This session will be packed with games and game templates that provide you with a motivating context for understanding and practice for all levels of students in your math classroom.
3-5 | PRS | 306 | Saturday, 11:00 - 12:00 | Asilomar, Scripps Conference | BT

Nussdorfer, Lisa — North Bay Instructor/Trainer
Using the iPad in the Mathematics Classroom
How can students' understanding of mathematics be solidified using the iPad? During this presentation, I will demonstrate various Apps that can be used by students to communicate their understanding of mathematics. There will be time for participants to share any Apps they have found useful in the classroom. Additionally, I will describe how to use Evernote or Google docs to index the features of various Apps and how to find websites that review math Apps.
8-12 | PRS | 143 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 24 | BT

Ogata, Francis — Curriculum Specialist
Common Core Math Practices & Math Games: Do They Go Together?
Been thinking about the CCSS (Common Core State Standards) and how this affects your daily lesson? Are there other ways to ensure your students are given the opportunities to use the eight Standards for Mathematical Practice? Can we make it fun and enjoyable? Come play some math games and see!
PK-5 | INT | 305 | Saturday, 11:00 - 12:00 | Asilomar, Evergreen | BT

Parr, Barbara — Emerson MS, Bakersfield City SD
Problem Solving-Shifting to a Common Ground!
Participants will engage in hands-on activities on how to successfully teach linear equations through problem solving while implementing the eight math practices. To shift towards a common ground with the CCSS and eight mathematical practices in middle school, it's important for grade level collaboration to take place among teachers. Participants will be given effective strategies to use in the classroom.
6-8 | INT | 548 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 29 | BT
Co-presenter: Hilda Wright — Math Coach, Washington MS

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.

Paulus, Chris — Math Teacher, Santa Maria HS, Santa Maria JUHSD
Origami Icosahedron: Learn How to Make it and Teach Your Students!
Come learn how to use a bow-tie motif to create an origami icosahedron. You will fold, connect and complete a 20-sided polyhedron that you can use to inspire your students to create even more complex shapes. Beginners and more experienced origami builders are welcome!
8-12 | MITI | 443 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 24 | BT

Petersen, Bob — Teacher (retired)
Making Functions in Algebra Active and Interesting
Participants will experience several activities concerning functions. These will include using a human graph to explore functions, domain and range, and asymptotes. There will be a function carousel, silent board game and what a function is. We will end with a Function Treasure Hunt.
8-12 | INT | 334 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 5 | BT

Pickford, Avery — Mathematics Teacher, The Nueva School
The *Invent Your Own* Project: Student Created Problems
A significant part of a mathematician's work is generating problems. This is typically not the case in the classroom. In this session I will talk about how I build a culture where problems don't just come from the teacher. Participants will take part in creating extensions, variations, and generalizations from open-ended questions. I will also share examples of how this work culminates in a year-end project where students deeply explore their own mathematical question.
8-12 | INT | 456 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 38

Preston, Robert — Mathematics Coach, Chico USD
The Mathematical Practices of Everyday Mathematics
Everyday Mathematics originally used the National Council of Teachers of Mathematics (NCTM) standards as the foundation of their math curriculum. This session will explore the program's structures and identify the embedded Common Core State Standards (CCSS) Standards for Mathematical Practice, the real foundation of our new common core. Together, we will learn ways to enhance these practices through the delivery of the program on a daily basis.
PK-5 | INT | 250 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 32

Pugalee, David — Director, Center for STEM Ed., University of North Carolina at Charlotte
STEM Contexts to Develop HS Students' Mathematical Practices
Activities with STEM Contexts provide meaningful ways to engage students in exploring mathematics while developing mathematical practices. Problems will be presented with access to additional activities from a NSF project aligned to the CCSSM. The session will provide explicit alignment to the Common Core and will engage participants in discussing how the problems promote the mathematical practices. Contexts include mathematical modeling, multi-criterion decision making, and probability.
8-12 | INT | 131 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 1 | BT

Quinn, Bridget — Teacher, Springhill ES
Math Workshops: Tools for Tomorrow's Success
Use a math workshop structure to create rich mathematical experiences for early elementary students. Presenters share the use of math menus in their classrooms (grades 1-2). Leave with classroom-ready menus, activities and strategies that help your students achieve success in a variety of math concepts. Special attention will be given to the shift to Common Core Standards and mathematical practices—and most of all, how math workshop can help spark the interest of budding mathematicians!
PK-2 | INT | 348 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 29 | BT
Co-presenter: Meredith Dolley — Teacher, Burton Valley

Ramos, Jeanne — Los Angeles USD
Building Students' Confidence as Persevering Problem Solvers
Participants will engage in activities that will build students' access to and confidence in doing rigorous mathematics, in particular for English learners, through problem-solving tasks that develop algebraic thinking and in which academic language is developed.
6-8 | WkS | 507 | Saturday, 3:30 - 5:00 | Asilomar, Acacia | BT

Rees, Kevin — Math Department Chair, Marin Academy
How to Avoid Being *Boxed In*
One of the common applications introduced to Calculus students involves maximizing the volume of a box. This problem has dominated Calculus courses for 100 years. This session will explore problems involving maximizing the volume of three-dimensional solids. The focus will be hands-on learning. You will build your solid, gain an understanding of the measurements and their relationships, develop a function for the volume, and use Calculus techniques to create an optimal solid with maximum volume.
8-12 | INT | 508 | Saturday, 3:30 - 5:00 | Asilomar, Toyon | BT

Resek, Diane — San Francisco State University
Mixing Data Analysis with Algebra
To prepare students for statistics courses, they need to be familiar with proportional reasoning and scatter plots. Intriguing examples in these area will be explored.
8-12 | INT | 343 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 24 | BT

Richardson, Michael — Los Altos HS,
Mountain View Los Altos HSD
Making Math Visual in the Higher Level Math Class
Learn how to use the free mathematics software Geogebra to help students visually explore advanced math topics in courses from Trigonometry to Calculus. Topics include trigonometric and rational functions, limits, derivatives, integrals, parametric curves and more. The presentation will include an introduction to the software as well as worksheets and PowerPoint presentations for use in the classroom. Bring a laptop if you have one.
8-12 | PRS | 241 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 21Lab
Co-presenter: Shelley Carranza — Math Teacher, Los Altos HS

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

Richman, Gena — Mary Collins School at Cherry Valley, Petaluma SD
Unusual Teacher Moves in a Common (Core) World!
Common Core—coming to a classroom near you! What to do! Gain insights for melding the Mathematical Practices into your classroom as we share strategies such as: collaboration, lesson study and student interviewing. Join a panel of grades 1-8 teachers as they share ways to incorporate viable argument, representation proofs and critical thinking into the classroom. Take away ideas they have worked on for the past two years while participating in Project LEAD, a three-year professional development study.
GI | INT | 105 | Saturday, 8:00 - 9:00 | Asilomar, Evergreen | BT

Rizo, Aileen — Math Consultant, Fresno COE
Engineering with LEGOS
Explore engineering ideas through STEM (Science, Technology, Engineering and Mathematics) lessons that engage students and infuse the Common Core State Standards for Mathematics. With the use of a simple machines set from the LEGO Education store, lessons were created to model mathematics and infuse technology. We plan to take teachers through an example lesson and share personal experiences from using these lessons in classrooms showing student work and feedback.
3-5 | INT | 545 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 26 | BT
Co-presenter: Eric Crantz — Fresno COE

Robins, Sandra — Museum Staff Teacher, Exploratorium
Making a Mini-Me: Using Ratios and Proportions
What interests your students more than themselves? This activity will intrigue them because it's all about them! In this workshop you will build your own Mini Me diorama using only paper and chenille stems. You can use your creation as a model to teach this literally hands-on math and art activity. You can adapt this exploration of ratios and proportionality to different levels.
3-8 | WkS | 434 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 5 | BT
Co-presenter: Elizabeth Brookings

Rodgers, Sherry — Assistant Director CAMSP Grant, Shasta COE
Number Talks: Developing Mathematically Powerful Students
Come find out how to help your students develop into mathematically powerful mathematicians. In a mental math Number Talk students analyze number relationships, discover and evaluate different ways of solving problems, justify their strategies and look for patterns to help them find a general method or shortcut. Participants will experience a Number Talk first hand, be given information about how to incorporate the process into their own classroom, and watch several Number Talk video clips.
3-5 | INT | 336 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 7

Rogers, Patricia — Brownell MS, Gilroy USD
Let's Talk About It!
CCSS-M embrace the idea that mathematics should be taught such that all students use mathematical discourse to make conjectures, talk, question, agree and/or disagree about problems to dig deep into the discovery of important mathematical concepts. Come to this session to explore some ways you can establish your classroom community so all of your students can participate in these discussions, using the Standards for Mathematical Practice as a guide.
6-8 | INT | 555 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 37

Roth, Marc — Teacher, Woodside Learning Center
Quadratic Equations by Completing the Square Backwards
We can solve quadratic equations by completing the square, which is based on the square of the sum of two numbers. We can also solve quadratic equations by using the difference of two squares identity. In practice, we are comparing the areas of a square and a rectangle which have the same perimeter. This method is like completing the square backwards. Participants will work through a sequence of activities and worksheets which they can then use in their classrooms.
8-12 | WkS | 536 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 7 | BT

Salguero, Katie — Research Associate, WestEd
Making Middle School Mathematics Accessible to English Learners
Supporting English learners in mathematics class requires teaching both the language and the content of mathematics. Which easily adaptable tools can be used to support students' understanding of mathematics and mathematical language? How do we encourage students to engage in mathematical discourse? In this session, we will examine strategies to promote language development and differentiate instruction for English learners and students with diverse learning needs.
6-8 | INT | 411 | Saturday, 1:30 - 3:00 | Asilomar, Sanderling | BT
Co-presenter: Cathy Carroll — Senior Research Associate, WestEd

