

# Monday, March 11

# Session #1: 8:00am-9:00am

#### Strategies Used to Promote Discourse and Engagement in Mathematics Classrooms (6-8, 9-12)

Presented By: Kathy Williams (CPM Educational Materials)

#### Room: Salon AB

Description: In many classrooms, students sitting together in teams does not guarantee effective mathematical discourse. Defending one's position is important, but everyone needs to be heard. Activities will be modeled that encourage students to talk, write and share ideas. Status is important so some of these activities will address this issue. Participants will experience study team and teaching strategies that particularly deal with discourse, work on math problems using these strategies, see how the Standards for Mathematical Practices will be tied into and highlighted by these strategies, be actively engaged in using strategies that they can take back and use in their classrooms.

#### The Love/Hate Relationship with Word Problems (K-2, 3-5)

Presented By: Randi Womack, Kate Wintuska (Warren County Schools) Room: Salon C

Description: Have you ever thought or said the following? My students give up before even attempting the problem? My students just find the numbers in the problem and add, no matter what? They aren't even thinking about what the situation means? You are not alone! In this session, learn how to foster your student's mathematical thinking through facilitating and writing numberless word problems. We will explore strategies for making sense of problems, as well as, scaffolds that allow all students to be successful.

#### I am here! Now what? (All Grade Levels)

Presented By: Amy Kellem (Bardstown Primary School)

Room: Salon D

Description: Is this your first time or have you had a past conference FAIL? Do you need help navigating the conference schedule? Would you like to know how to best use your time at the conference? If you are a little nervous about making the best use of your time away from school, START HERE! Learn from someone who once thought she would get kicked out of the math conference for not being a 'math person.' Learn how to create a 'math family' network. Start your day off in a relaxing and judgement-free, math-loving zone.

# How Difficult can Third-Grade Math be? Understanding Parents' Experiences with Common Core Math (K-2, 3-5, 6-8)

Presented By: Priyanka Parekh (Transylvania University) Room: Salon E

Description: In its eighth year of implementation, the Common Core Math standards continue to baffle parents. Teaching children to add, subtract, multiply and divide following Common Core strategies has become a part of the everyday struggle for families across the country. As parents wonder how difficult third-grade math can be homework time sees more tears and frustration than most families can accommodate on weeknights. In this presentation, I share some common reasons for frustration among parents and the negative outcome that such feelings mean for math education. Specifically, through four representative case studies, I seek to answer the following questions.

- 1. What kind of math do parents know? How different is this math from common core math?
- 2. What do parents feel about the math that children learn at school? Does asking the teacher help?
- 3. How do parents make sense of common core math? What kind of resources do they use when they find an obstacle?
- 4. What happens when parents fail to make sense of common core math?

Overall, participants can expect to leave the presentation with the understanding that procedures and strategies that alienate parents from their children's math learning experiences at school can have negative consequences.

#### Digging Deep into Statistics (6-8, 9-12, Post-Secondary)

Presented By: Funda Gonulates, Bethany Noblitt (Northern Kentucky University), Cheryll Crowe Johnson (Asbury University), Sue Peters (University of Louisville)

#### Room: Salon F

Description: The Kentucky Association of Mathematics Teachers Educators (KAMTE) hosted a statistics workshop led by K-12 Statistical Ambassador Chris Franklin in March 2018. Participants explored basic statistics through hands-on activities, case studies, and simulations. This KCM session will provide participants with selected key activities from that workshop and information about an upcoming follow-up statistics workshop hosted by KAMTE. Teachers interested in creating promising problem spaces to explore main ideas in statistics will benefit from this session. Teacher educators and teacher leaders will take away innovative ideas to use in their teacher development programs.