Sato, Mele — Mathematics Teacher, High Tech HS Media Arts
The Essential Question: A Project-Based Approach to Learning
Participants will experience project design through developing essential questions and assessment tools. Participants will explore projects implemented in grades 9-12 and learn to use a tuning protocol to create, refine and reflect on projects.
8-12 | INT | 557 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 39 | BT
Co-presenter: Candice Director — Mathematics Teacher, High Tech High School Media Arts

Schaffer, Karl — Math Faculty, De Anza College
Dancing with Mathematics: Exploring the Symmetry of the Body
Artists as well as scientists perceive and utilize symmetries in space and time. We will explore symmetry using open-ended group activities to create a series of movements illuminating and distinguishing types of symmetries. Gain the tools to make cross-curricular connections by visualizing, improvising with, and combining symmetries. Inspire students by bringing mathematics to a palpable, creative level that uncovers bridges between mathematics and the arts in a wide range of human endeavors.
GI | INT | 502 | Saturday, 3:30 - 5:00 | Asilomar, Kiln | BT

Schallau, Barbara — East Side UHSD
Making Sense of Beginning Algebraic Ideas and Properties
Classroom activities that use algebra tiles to teach integer operations, writing and evaluating algebraic expressions, distributive property and solving equations will be shared. All activities are based on three stages of learning: concrete, transitional and abstract.
6-8 | WkS | 535 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 6 | BT | $

Selby, Victor — Author/Curriculum Consultant, Carmel HS (retired)
THE STEM Effect: Making Sense of How Math Shapes Science
Add retention and depth to proof and key concepts in Geometry and Algebra II by allowing students to recount the history of Euclid's fifth axiom and the progression of ideas from DesCartes to Reimann. Make sense of the models that led to Einstein's General Theory of Relativity. Create an understanding of the idea of changing axiom systems, finite-unbounded spaces, and how mathematics becomes the language of science. Attendees will receive a copy of my book *Mathematics and The Human Condition*.
8-12 | PRS | 412 | Saturday, 1:30 - 3:00 | Asilomar, Dolphin | BT

Sgroi, Richard — Textbook Author, Bedford Schools, Cengage Learning
Advanced Algebra with Financial Applications
Looking for a third or fourth year math course containing relevant and accessible mathematics? Advanced Algebra with Financial Applications is a quantitative financial literacy course that is UC approved and well-aligned with the Common Core State Standards. Students learn selected topics in Algebra II, Statistics, and Precalculus with an Algebra I prerequisite while covering banking, taxes, insurance, credit, investing, budgeting, and more! The course is suitable for students of all ability levels.
8-12 | PRS | 135 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 6 | BT | $

Silverman, Sandy — Coordinator, San Diego COE
It's a Mathematical World (for Preschool and Kindergarten)
It *IS* a mathematical world, and young children constantly try to make sense of the world around them. Learn about authentic math and science experiences in young children's everyday environments that optimize mathematical thinking and encourage the use of mathematical skills and concepts. Explore learning opportunities. Take home a learning adventure guide as a model for real world math and science experiences.
PK-2 | INT | 357 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 39 | BT

Simpson, Jeffrey — Mastery Learning Systems
Filling Concept and Skill Gaps in High School Geometry
Learn to use hands-on activities with guided discovery and rapid reconstruction techniques to enable your low-achievers to systematically master the underlying concepts and skills that lead to success in Geometry. Learn to use informal assessment techniques and differentiated challenge levels to meet individual needs in a whole class setting. Learn to deliver simple, respectful, engaging multi sensory lessons that re-ignite the natural curiosity of your chronically disengaged students.
8-12 | PRS | 509 | Saturday, 3:30 - 5:00 | Asilomar, Marlin | BT

CONFERENCE EVALUATION FORM
Complete conference evaluation online **www.surveymonkey.com/s/asilomar** by December 31, 2012 and you will be entered in a drawing for FREE conference registration and on grounds housing for next year. The winners for this year's free registration and housing are Kirsten Choy and Stephanie Willshon-Butler.

Slovin, Hannah — University of Hawaii at Manoa
Let's Be Reasonable: Using Units to Build Convincing Arguments
The session takes the perspective that reasoning is about making and applying generalizations to problems and proof involves convincing others and ourselves that ideas and operations make sense. We will explore the concept of unit as it applies to key topics throughout the elementary mathematics curriculum. The presentation will highlight the role unit plays in students' making sense of counting, place value and rational number. Student work and videos will be shared.
PK-5 | PRS | 210 | Saturday, 9:30 - 10:30 | Asilomar, Curlew

Standiford, Gail — Fairfield HS, Fairfield-Suisun USD
Using Graphing Technology to Teach the Common Core Standards
See how graphing technology can enhance your California Common Core Standards lessons and help build student understanding. Learn how students can use their calculators to find equations for patterns, check solutions to equations, better understand multiple representation, and investigate transformations. Motion sensors will be used to make graphs come alive!
8-12 | WkS | 547 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 28 | BT

Starnes, Daren — The Lawrenceville School
Making Sense of Statistics for Common Core: A Four-Step Process
This session will focus on Standard S-IC Making Inferences and Justifying Conclusions. Participants will engage in classroom-tested activities that highlight inferential thinking based on sample surveys, observational studies, and experiments. We will use simulations to model the chance behavior involved in random sampling and random assignment, and to highlight the underlying logic of inference. We'll also look at a four-step process for organizing students' thinking on inference problems.
8-12 | INT | 543 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 24 | BT

Stetson, Deb — Project Director, California State University, Sacramento
Use Practica: Move Teachers Mathematically and Pedagogically
A Practicum is a series of professional development activities that includes teaching a lesson to K-12 students. It's not coaching, but coaching is involved. It's not a model lesson, although the coach might teach. It's not just team-teaching, although teachers do teach together. Come learn how we use Practica to allow professional development to translate into improved classroom practices. Come to learn how we structure it, what teachers learn through the process, and why it works.
Ldrshp | PRS | 156 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 38
Co-presenter: Rick West — Mathematics Specialist, California State University, Sacramento Math Project

Strange, Kathleen
What Textbooks Don't Tell You About Multiplication
Experienced teachers know that when students are learning multiplication facts, one size does *not* fit all! Textbooks are not always helpful with hints such as "Now have students memorize the fours facts." Explore the number sense behind multiplication that is not discussed in most textbooks. Activities in this workshop will focus on how students can use number sense along with arrays, models, and skip counting so they will never *forget* a multiplication fact again.
3-5 | INT | 244 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 25 | BT

Swarthout, Mary — Sam Houston State University
Encouraging Evidence: Using Technology to Unlock Student Reasoning
Are your students ready to explore and reason about what they see in work with number and operations? Technology holds power as a tool for student investigation and creates opportunities for reasoning about *why* patterns appear. Focus in this session will be on patterns and reasoning about the operation of division through the use of concrete materials and calculators. Example tasks student work and resources to support mathematical communication and reasoning in your classroom will be shared.
PK-5 | PRS | 310 | Saturday, 11:00 - 12:00 | Asilomar, Curlew

Taylor, Megan — Assistant Professor, Sonoma State University
From Tsuruda to Sicherman: A Sample of the Best Problems Ever
As a math methods instructor I am often asked, "Where do I FIND great math problems?" From my experience as a student of Gary Tsuruda, a mentee of Jo Boaler, a 6-12 math teacher and Asilomar afficianado, I admit I've stolen and experimented with a ton of great math problems. Come take a look at some of the problems we played with a few years ago with some new adaptations and additions. Be ready to *do* some math!
8-12 | INT | 255 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 37 | BT

Comparing the Current Standards with the Common Core: What Changed
The adoption of the Common Core Standards will mean big changes in how we think about the teaching and learning of mathematics, including the development of new curricula and approaches to teaching essential understandings. In this session we will take a look at the current Mathematics Content Standards for California Public Schools and compare them with the up-and-coming Common Core Standards for Mathematics. We will begin by looking at the structure, organization and content of each set of standards as wholes, then zoom in on Algebra I for a closer look. Be prepared to do a little math, of course! This section will be interactive.
GI | PRS | 355 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 37 | BT

CELL PHONES AND PAGERS
Out of respect for presenters and other participants, please turn off cell phones and pagers 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.

Tobes, Jeff — Teacher, Wright Charter
Accessing Mathematics through Walking...Step by Step
Students learn CCCSS and use mathematical practices such as map reading, measurement, perimeter, fractions, mph, ratio, time and graphing by taking 1-30 mile walks. Non-math standards are easily integrated. Presenter has taken his classes on educational walks since 1997. Students build character and apply classroom learning to the outside world. It's interesting how much learning takes place during walks. You should try it. Optional 15-30 minute walk at the end. Handouts will be distributed.
3-8 | PRS | 408 | Saturday, 1:30-3:00 | Asilomar, Toyon

Treuting, Gretchen — Educational Therapist, Pi vs. Pie Math
I Can Do This! Strategies for Learning Disabled Students
Special and general educators once shared one approach: teach math as a basic set of skills, use direct instruction and supervised work. We see how most students benefit from curriculum that offers a deeper access to the real discipline of mathematics. But students with learning disabilities (LD) can find it difficult to recognize the patterns or to sustain the focus/perseverance needed to take advantage of our current pedagogy. I offer strategies that scaffold math instruction for LD students.
3-8 | PRS | 233 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 4 | BT

Trevino, Emma — Supervisor of Mathematics Programs, University of Texas at Austin
The True Intent of the Standards for Mathematical Practices
The standards for mathematical practices are going to change our classrooms. How do we make sure we address these practices as we teach the content? How do the standards change what I do in my classroom? What do I look for, listen for as I teach my lessons?
6-8 | INT | 454 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 36 | BT
Co-presenter: Carmen Whitman — Director, Mathematics For All Consulting

Philip Tucher — Mathematics Manager, Oakland USD-LCI
Fast-Tracking to the Common Core: One District's Experience
In the California mathematics context, after a decade of test-driven boilerplate reform, how is a district to re-tool or re-culture to make good on the promise of the Common Core? What are the prerequisites for teachers? What about for students? And, what can leaders do to ensure we learn and build from experiences of the past ten years? One of California's most improved districts since 1995 (think CST scores & API) shares a rationale for a fast-track transition and some early lessons learned.
Ldrshp | PRS | 403 | Saturday, 1:30-3:00 | Asilomar, Heather
Co-presenter: Estelle Woodbury, Oakland USD

Tuska, Agnes — California State University, Fresno
GeoGebra: A Common Ground for Mathematical Investigations
GeoGebra is an open source software used by millions over the world. This presentation will show examples of its use for demonstrating mathematical concepts and for conducting mathematical investigations in high school level.
8-12 | INT | 442 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 22Lab | BT

ASK ME!
Need assistance on the day of the conference? Look for the attendees with "**Ask Me**" button.