#### Vocabulary Usage in the Math Classroom (6-8, 9-12)

Presented By: Erin Staley, Ariana Shah (Louisville Collegiate School) Room: Salon HG

Description: Many students focus on the procedural side of mathematics. But, do they truly understand the vocabulary? In order to connect and build a mathematical community, it is just as important, if not more important, to be able to accurately describe any situation using appropriate vocabulary. When we as teachers model appropriate vocabulary usage, we can help students to master the concepts behind the words. However, the words we choose can greatly impact students. In this session, we will talk about some potential misconceptions that can arise because of different vocabulary choices. We will also ask participants to discuss contexts in which we use of words such as "solve," "evaluate" and "simplify." We will share our thoughts and ask for participants to add to the discussion as we learn together to become better examples for our students.

#### The power of WHY?-Understanding students through reasoning and estimating (K-2, 3-5)

Presented By: Robert Brown, Kara Ford (Park City Elementary School)

#### Room: Darby Dan/Calumet

Description: Students generally only give us as much information as we ask of them. The power of the question 'why?' will be discussed as well the positive climate it creates within our classroom. In this session, we will share how we have used Estimation 180 in our classroom to spark curiosity and reasoning in our students, as well as to promote mathematical discourse. As students investigate, agree or disagree, and try to defend their estimate they are likely to also have tons of fun. We will share methods we have used within our classroom including allowing the students to lead the discussion, symbols that promote positive conversation and methods of reasoning. Session attendees will have the chance to engage in one of the lessons we have used and to participate in reasoning their way to a winning estimate. We will conclude the session by sharing examples of student work and the evidence we have that our students are engaged in mathematical reasoning.

#### Mathematical Practice 8: Making Implicit Connections Explicit (K-2, 3-5)

Presented By: Cara Caudill (La Grange Elementary)

#### Room: Dixiana/ Lane's End

Description: Conceptual math understanding is built upon a solid foundation of mathematical reasoning. As teachers, we guide students through units of study with the goal of building layers of skills. What happens when students are not implicitly 'good' at finding connections between old and new learning? Teachers help them make the connections! In this session, we will dive into Mathematics Practice 8 and look at how we can make the pattern/reasoning explicit, between and within domains.

# Breakout Session #2: 9:15am-10:15am

#### I've got the Power! Using the Bead String and Number Line to Develop Flexible Computational Strategies (Pre-K, K-2)

#### Presented By: Dina Mendola (US Math Recovery Council) Room: Salon AB

Description: The bead string and number line are a powerful pair towards developing flexible and efficient computational strategies! We will take an interactive journey, exploring trajectories and corresponding hands-on activities to unleash the power to help students envision, make connections, and verbalize number relationships. Building deeper connections with

foundational knowledge is the key towards developing strong number relationships in order for all students to structure composite units!

# Beyond SmartBoard. Using other technologies to reach your students within the mathematics classroom (Post-Secondary)

Presented By: Adam Meadows (Union College) Room: Salon C

Description: SmartBoard can become an expense for colleges and universities. This talk is aimed at presenting educators with other forms of technology. Educators within STEAM areas attending this talk will walk away being able to communicate effectively with their students using other forms of technological software such as Doceri, Notability, TurboScan, and Zoom. All of these available applications will be demonstrated using a tablet computer. The aforementioned applications are free to use on an iPad Pro or Microsoft Surface Pro or are available for minimal cost to the educator. The goal of this talk will be intended for teachers in low socioeconomic districts or communities that need to use technology within the classroom but cannot afford the software license of SmartBoard.

#### Mental Math, Fact Fluency and Problem Solving Activities with Playing Cards (K-2, 3-5)

Presented By: Sherri Adler (SingaporeMathSupport.com)

Room: Salon D

Description: During this fast paced presentation, attendees will be using ordinary playing cards to learn activities that will build mental math skills, fact fluency, and problem solving. Teachers will leave with numerous ideas as simple as 'Making 10' to activities that practice regrouping mentally. The ideas presented in this session can be implemented with little preptime. Students don't even realize that they are learning while playing these card games. This is a must attend session for grades 1-4!