Valentine, Marty — Teacher, Creekside MS, Castro Valley USD
Make Logic Meaningful: Engage Students in the Rigors of Logic
If you ask the average Geometry student, they will tell you their lest favorite part of the class is writing proofs. In my presentation, I will demonstrate techniques I have found to make logic fun! By finding the logic in TV commercials, stereotypes, bets on ping pong games, and slurpees that mysteriously disappear, we make logic and proof writing fun and we can make it more meaningful for our students!
8-12 | PRS | 231 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 1 | BT

VanDunk, Andrea — Locke 3 Charter HS
***Log* in to the Common Core**
Experience the Mathematical Practices of the Common Core State Standards in a unit on logarithms. Explore engaging strategies for teaching logs including discovery activities, an earthquake project, and formative assessment ideas. Participants will receive resources they can use in class on Monday!
8-12 | INT | 455 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 37 | BT

Vierra, Vicki — K-12 Math Specialist, Ventura COE
Inviting Participation for Access and Achievement
Who's doing the thinking? Who gets to talk? Who's doing the work? Develop students' mathematical practices as they engage with, explore, explain and make sense of rich problems.
6-8 | WkS | 451 | Saturday, 1:30 - 3:00 | PG Middle School, Rm 33 | BT

Wanko, Jeffrey — Miami University
Developing Proof Readiness with New Logic Puzzles
Participants will work with new types of logic puzzles that support deductive and spatial reasoning. We will develop strategies for using these and other puzzles in classrooms to prepare students for understanding proofs and other reasoning tasks.
6-12 | PRS | 309 | Saturday, 11:00 - 12:00 | Asilomar, Marlin

Whitman, Carmen — Director, Mathematics For All Consulting
It's All Connected: Proportionality in the Standards
How do the Common Core State Standards address proportionality? Let's investigate lessons that incorporate proportional reasoning as we teach the different domains. These lessons will also exemplify the Standards for Mathematical Practice.
6-8 | INT | 554 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 36 | BT
Co-presenter: Emma Trevino — Supervisor of Mathematics Programs, University of Texas at Austin

CALL FOR SPEAKERS!
Interested in presenting at the 2012 Asilomar Mathematics Conference? The theme is Modeling Mathematics from Many Angles. Speaker proposals will be accepted between January 30 - April 30, 2013. Go to: **www.cmc-math.org/activities/north_speakers.html** to submit your online proposal.

Wiegers, Brandy — Program Director,
San Francisco State University
Slide Rules Rule!
A stereotypical mathematician's tool belt includes a slide rule but how many teachers or students have ever seen or used one? This lesson starts at the addition and multiplication tables and builds up to the idea of exponentials. From there we hand out the slide rules and let the good times rule! We'll end with a discussion of where to find your own slide rule resources! Lesson will be hands-on and interactive!
6-8 | INT | 342 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 22Lab | BT

Winicki Landman, Greisy — Professor,
California State Polytechnic University, Pomona
Look for and Make Use of Structure: What Does It Mean?
Teachers seek to develop students' expertise to look for structures and to make use of them when solving problems, constructing a justification, etc. In this session we will use strategy games to analyze snippets from school mathematics under these new structural glasses.
3-8 | WkS | 240 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 13 | BT

Wolfson, Risa — Math Coach, University of California, Berkeley
Making Connections with the Common Core Standards
Instead of teaching grade level math content in isolation, it is the perfect time to embrace the Common Core State Standards and make connections across grade levels and subject matter. In this session, we will focus on the Standards for Mathematical Practice and how they impact our instruction and student learning. Interesting connections will be made between the Standards for Mathematical Practice, English Language Arts and the Next Generation Science Standards (released in December 2012).
GI | PRS | 157 | Saturday, 8:00 - 9:00 | PG Middle School, Rm 39
Co-presenter: Sandra Yellenberg — Science Coordinator, Santa Clara COE

Wong, Justine — KM2A
Preschool Math Matters: Early Concept Connections
Pre-K impacts K-2. View preschool early math concepts through a 9-14 mathematics educator's perspective. *"Learning is experience. The rest is information." (Albert Einstein)*. What does the Pygmalion effect have to do with preschool math? What does nature or nurture have to do with a preschool math? What does preschool math look like? What math are preschool children capable of doing? What is the connection of the preschool desired results developmental profile measures and the math standards?
PK-2 | INT | 505 | Saturday, 3:30 - 5:00 | Asilomar, Evergreen | BT

Yakes, Christopher — Associate Professor Mathematics,
California State University, Chico
Teaching Linear Equations Through Proportional Reasoning
The connection between linear equations and proportional reasoning in California's 1997 Mathematics Standards is tenuous at best, only mentioned in a standard that references solving direct variation problems (Gr 7, 4.2). We investigate the Common Core's distinctly different approach to teaching linear equations, which consists of first exploring the equation y=kx in situations with directly proportional quantities, before introducing and studying the more general linear equation, y=mx+b.
6-8 | PRS | 340 | Saturday, 11:00 - 12:00 | PG Middle School, Rm 13 | BT

Youngs, Dave — Fresno Pacific University
Problem Solving and the Standards for Mathematical Practice
This workshop for grades 3-5 teachers will present a number of engaging, problem-solving tasks that embody the Common Core Standards for Mathematical Practice. Participants will receive a packet of grade-level appropriate activities that help foster a conceptual rather than procedural approach to math content.
3-5 | WkS | 234 | Saturday, 9:30 - 10:30 | PG Middle School, Rm 5 | BT

Yu, Julie — Staff Scientist, Exploratorium
Geometry Through Mirrors
Does a full-length mirror need to be full-length? How do you draw a picture that is recognizable in a curved mirror? We'll use a variety of mirrors and simple math to answer these questions and explore basic ideas in geometry. Mirrors provide an engaging, hands-on way to investigate concepts such as angles, symmetry, and, of course, reflections.
6-8 | WkS | 110 | Saturday, 8:00 - 9:00 | Asilomar, Curlew | BT

Zeller, Erich — Senior Content Specialist, MIND Research Institute
Build Student Visual Schema for Solving Word Problems
Learn how to use interactive visual puzzles to provide access for all students to word problems while promoting problem solving and algebraic thinking. Receive software and strategies to use in class for connecting visual models, word problems, and equations involving unknowns. Focus will be on K-2 addition and subtraction situations.
PK-5 | INT | 531 | Saturday, 3:30 - 5:00 | PG Middle School, Rm 1 | BT | $

ASILOMAR PATHWAYS

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 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.

IMPORTANT NOTE

Although you have likely planned your schedule ahead of time, it is important that you verify the session information with what appears in this program. The information here reflects some unavoidable changes. Some sessions have changed speakers and/or topics, some have changed times and some have changed location. Please be sure to check on the very last minute information that is posted in the Asilomar registration area.

Sessions at a Glance

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience							Beginning Tchr.	Comm. Product
		K-2	3-5	6-8	9-12	College	Ldshp/TchEd	GI		
Alejandre, Suzanne	Unsilence Students' Voices	√	√						√	
Alteparmakian, Tony	The Black Sheep Chronicles			√	√				√	
	A Tale of Two iPads			√	√				√	
Anderson, Jody	Assessment + Goal Setting = Achievement at Number CAMPP	√							√	
Arth, Karen	Little Things Can Make a Big Difference: Foldables and More			√					√	√
	Mathematical Modeling			√	√				√	√
Asturias, Harold	Constructing Viable Arguments in Middle School Mathematics			√						
	Math, Language and the Pursuit of Happiness							√		
	Using SMP as Scaffolding for Academic Language Development			√						
Bales, Janet	Adaptive Technology Targets Math Fluency		√	√					√	√
Barry, Camilla	Make a Sundial That Really Works			√					√	
Beigie, Darin	No Child Left Unchallenged: Problem Solving with Core Content			√					√	
Belcher, Jenny	Making Sense of Fractions and Operations with Fractions		√	√					√	√
Bellman, Allan	Multiple Representations = Multiple Models and Approaches			√	√				√	
Berkaliev, Zaur	Early Algebra Through Measurement and Common Core Standards	√							√	
Biagetti, Stephanie	Using Student Work as a Window to Student Understanding	√							√	
Bjerke, Hope	Activate CCSS for Mathematical Practice with NCSM's PD Model						√			
Blachman, Nancy	Inspiring Mathematics: V Hart, M Gardner, Math Circles, JRMF			√					√	
Bloom, Jack	Student Centered Classrooms: Common Core needs them!							√	√	
Boswell, Laurie	Direct Variation is Not a Slippery Slope			√					√	
Bower, Travis	Nspire Geometry Essentials			√	√				√	
	Projects Showcase Beginner			√	√					
Bradley, Kathy	Making Sense of Division of Fractions		√	√					√	
Brown Brooks, Gloria	The Journey from Flatland to Zometown		√	√					√	
Brown, Kyndall	Access, Equity, and the Standards for Mathematical Practice							√		
Callahan, Amy	Differentiation Through Project-Based Math			√	√				√	
Callahan, Patrick	Defining Achievement: Rethinking Teacher/Student Evaluations							√		
	Constructing Viable Arguments in High School Mathematics			√	√					
Capone, Richard	What are the Technology Implications of the New State Test?		√	√					√	
Carlyle, Ann	Expanding Math Talk with Our Youngest Students (Pre K-K)	√								
Carranza, Shelley	Making Math Visual with Geogebra			√	√				√	
Carroll, Cathy	Developing Specialized Content Knowledge: Doing Math with Teachers...		√	√						
Casey, Christopher	Algebraic Thinking in Grade Four		√						√	
Chamberlin, Ruth	What's Vocabulary Got to Do with Mathematical Precision?			√					√	
Cheng, Ivan	Designing Classroom Assessments Aligned with CCSS			√	√				√	
Childs, Leigh	Engaging, Effective Strategies = Numerically Nimble Students	√							√	√