#### Breakout Escape Game: Increasing Student Soft Skills While Integrating Math and Science (3-5, 6-8, 9-12)

Presented By: John Crisologo (Whitley County Central Intermediate School), Chris Fabrizio (Pulaski County High School) Room: Salon E

Description: Breakout Escape Games give educators an opportunity to implement real-life activities allowing students to learn and practice soft skills which will help them become more marketable for professional entry-level jobs after graduation. Some key soft skills students will work on through the games will be communication skills, teamwork, resilience, leadership skills, and critical thinking skills. Teachers in this workshop will participate in hands-on activities using Breakout boxes to find clues from math or science problems to breakout before time runs out. These activities can be implemented in their classrooms to foster cooperative learning, critical thinking, better communication, and team building skills. The skills learned by students will help make our future workforce stronger, more marketable and valuable to our local communities.

#### Break-Outs & Fake-Outs: How to Create a Clue-Based Math Challenge Game (All Grade Levels)

Presented By: Sarah Shartzer, Jennifer Williams (Kentucky Country Day School) Room: Salon F

Description: If you are looking for a new way to review concepts and challenge students, this session is for you! We'll take you through the process of creating a breakout box or a station-based version with the same ideas (affectionately dubbed a 'fake-out' by students). If you've never created a clue-based game before or don't have official BreakoutEDU supplies, don't worry! We'll lead you through the entire process, show you how we created games using dollar store purchases, give you ideas for creating unique clues and challenges, and offer tips and tricks that we've learned with our own students. These games are adaptable for any level of math!

#### How Open Up Resources Made Me A More Effective Teacher (6-8)

Presented By: Ellen Woolery (Model Laboratory School) Room: Salon HG

Description: For years I attended excellent professional learning experiences offered by KCM. I aimed to offer my students learning experiences that were based on the mathematical practices, were student centered, and developed student's mathematical thinking. The textbooks that I had lacked the types of problems and activities that are necessary to accomplish this. Then someone told me to check out Open Up Resources. They are research based and are free, so that was immediately appealing. As I began to use them for teaching, I realized that the resources were engaging, based on the mathematical practices, and developed student's mathematical thinking! I will share how using Open Up Resources have transformed my teaching and more significantly, how they have transformed my student's learning. I am not affiliated with their organization, but I have used their resources for almost a year and am amazed on a daily basis at what my students are accomplishing. During this session, we will explore the materials and do an activity from one of the lessons. Teachers of students Grade 6-8 who want free resources that are geared toward fostering mathematical minds would benefit from this session.



#### Centered on Math (K-2)

Presented By: Angela Miller (Red Oak Elementary) Room: Darby Dan/Calumet

Description: Math centers provide an opportunity for students to take a more active role in their learning by providing review, practice and enrichment of skills and strategies taught within the classroom. Math centers should be differentiated based on student's readiness, interests, and learning profiles. Working with partners in centers allow students the opportunities to talk about their thinking, apply math vocabulary, and hear how other people think about math. Creating engaging center activities that encourage exploration, mathematical dialogue and meaningful learning is as easy as 1,2,3. Learn more about how to create and manage engaging centers that your students will enjoy while allowing you time to work with guided math groups.

#### Mathematical Differentiation in the Early Childhood Classroom (Pre-K)

Presented By: Kelli Evans (Lexington Universal Academy)

Room: Dixiana/Lane's End

Description: Early Childhood classrooms contain students who are working at different levels and paces both academically and socially. Some educators tend to go away from differentiation due to lack of time, lack of materials, the stress of creating multiple lesson plans etc. Join us in a discussion on how to incorporate more differentiation within your classroom setting. Participate in hands on activities, see real life examples of a differentiated early childhood environment and ask questions to help meet the multiple levels of students in your classroom. This session will provide you with plenty of resources that allow you to begin differentiating within your classroom immediately.

#### "Tier 1 and Tier 2 Mathematics Instruction: Supporting Students" (1-2, 3-5) \*\*2 HOUR PRESENTATION: 9:15am-11:15am\*\*

Presented By: Karen Karp (Johns Hopkins University)

Room: Terrace Ballroom

Description: When focusing on Multi-tiered Systems of Support (MTSS), a goal is to present highly engaging and effective Tier 1 instruction and Tier 2 interventions— particularly for students with disabilities. This session considers instruction, interventions, and assessments for grades 1-5 using multiple strategies for learning number, operations, and algebraic thinking.

# Breakout Session #3: 10:30am-11:30am

#### Hands-on and Self-Correcting Math Centers (K-2, 3-5)

Presented By: Rich Stuart (Learning Wrap-ups) Room: Salon AB Description: This is your opportunity to play with, and KEEP, hands-on and self-correcting materials that help K-5 students with Numeration, Algebra, Geometry & Measurement, and Probability and Statistics.

#### Empowering Mathematical Teaching Using Quality Resources (K-2, 3-5)

Presented By: Cara Osborne, Lisa Pinson (Millbrooke Elementary) Room: Salon HG

Description: Eureka Math (curriculum) can be overwhelming when first being implemented. With this session participants will confidently walk away being able to dissect a Eureka Lesson. Participants will also learn how to incorporate other quality supplemental resources for differentiation into their Eureka lessons ie. Math Workshop. Presenters will model and provide example lessons ready to use in the classroom.

#### Some Problems that Nurture Mathematical Thinking (9-12, Post-Secondary)

Presented By: Philip McCartney (Northern Kentucky University)

Room: Darby Dan/Calumet

Description: This interactive presentation is designed to share an array of problems and problem-solving strategies I have used in teaching mathematical thinking for over 40 years. When used in the right context, these problems and strategies promote interest and ability in mathematics. Attendees will have an opportunity to select and solve problems they find interesting. Good problems are a crucial mechanism by which mathematical thinking is nurtured. Good problems provide shelter from boredom, but can haunt our dreams. Good problems motivate the creativity and persistence so vital to the





development of vibrant mathematical minds and communities. Some sample problem titles:

- 1. School is out, but so is the power.
- 2. The broken bolt problem.
- 3. The two million points problem.

#### Math Escape Rooms: A different approach to unit review (6-8)

Presented By: Sarah Antle (Adair County Middle School)

Room: Dixiana/Lane's End

Description: Come and see how this 8th grade classroom is making Math Escape Rooms on Google Slides as a culminating activity for students, and also how these students share their projects with one another in order to serve as useful and fun unit reviews. This 8th grade math teacher will give you the student-made template for you to apply in your own classroom and can easily be adapted to fit within ANY CONTENT AREA. Come and hear the success of this Adair County classroom and get a fresh idea for your students!

#### Fractions Fair (K-2, 3-5)

Presented By: Meredith Brewer, Dee Crescitelli, Cindy Aossey (KCM) Room: Bluegrass Pavilion



### JOIN US FOR A COMPLIMENTARY LUNCH! 11:30 AM - 1:00 PM

Grand Ballroom

#### **KEYNOTE ADDRESS**

Cathy Fosnot City College of New York "Conferring with Young Mathematicians at Work: Making Moments"

## Breakout Session #4: 1:15pm-2:15pm

#### Engaging Learners and Building Student Confidence (3-5, 6-8)

Presented By: Lisa Sibert (Simple Solutions)

Room: Salon AB

Description: Engaged math learners are attentive and on-task, actively participating in their education; they learn more, and their learning is more durable. This session will highlight effective classroom strategies for increasing student engagement, long-term retention, and the confidence that students acquire by linking their effort with success. In a workshop setting, participants will experience and explore effective and engaging classroom strategies they can easily implement and use daily. Attendees will have an opportunity to obtain free classroom materials from Simple Solutions.