Sessions at a Glance

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience							Beginning Tchr.	Comm. Product
		K-2	3-5	6-8	9-12	College	Ldshp/TchEd	GI		
Connelly, Ralph	Sizzling School Starters		√	√					√	
Cook, Marcy	What's Cooking in a Live Math Classroom?			√					√	
	Algebraic Thinking Experiences For All	√	√	√					√	
Costa, Elmano	Meeting the Common Core Standards for English Learners	√	√						√	
Dagler, Clay	Turning Worksheets into Engaging Puzzles			√	√				√	
Damm, Suzanne	Develop Mathematical Habits of Mind with CCSS Math Practices							√		
Dapkewicz, Jack	The Language of Math: Using Math Vocabulary in Grades 2-7		√	√						
Davidenko, Susana	ELL Interaction Using Problems Within Familiar Contexts		√	√					√	
DeCarli, Elizabeth	Help Students Dig into Data and Tinker with their Plots!			√					√	√
DeFazio, Francesca	Learning Algebra Using C/C++ in the Interpreter Ch			√	√				√	
Dillon, Fred	Reasoning, Sense Making and Proof			√	√					
Dimas, Cecilio	Faculty Academy for Mathematics Excellence (FAME): PD Program			√					√	
Doherty, Bill	The Flipped Math Classroom			√	√				√	
Dorf, Carol	Core Connections: Poetry in the Mathematics Classroom			√	√				√	
Douglas, Lew	Connecting Math and Music							√	√	
Easterday, Joan	CMP CCSS Task Force: Bridging from Counting to Algorithms K-2	√								
Ellis, Amy	Laying a Foundation for Learning to Prove (NCTM Learn Reflect Strand)	√						√		
Eisenberg, Gary	The Power of the Visual Story in Math	√							√	
England, Ana	Mathematical Practices: An Opportunity for English Language Learners							√		
Erickson, Sheldon	Animated Algebra: Activities, Animation, and Apps			√					√	
Farrand, Scott	Problem Solving as Professional Development for the CCSS							√	√	
Foster, Halcyon	Tetrahedrons in Space			√	√				√	
Fulton, Brad	Fast Facts and Fractions			√					√	
	Developing Number Sense Through Engaging Activities			√					√	
Gale, Mardi	Algebra Intervention and Common Core: What's the Intersection?			√	√				√	
Garcia, Jorge	Technology Activities for Algebra Teachers			√	√				√	
Giganti, Paul	Learn Geometry Vocabulary as You Fold & Cut		√						√	
Gilbert, Melissa	Motivation and the Common Core Standards							√	√	
Gillespie, Janet	Do I Add or Subtract? Building Operation Sense Day-by-Day	√							√	√
Goldenstein, Donna	Mathematics and The Arts: Thinking and Reasoning Through Art		√							
Gomez, Emiliano	Rate and Percent Problems Through the Lens of the CCSS-SMP			√	√					
Grzegorczyk, Ivona	Dancing Fractions and Touching Algebra Activities			√					√	
Hamo, Matthieu	Design Lessons and Activities That Make Students Learn!			√					√	
Harbin Miles, Ruth	Visible Thinking in the 3-8 Mathematics Classroom		√	√					√	
Heiman, Siva	New Three-Step Method to Teach the Addition and Subtraction Facts	√							√	
Heirendt, Dwight	Digital Math Tools to Support the CC Mathematical Practices			√	√				√	

Sessions at a Glance

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience							Beginning Tchr.	Comm. Product
		K-2	3-5	6-8	9-12	College	Ldshp/TchEd	GI		
Herrington, Diana	No Child Left Hiding in your Classroom			√	√				√	
Hirsch, Tere	ELLS & the CCSS: Access and Achievement		√	√					√	
Hogan, Marie	My Students Can Notice/Wonder: Now What?	√		√					√	
Holm Holman, Lynda	Kindergarten Algebra	√							√	
Holm, Calisa	Communicator Activities Use CCSS to Improve Math Performance			√					√	
Hull, Ted	Transforming Classroom Instruction						√			
Humphreys, Cathy	Learning Practices Together: Number Talks in High School	√						√		
Jackson, Mike	Identifying Gaps in CCSS with Technology		√	√						
Jacob, John	Classroom Mathematics Experiments for Precalculus Courses			√	√				√	
Jacobs, Harold	Mathematical Snapshots of 2012			√	√				√	
Johnson Rock, Monica	Accessing Geometry Through Origami	√	√						√	
Kirley, Kim	Embracing the Kindergarten California Common Core Standards	√							√	
Ellis, Amy	Laying a Foundation for Learning to Prove (NCTM Learn Reflect Strand)	√						√		
Kriegler, Shelley	Integers on the Number Line: A CCSS-M Approach		√	√					√	√
Kysh, Judith	More Tasks That Turn Algebra Procedures into Good Group Work			√	√				√	
Lahme, Brigitte	Professional work around the Common Core: Illustrative Math							√	√	
Lambertson, Lori	Carbon Cycle by the Numbers			√					√	
Larson, Ron	College Prep Algebra for Seniors			√	√				√	
	Real Math, Real Life: A New Course for High School Students			√	√				√	
	Using the Mathematical Practices to Promote Active Learning...			√					√	√
Lau, David	Solve Optimization Problems and Interpret Solutions			√	√					
Lim, Brian	Mathematics in TV shows						√		√	
Malankowski-Smith, B.	They Know How to Count! Move Them Past Counting on Fingers	√							√	
Marti, Andres	Make Math Move: Modeling Algebra and Geometry with Sketchpad			√	√				√	√
Mathurin, Andre	Engaging Activities and Ideas for Teaching Discrete Math			√	√					
Mattenson, Marla	Homework, Classwork and Assessments that Embed the Eight...			√	√				√	
Mayfield-Ingram, Karen	Engaging Parents in the Transition to the Common Core Standards		√	√						
Mazzola, Alison	Developing Algebraic Thinking in the Younger Grades	√		√					√	
McAlister, Mark	Focusing on Conic Sections for Better Access			√	√				√	
McLean, Peggy	Mathematical Reasoning Across the Strands with Pattern Blocks		√					√		
McNamara, Julie	Fractions: What's There to Talk About?		√	√					√	
McReynolds, Susan	Conditional Probability and Proving Independence: High School			√	√					
Meyer, Dan	Tools and Technology for Modern Math Teaching							√	√	
	Teaching Applied Math with Digital Media			√	√				√	

Sessions at a Glance

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience							Beginning Tchr.	Comm. Product
		K-2	3-5	6-8	9-12	College	Ldshp/TchEd	GI		
Miller, Jim	Using Simple Manipulatives to Teach Fractions		√	√					√	
	Multiply Binomials/Factor Trinomials with Strips of Paper			√	√				√	
Mitchell, Suzanne	Powerful Actions to Enrich the Implementation of the CCSS						√			
Miller, Lisa	Preparing Students for the High School Exit Exam in Math			√	√				√	
	Reaching At-Risk Students in Algebra Using Best Practices and The CCSS			√	√				√	
Moore, Sara	Teach Algebraic Thinking to ELL Students		√						√	
Morris, Kathy	Create & Critique Viable Arguments via Mathematical Modeling							√	√	
Moskowitz, Stuart	Circular Reasoning: 2πr and πr^2: Which is Which?			√					√	
Muller, Eric	The Math in Motion			√	√				√	
Murray, Tom	Writing in Mathematics: Preparing for Future Assessment		√	√					√	
Myers, Cathy	Slopes of Modern Art			√					√	
Myers, Louanne	Number Sense, Reasoning, Common Core: Help Me Get Started!	√	√						√	
Nank, Sean	CCSS Access, Achievement, and Assessment: Lessons via ICME12			√	√				√	
	The Making of a Presidential Mathematics and Science Teacher						√		√	
Nelson, Scott	Discovery of 2-D & 3-D Equations Using Computer Modeling			√	√				√	
North Morris, Jennifer	Middle School Math Techies: Turn it On!			√					√	
Novelli, Barbara	Science Brings Meaning and Purpose to Math	√	√						√	
	Games to Teach Important Math Concepts and Skills		√						√	
Nussdorfer, Lisa	Using the iPad in the Mathematics Classroom			√	√				√	
Ogata, Francis	Common Core Math Practices & Math Games: Do They Go Together?	√	√						√	
Parker, Ruth	Enhancing Teaching and Learning with the Standards for Mathematical ...		√							
Parr, Barbara	Problem Solving-Shifting to a Common Ground!			√					√	
Paulus, Chris	Origami Icosahedron: Learn How to Make it and Teach Your Students!			√	√				√	
Petersen, Bob	Making Functions in Algebra Active and Interesting			√	√				√	
Pickford, Avery	The "Invent Your Own" Project: Student Created Problems			√	√					
Preston, Robert	The Mathematical Practices of Everyday Mathematics	√	√							
Pugalee, David	STEM Contexts to Develop HS Students' Mathematical Practices			√	√				√	
Quinn, Bridget	Math Workshops: Tools for Tomorrow's Success	√							√	
Ramos, Jeanne	Building Students' Confidence as Persevering Problem Solvers			√					√	
Rees, Kevin	How to Avoid Being *Boxed In*			√	√				√	
Resek, Diane	Mixing Data Analysis with Algebra			√	√				√	
Richardson, Michael	Making Math Visual in the Higher Level Math Class			√	√					
Richman, Gena	Unusual Teacher Moves in a Common (Core) World!							√	√	
Rizo, Aileen	Engineering with LEGOS		√						√	
Robins, Sandra	Making a Mini-Me: Using Ratios and Proportions		√	√					√	
Rodgers, Sherry	Number Talks: Developing Mathematically Powerful Students		√							