#### Active-Learning in Statistics & Probability for Adult Learners (Post-Secondary)

Presented By: Erron Prickett (Gallatin County Adult Education Skills U) Room: Salon C

Description: Adult students in Adult Basic Education (GED) math classes or in remedial mathematics college courses generally have low numeracy and conceptual understanding of core concepts in statistics, and exit their studies unprepared for credit-bearing algebra or statistics courses. By implementing active-learning methods in pre-statistics coursework, instructors can engage students in creating and performing mathematical experiments to illuminate key statistics and probability ideas. Additionally, students reinforce their basic numeracy skills in ratio and proportion, decimal computation, creating and interpreting data tables, and connecting mathematical procedures to concepts. Opportunities for students to think like scientists and collaboratively think about, implement, and execute mathematical experiments will be demonstrated. Participants will engage with examples of active-learning materials, student artifacts, and a light discussion about this framework.

#### Math as Language: Getting Students Talking and Writing Math (K-2, 3-5)

Presented By: Kate Wintuska, Randi Womack (Warren County Schools) Room: Salon D

Description: How many times have your students responded – "I just knew it," "I did it in my head" when you asked for their math thinking? As teachers, our hearts and heads drop in frustration - what do we do? In this session, we will explore

how leveraging the Speaking & Listening Standards, as well as, Writing Standards can build math and literacy skills. Learn strategies that foster mathematical thinking through math talk, supports that allow all students access to the conversation, as well as, examples of what it actually looks like in the classroom. From number talks to math journals - math is a language. It's time to get students communicating.

#### Backwards Boomerang! Intentional Planning for Intentional Results (All Grade Levels)

Presented By: Robyn Marcum (Shelby East Middle School) Room: Salon E

Description: So many standards; so little time! Do you ever find yourself feeling the need to extend units of instruction to give your students 'more time,' only to find yourself racing the clock in the spring to make sure you 'cover' everything... or at least as much as you can? Many of us, as educators, have found ourselves in that position! In this session, we will explore the concept of Backwards Planning, an instructional planning structure that ensures rigor through appropriate pacing and increases motivation for responsive instruction. Through Backwards Planning, teachers can intentionally plan strategies for fostering mathematical minds and communities, but do so in a way that doesn't 'slow down' their instruction!

#### Building Spatial Thinking Skills in Preschoolers and Early Elementary Students (Pre-K, K-2)

Presented By: Lemi-Ola Erinkitola (The Critical Thinking Child LLC)

#### Room: Salon F

Description: The National Council of Teachers of Mathematics recommends that at least 50 percent of mathematics instruction focus on spatial reasoning. This session will raise the awareness of spatial skills as an important predictor of achievement in STEM fields and highlight the opportunities for spatial thinking in supporting mathematics among early elementary students. Participants will explore effective teaching strategies and fun games that can be readily implemented in the classroom or shared with parents to help students develop and expand their spatial thinking.

#### Digital [FREE] Manipulatives to Put the Power at Their Fingertips (All Grade Levels)

Presented By: Chasity Gregory (East Hardin Middle School)

Room: Salon HG

Description: The focus of mathematics instruction has shifted toward engaging students at the conceptual level and building understanding from there. Virtual math manipulatives work toward accomplishing this task. This session will share resources and strategies for using Desmos and GeoGebra, two free applications that can be used on nearly all devices. As well as Google Drawings and Google Slides to create limitless supplies for every student in your classroom. \*Make-and-Take\* \*Exploratory\* \*BYOD\*

#### Domino Dynamics (K-2)

Presented By: Lynn Patterson, Emily Green, Emilea Bullen, Josh Stewart, Michaela Molnar (Murray State University) Room: Darby Dan/Calumet

Description: Games play a powerful role in supporting the development of numeracy skills and access to high-quality mathematical learning through doing! Dominoes are a dynamic and motivating mathematical tool and manipulative that beautifully supports experiencing many early mathematical content areas. This presentation incorporates dominoes in early numeracy development to support, explore, and discover sorting, number recognition, counting, addition, subtraction, and problem solving strategies. The math becomes "organic" for the students as they develop their own rules and paths to problem solving in a real-world game setting. Since the games presented are very open-ended, students will love creating their own solutions, extensions, and numerical target numbers. Preservice teachers with their university instructor with guide participants through games that promote mathematical discourse, struggle, play, and problem solving.