Sessions at a Glance

Speaker	Presentation Title (Refer to alpha section for presentation description.)	Target Audience							Beginning Tchr.	Comm. Product
		K-2	3-5	6-8	9-12	College	Ldshp/TchEd	GI		
Rogers, Patricia	Let's Talk About It!			√						
Roth, Marc	Quadratic Equations by Completing the Square Backwards			√	√				√	
Salguero, Katie	Making Middle School Mathematics Accessible to English Learners			√					√	
Sato, Mele	The Essential Question: A Project-Based Approach to Learning			√	√				√	
Schaffer, Karl	Dancing with Mathematics: Exploring the Symmetry of the Body							√	√	
Schallau, Barbara	Making Sense of Beginning Algebraic Ideas and Properties			√					√	√
Selby, Victor	The STEM Effect: Making Sense of How Math Shapes Science			√	√				√	
Sgroi, Richard	Advanced Algebra with Financial Applications			√	√				√	√
Shaughnessy, J Michael	Infusing the Classroom with Reasoning and Sense Making...							√		
Silverman, Sandy	It's a Mathematical World (for Preschool and Kindergarten)	√							√	
Simpson, Jeffrey	Filling Concept and Skill Gaps in High School Geometry			√	√				√	
Slovin, Hannah	Let's Be Reasonable: Using Units to Build Convincing Arguments	√	√							
Standiford, Gail	Using Graphing Technology to Teach the Common Core Standards			√	√				√	
Starnes, Daren	Making Sense of Statistics for Common Core: A Four-Step Process			√	√				√	
Stetson, Deb	Use Practica: Move Teachers Mathematically and Pedagogically						√			
Strange, Kathleen	What Textbooks Don't Tell You About Multiplication		√						√	
Swarthout, Mary	Encouraging Evidence: Using Technology to Unlock Student Reasoning	√	√							
Taylor, Megan	From Tsuruda to Sicherman: A Sample of the Best Problems Ever			√	√				√	
	Comparing the Current Standards with the Common Core: What Changed							√	√	
Tobes, Jeff	Accessing Mathematics through Walking... Step by Step		√	√						
Treuting, Gretchen	I Can Do This! Strategies for Learning Disabled Students		√	√					√	
Trevino, Emma	The True Intent of the Standards for Mathematical Practices			√					√	
Tucher, Philip	GeoGebra: A Common Ground for Mathematical Investigations			√	√				√	
Valentine, Marty	Make Logic Meaningful: Engage Students in the Rigors of Logic			√	√				√	
VanDunk, Andrea	*Log* in to the Common Core			√	√				√	
Vierra, Vicki	Inviting Participation for Access and Achievement			√					√	
Wanko, Jeffrey	Developing Proof Readiness with New Logic Puzzles			√	√					
Whitman, Carmen	It's All Connected: Proportionality in the Standards			√					√	
Wiegers, Brandy	Slide Rules Rule!			√					√	
Winicki Landman, Greisy	Look for and Make Use of Structure: What Does It Mean?		√	√					√	
Wolfson, Risa	Making Connections with the Common Core Standards							√		
Wong, Justine	Preschool Math Matters: Early Concept Connections	√							√	
Yakes, Christopher	Teaching Linear Equations Through Proportional Reasoning			√					√	
Youngs, Dave	Problem Solving and the Standards for Mathematical Practice		√						√	
Yu, Julie	Geometry Through Mirrors			√					√	
Zeller, Erich	Build Student Visual Schema for Solving Word Problems	√	√						√	√

Commercial Exhibits

Company	Asilomar Merrill Hall	PG Middle Gym	Company	Asilomar Merrill Hall	PG Middle Gym
AIMS Education Foundation		214-216	Moore Educational Resources	156	
Bedford, Freeman & Worth (BFW) Publishers and W.H. Freeman	104-105		Music Notes	155	
Cengage Learning	143		NASCO		211-212
Center for Mathematics and Teaching, Inc	107		National Board for Professional Teaching Standards	124	
CMC Bag Check In		204-205	NCTM Book Sales		218-219
Communicator		276	NCTM Informational Table	130	
CPM Educational Program	101-102		Oliver Worldclass Labs	145	
CSU/UC Mathematics Diagnostic Testing Project (MDTP)	141		Pearson	159-160	
Curriculum Associates	135		Renaissance Learning	119	
Ed-Tex/ Perfection Learning	122		Resource Area For Teaching (RAFT)	149	
Family Math Night by Kidnexions	103		Saxon Publishers, a division of Houghton Mifflin Harcourt	118	
FROG PUBLICATIONS	154		Scholastic Inc.	136	
Heinemann	151		SMP Posters		253-258
Houghton Mifflin Harcourt	138-140		Stokes Publishing Company		270-271
IISME		274	Tessellations		228-229
iLearn, Inc.	158		Texas Instruments		225
Key Curriculum	146-147		The Markerboard People		236-237
Math Teachers Press, Inc.	152-153		The Math Board Game	148	
MathType by Design Science		206-207	TODOS: Mathematics for All	142	
McGraw-Hill Education	120-121		Western Governer's University	150	
MIND Research Institute	157		YMIR, Inc.		249

Pacific Grove Middle School	Friday / 5:30 - 7:15 p.m.	Saturday / 8:00 a.m. - 5:30 p.m.
Merrill Hall, Asilomar	Friday / 4:30 - 7:00 p.m.	Saturday / 8:00 a.m. - 4:00 p.m.

Exhibits close promptly at times listed above so visit early!

~ NAME BADGES ~

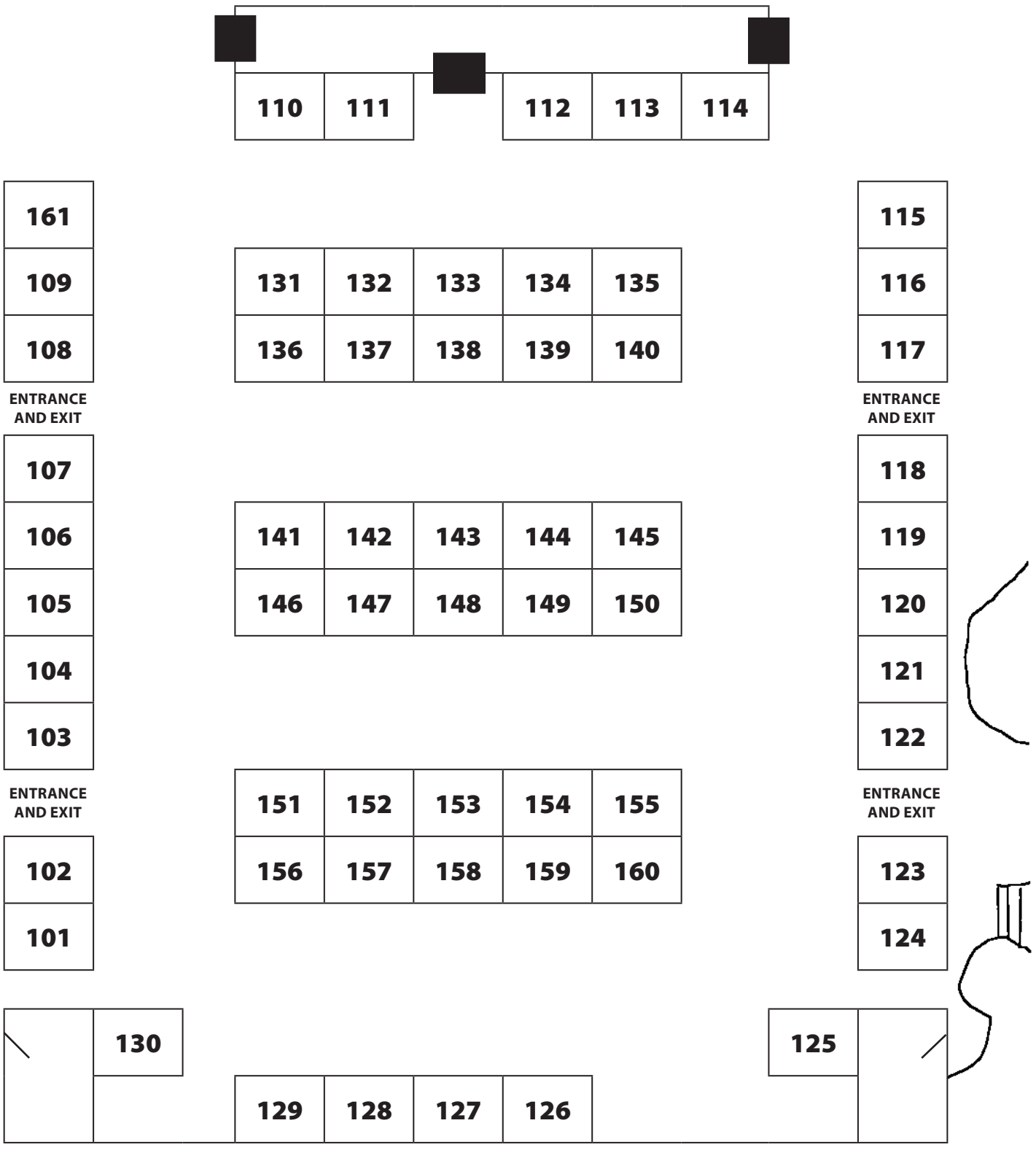
Name badges must be worn at all times while attending the conference. Badges are required for entry into the sessions and the exhibit halls.

CELL PHONES AND PAGERS

Out of respect for presenters and other participants, please turn off cell phones and pagers during sessions.

ASK ME!

Need assistance on the day of the conference? Look for the attendees with "**Ask Me**" button.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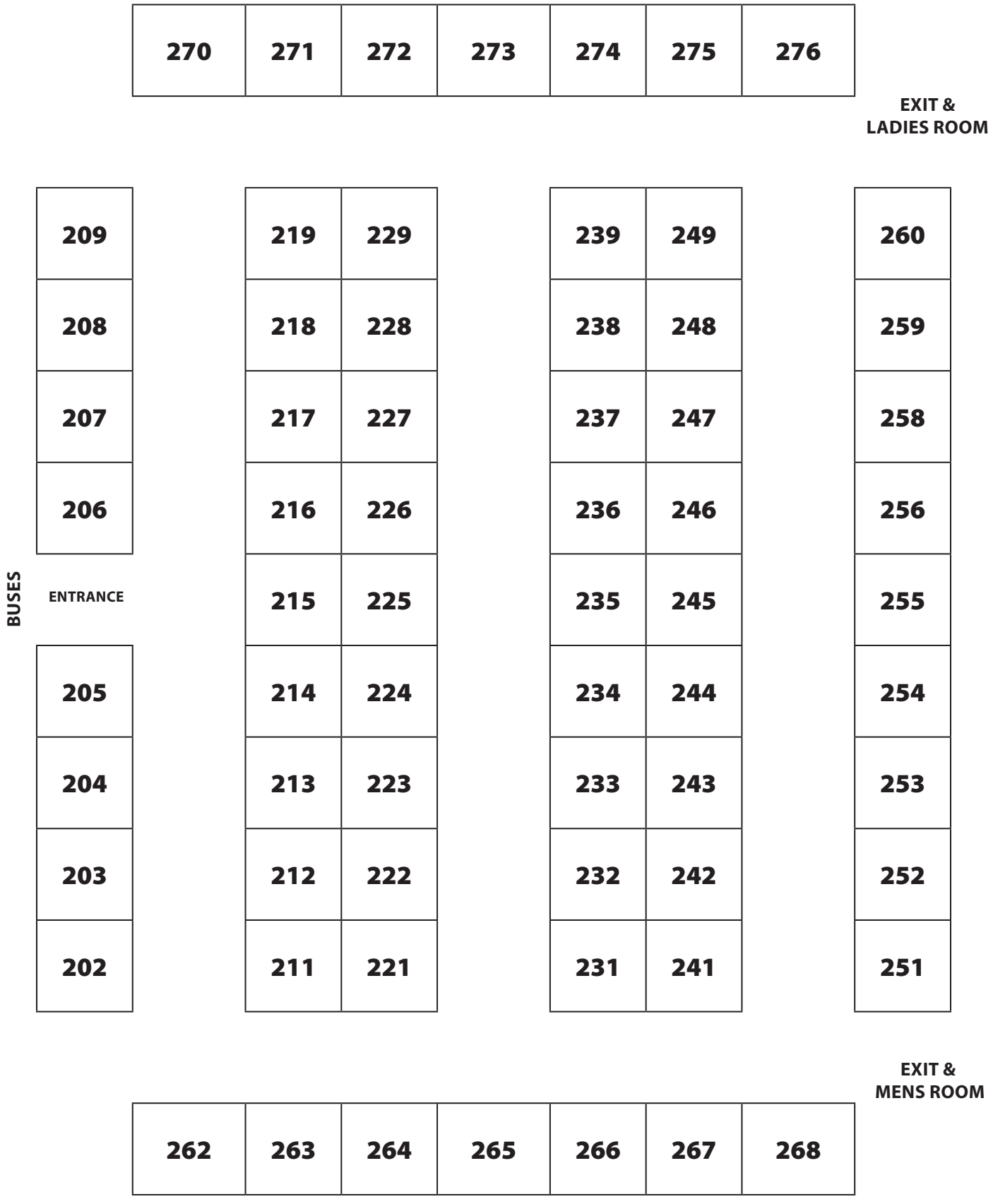
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- **Presidential Awards, www.cmc-math.org/PAEMST**
  One elementary or one secondary awardee, chosen from several mathematics teacher finalists, get a trip for two to the White House and over $10,000 in awards. The award alternates between the two levels: secondary in odd years, elementary in even.

  2011 Presidential Award for Excellence
  Kentaro Iwasaki — Mission High School, San Francisco, California — **High School Mathematics**

  2013 Secondary Teacher Nominations
  Elementary and secondary awards are alternating. The nominations for the 2012 Presidential Award for Excellence in Mathematics and Science Teaching are now being accepted. Please encourage your colleagues to apply. A good candidate:
  - Gets students excited about math
  - Skillfully uses a variety of teaching techniques
  - Engages students in meaningful mathematics
  - Regularly reflects on lessons and seeks professional development
  - Is actively involved in mathematics education at the local, state, and/or national levels

- **California Math Council, www.cmc-math.org/awards**
  We are also grateful to the following winners of CMC's awards for educators who have given sustained service to the students of California and to the mathematics education community.

  Award Winners
  Scott Farrand.....2011 Edward Begle Memorial Award
  Bruce Grip.....2011 George Polya Memorial Award

  Kay Gilliland ..... 2012 Walter Denham Memorial Award
  Brian Shay.....2012 George Polya Memorial Award

For more information about awards, or to nominate, visit Presidential Awards at **www.cmc-math.org/PAEMST** or California Math Council at **www.cmc-math.org/awards**

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
November 30 – December 2, 2012

Christine Robles
Christine Robles, CMC-N President

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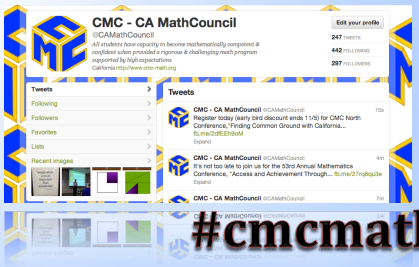


#cmcmath

www.cmc-math.org

Conference Notes

Calendar of Math Events 2011-12

January 24-26, 2013
Association of Mathematics Teacher Educators (AMTE)
Annual Conference
Rosen Plaza Hotel, Orlando, FL
www.amte.net

March 8-9, 2013
CMC-Central STEMposium, Visalia, CA
888-CMC-Math or cmc-math@sbcglobal.net

March 2013
Sacramento Area Mathematics Educators (SAME)
Annual Conference, CSU Sacramento, CA
edweb.csus.edu/projects/same/

March 2013
Council of Mathematics and Science Educators
of San Mateo County (CMSESMC)
Annual Conference, Cañada College, Redwood City, CA
April Cherrington, 650.802.5359
acherrington@smcoe.k12.ca.us

April 15-17, 2013
NCSM Annual Conference
Denver, CO
www.mathedleadership.org

April 17-20, 2013
NCTM 91st Annual Meeting & Exposition
Denver, CO
www.nctm.org/conferences

October 2013
Mt. Lassen Math Council
Annual Conference, Redding, CA
Sherry Rodgers, teach4sumfun@yahoo.com

November 1-2, 2013
CMC-South, 54th Annual Mathematics Conference
Palm Springs, CA
888-CMC-MATH or cmc-math@sbcglobal.net
www.cmc-math.org/activities/south_conference.html

December 6-8, 2013
CMC-North, Asilomar Mathematics Conference
Pacific Grove, CA
888-CMC-MATH or cmc-math@sbcglobal.net
www.cmc-math.org/activities/conferences.html

For information and links to these math events go to:
www.cmc-math.org/activities/calendar.html

2012-13 Board Members

State

President	Kathlan Latimer
President-Elect	Jane Wentzel
Secretary	Jeannie Toshima
Treasurer	April Goodman-Orcutt
Past President	Sheri Willebrand

North

President	Christine Robles
President-Elect	April Goodman-Orcutt
Vice-President	Rebecca Lewis
Secretary	Rita Nutsch
Treasurer	Chris Tsuji

Commercial Exhibits

Be sure to make time in your schedule to visit the commercial exhibits at the Pacific Grove Middle School Gym and 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 two exhibit halls on page 37.

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 CMC-N members from any public or private school or district

Qualifications
- √ Must be current members
- √ Can only apply once per school year
- √ Should have additional sources of funding
- √ Application completed in full

Proposal

1. Title Page, complete the form on page 44.

Format

2. Project Description
   a. Project Goals—What will the project seek to accomplish?
   b. Statement of need as related to your students.
   c. Project activities and timeline.
   d. Impact—Who and how many will be effected?
   e. Evaluation/Dissemination Plan—How will you assess and then document the outcomes of the project? What plans do you have for sharing?
3. Project Budget—provide an itemized budget listing support from other sources.
4. Amount requested. Partial funding likely.

Applications must be limited to five pages including the cover form.

Send to:

CMC-N Grants
c/o FaraLee S Wright
PO Box 2738
Suisun City, CA 94585-5738

Mini-Grants

Mini-Grants for CMC-N members are available for up to $500 to encourage creativity and innovation among Northern California educators for the purpose of developing mathematically powerful students.

Deadline: January 31 and November 1 of next year.

For information and applications visit **www.cmc-math.org/awards** or contact FaraLee Wright at faralee.wright@sbcglobal.net

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 for the seating capacity of each room. All seats are available on a first-come, first-served basis.

California Mathematics Council - Northern Section

Mini-Grant Deadlines: **January 31 - $500**
November 1 - $500

Title of Grant _____

Name of Grant Leader: _____CMC Member # _____

Home phone: ( ) _____ Home e-mail:_____

School name:_____

School address: _____Fax: _____

School e-mail: _____

The Grant will impact the following: Number of students: _____

Number of teachers: _____

Percent members of minorities: _____

Maximum amount requested to implement the grant:_____

Include the following information in your request:
Item(s) to be purchased:

Expected vendor and prices:

Short narrative about how these items will be used:

Grant requests may be only partially funded. Additional funding sources available to you.

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.

Approval Signature:

Grant Leader _____

Building Site Administrator Name and Title _____

Send to:
CMC-N Grants, c/o FaraLee S Wright, PO Box 2738, Suisun, CA 94585-5738, or faralee.wright@sbcglobal.net

SPECIFICS:

- √ Earn 1.5 quarter hours (= 1 sem hr) of college credit for your Asilomar participation.
- √ Credit is from CSU East Bay Extension Division. Generally it can not be applied toward a degree program, but can be used as:
  - professional growth units for your credential, and,
  - district credit for step advancement. Check with your district regarding its policy on accepting these units.
- √ Credit will be given in the Winter Quarter. Grades will not be available until April. Please do NOT call before that time. After February 1, you may send an e-mail to be sure your materials were received.
- √ Grades are CR/NC only.
- √ You must complete each of the requirements below.

REQUIREMENTS:

1. Register for the conference.
2. Register for credit/no credit by downloading the form at **www.cmc-math.org/activities/north_conference.html**. Complete the form on your computer. Then print, sign, and mail with credit card information or your check for $145.00 (payable to CSU East Bay).
3. Attend the opening session Friday evening 7:30-9:00 p.m. at Pacific Grove Middle School Auditorium.
4. Attend at least three sessions on Saturday, visit either exhibit area, and attend a Sunday closing session.
5. Type a paper as described below. Save a tree: single spacing is fine. Include your name, address and phone number on it in case of problems.

PAPER:

1. Submit a two-part paper. In the first part devote a paragraph or more to each session you attended. Include details on the title, speaker, ideas, activities, and theme(s). Then, in the second part, reflect on how the conference affected your thinking about math education. How has it affected your classroom? How do you believe it will affect it in the future? What common themes did you see throughout the conference? This part should be at least 1 or 2 pages.
2. If you prefer, the two parts above can be combined into one using a more narrative style.

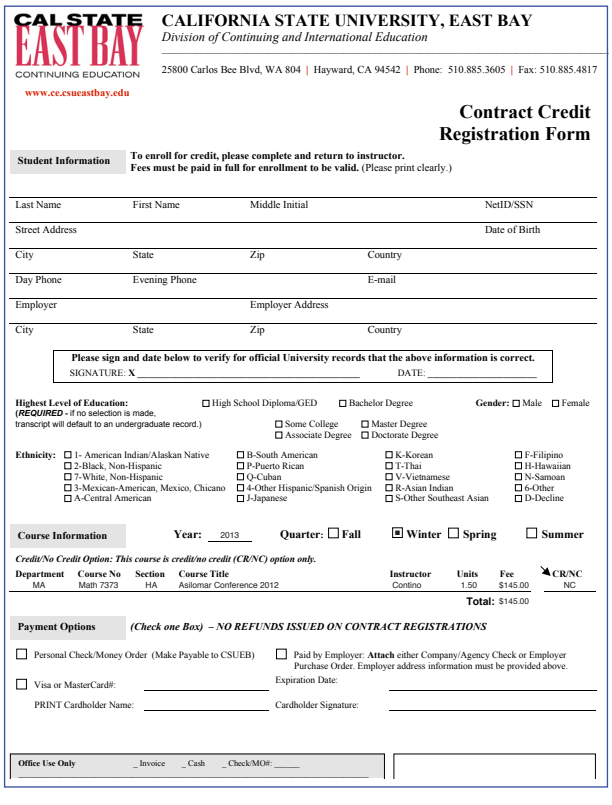
REMEMBER:

The paper must exhibit a great deal of reflection, and must not be just a chronicle of how you spent your weekend.

Mail the registration form, payment, and paper in a single packet by January 30 to:

CMC, PO Box 880, Clayton, CA 94517-0880
Attention: Mike Contino or cmc-math@sbcglobal.net

Download form at
http://www.cmc-math.org/activities/north_conference.html



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www.ce.csueastbay.edu

CALIFORNIA STATE UNIVERSITY, EAST BAY
Division of Continuing and International Education
25800 Carlos Bee Blvd, WA 804 | Hayward, CA 94542 | Phone: 510.885.3605 | Fax: 510.885.4817

Contract Credit Registration Form

Student Information — **To enroll for credit, please complete and return to instructor. Fees must be paid in full for enrollment to be valid.** (Please print clearly.)

Last Name | First Name | Middle Initial | NetID/SSN
Street Address | Date of Birth
City | State | Zip | Country
Day Phone | Evening Phone | E-mail
Employer | Employer Address
City | State | Zip | Country

Please sign and date below to verify for official University records that the above information is correct.
SIGNATURE: X _____ DATE: _____

Highest Level of Education: ☐ High School Diploma/GED ☐ Bachelor Degree ☐ Some College ☐ Master Degree ☐ Associate Degree ☐ Doctorate Degree
(*REQUIRED* - if no selection is made, transcript will default to an undergraduate record.)

Gender: ☐ Male ☐ Female

Ethnicity: ☐ 1- American Indian/Alaskan Native ☐ 2-Black, Non-Hispanic ☐ 7-White, Non-Hispanic ☐ 3-Mexican-American, Mexico, Chicano ☐ A-Central American ☐ B-South American ☐ P-Puerto Rican ☐ Q-Cuban ☐ 4-Other Hispanic/Spanish Origin ☐ J-Japanese ☐ K-Korean ☐ T-Thai ☐ V-Vietnamese ☐ R-Asian Indian ☐ S-Other Southeast Asian ☐ F-Filipino ☐ H-Hawaiian ☐ N-Samoan ☐ 6-Other ☐ D-Decline

Course Information — **Year:** 2013 **Quarter:** ☐ Fall ☒ Winter ☐ Spring ☐ Summer

Credit/No Credit Option: This course is credit/no credit (CR/NC) option only.

Department	Course No	Section	Course Title	Instructor	Units	Fee	CR/NC
MA	Math 7373	HA	Asilomar Conference 2012	Contino	1.50	$145.00	NC

Total: $145.00

Payment Options — *(Check one Box) – NO REFUNDS ISSUED ON CONTRACT REGISTRATIONS*

☐ Personal Check/Money Order (Make Payable to CSUEB) ☐ Paid by Employer: **Attach** either Company/Agency Check or Employer Purchase Order. Employer address information must be provided above.
☐ Visa or MasterCard#: _____ Expiration Date: _____
PRINT Cardholder Name: _____ Cardholder Signature: _____

Office Use Only _ Invoice _ Cash _ Check/MO#: _____

Affiliated Groups

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

CA Math Council to the Far North (CMCN∞)
Mary Ann Sheridan, masheri@suddenlink.net

Mt. Lassen Math Council (MLMC)
Sherry Rodgers, teach4sumfun@yahoo.com

Sonoma County Math Council (SCMC)
Ben Ford, ben.ford@sonoma.edu

Sacramento Area Math Educators (SAME)
Brian Lim, blim128@yahoo.com

Math Educators of Solano County (MESC)
Julie Crozier, crozier4mesc@aol.com

Alameda Contra Costa County
Math Educators (AC^{3}ME)
David Lincoln, lincoln.hotmath@att.net

Contra Costa County Association
of Science Math Education (C^{3}ASME)
Connie Loosli, cloosli@wildlife-museum.org

Council of Math & Science Educators
San Mateo County (CMSESMC)
Stephen Asp, stephenasp@gmail.com

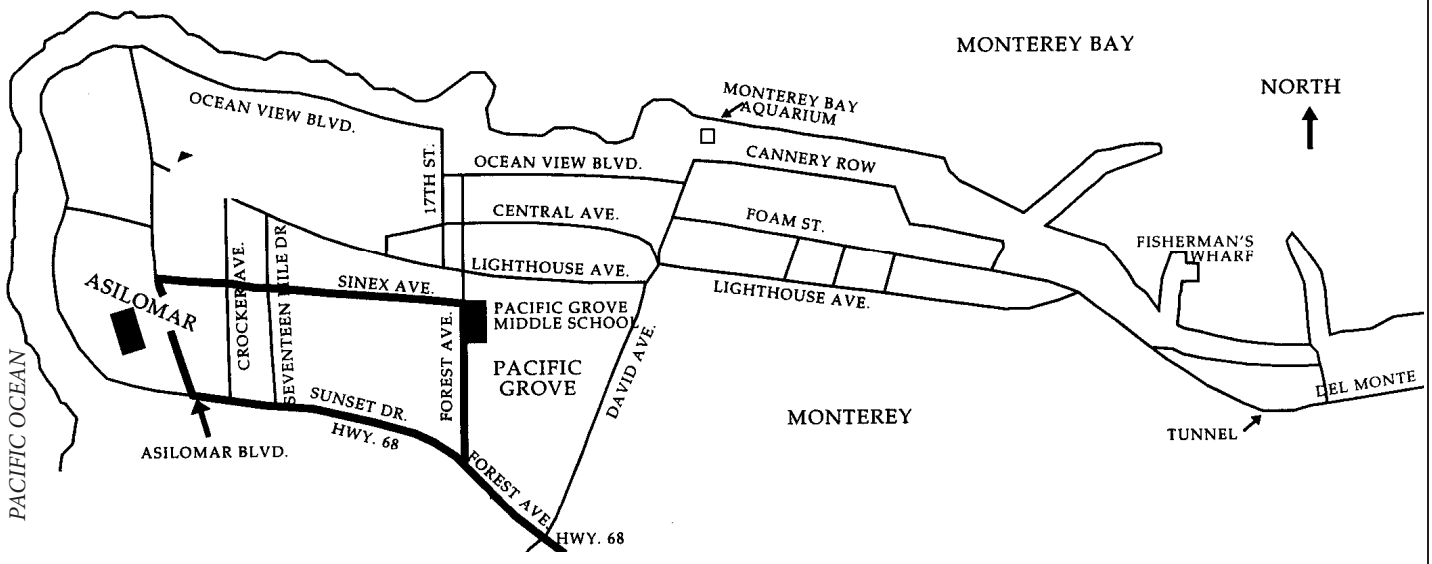
Santa Clara Valley Math Association (SCVMA)
Pallavi Shah, pallavi.shah@gmail.com

Monterey Bay Counties Math Education (MBCME)
Linda Dilger, ldilger@monterey.k12.ca.us

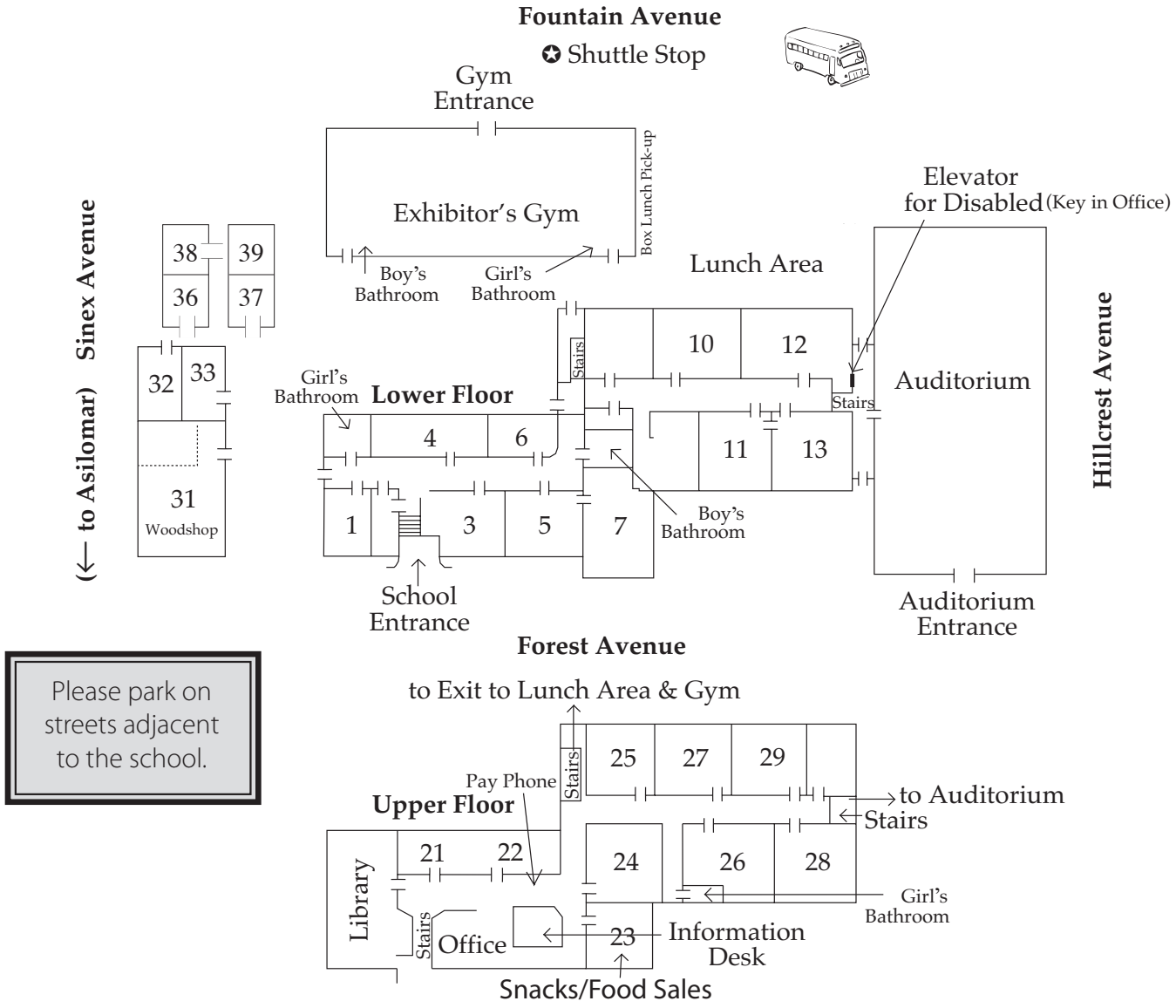
Northern Nevada Mathematics Council (N^{2}MC)
Misha Miller, mkmiller@washoeschools.net

San Francisco Math Teachers Association (SFMTA)
Jason Murphy-Thomas, murphy-thomasj@sfusd.edu

Pacific Grove



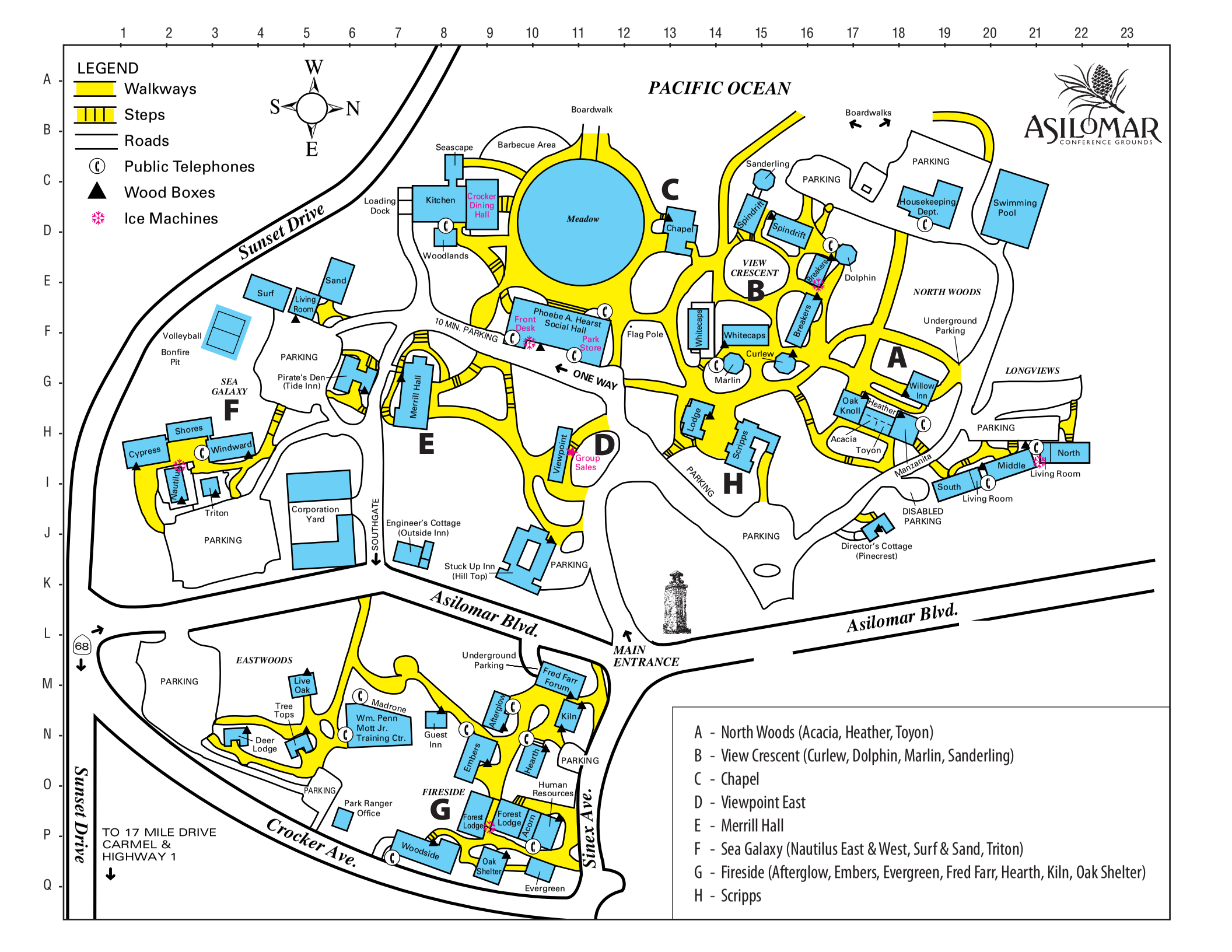
Pacific Grove Middle School



Please park on streets adjacent to the school.

Bus Service

On Friday, bus service will run between the Asilomar grounds and Pacific Grove Middle School from 4:30-9:30 p.m. Busses will run between Asilomar and Pacific Grove Middle School from 7:15 a.m. - 6:00 p.m. on Saturday.


LEGEND
Walkways
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Wood Boxes
Ice Machines
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PACIFIC OCEAN
ASILOMAR
CONFERENCE GROUNDS
Sunset Drive
Boardwalk
Boardwalks
Seascape
Barbecue Area
Loading Dock
Kitchen
Crocker Dining Hall
Meadow
Woodlands
Chapel
Sanderling
PARKING
Housekeeping Dept.
Swimming Pool
Spindrift
Breakers
Dolphin
VIEW CRESCENT
NORTH WOODS
Underground Parking
LONGVIEWS
Surf
Sand
Living Room
Volleyball
Bonfire Pit
SEA GALAXY
F
PARKING
Pirate's Den (Tide Inn)
10 MIN. PARKING
Phoebe A. Hearst Social Hall
Front Desk
Park Store
Flag Pole
ONE WAY
Whitecaps
Curlew
Marlin
A
Willow Inn
Oak Knoll
Heather
Acacia
Toyon
Manzanita
Merrill Hall
E
Viewpoint
Group Sales
D
Lodge
Scripps
H
PARKING
North
Middle
South
Living Room
Cypress
Shores
Windward
Nautilus
Triton
Corporation Yard
SOUTHGATE
Engineer's Cottage (Outside Inn)
Stuck Up Inn (Hill Top)
PARKING
DISABLED PARKING
Director's Cottage (Pinecrest)
Asilomar Blvd.
MAIN ENTRANCE
68
EASTWOODS
PARKING
Live Oak
Tree Tops
Deer Lodge
Madrone
Wm. Penn Mott Jr. Training Ctr.
Guest Inn
Underground Parking
Fred Farr Forum
Afterglow
Kiln
Embers
Hearth
PARKING
Human Resources
FIRESIDE
G
Park Ranger Office
PARKING
Forest Lodge
Forest Lodge
Acorn
Woodside
Oak Shelter
Evergreen
Crocker Ave.
Sinex Ave.
Sunset Drive
TO 17 MILE DRIVE
CARMEL &
HIGHWAY 1
A - North Woods (Acacia, Heather, Toyon)
B - View Crescent (Curlew, Dolphin, Marlin, Sanderling)
C - Chapel
D - Viewpoint East
E - Merrill Hall
F - Sea Galaxy (Nautilus East & West, Surf & Sand, Triton)
G - Fireside (Afterglow, Embers, Evergreen, Fred Farr, Hearth, Kiln, Oak Shelter)
H - Scripps