#### Let's call in TECHNO-MATH! (6-8)

Presented By: Brianne McDowell (Mason County Middle School)

#### Room: Lane's End

Description: They all have Chromebooks, now what? I will share tips and tricks to keep your middle school math classroom fresh, engaging and fun. Students using technology will go from distraction to production. From Google Docs to Teacher Friendly websites, you will leave with the tools you need to attack the ever changing math classroom. I will allow you to explore a day in my math classroom, and share my passion for technology and math. Let's call it TECHNO-MATH.

#### Making Equitable Practices Routine (All Grade Levels) \*\*2 HOUR PRESENTATION: 1:15pm-3:15pm\*\*

Presented By: Grace Kelemanik (Fostering Math Practices) Room: Terrace Ballroom

Description: Students face a constantly changing, data drenched world, filled with fake news and powerful technologies. Learning concepts and skills will not suffice, and leaving students behind is not an option. Every student needs to develop mathematical thinking and reasoning. This can only happen when students are talking together to make sense of important mathematics and each and every student is contributing to the conversation. So, how do we ensure that all students develop as mathematical thinkers and communicators? Leverage the predictable nature and uniform design of instructional routines to support students and teachers alike.

# Breakout Session #5: 2:30pm-3:30pm

#### Definitely Desmos - Incorporating a Free Online Engagement Tool into Your Classroom (6-8, 9-12)

Presented By: Susan McGrath (Fayette County Public Schools)

Room: Salon AB

Description: Desmos is a free, interactive online tool that teachers can integrate into their curriculum with ease. During this session, we will work together as students and teachers demonstrate the beauty of this calculator, plus all that Desmos offers in increasing engagement through technology. You will learn when and how to present Desmos to your students, discover all the lessons and activities already embedded online, and the immediate formative assessment feedback you get as a teacher. You can be a Desmos coach for your students, put them in charge of their success, and allow them the flexibility to move through online activities while gaining confidence in their abilities. You will foster a student-centered classroom using Desmos. We will also touch on the increased use of Desmos in book software and the SAT.

#### Fueling Student Achievement with Formative Assessments in Mathematics (All Grade Levels)

Presented By: Sally Wagoner (Eastside Elementary School, Harrison County) Room: Salon C

Description: Ready to fuel your teaching and take student mastery to a whole new level? This engaging presentation will ignite your passion to take back your teaching practices fueled through formative assessments. Attendees will participate in discussions using digital tools, as well as paper/pencil variations. Attending this session teachers will gain immediate knowledge on how to incorporate digital tools and paper/pencil formative assessments alternatives. Participants will also receive information on an innovative new tool that can be used in the classroom, the lpew. Participants will be allowed time to gain knowledge through participation of activities during the information session of formative assessments. Participants will leave this session with a toolbox full of ideas and resources to implement successful formative assessments in their classroom tomorrow! It is recommended that participants bring a digital device to access the assessments.

#### Exploring Growth Patterns with Sequences - A Marriage of Mathematics and Technology (9-12, Post-Secondary)

Presented By: Jay Schiffman (Rowan University) Room: Salon D

Description: We initiate our discussion with a seemingly modest proposal: Suppose a student is asked to secure the next term in the following sequence: 1, 2, 3, etc. The most common answer is probably 4. In this hands-on workshop, participants may argue and provide justification as to why the answer should be 5, 6 or other possibilities. Another problem asked two students to secure the next term in the following sequence: 1, 16, 81, 256. The first student responded with an answer of 625 while the second claimed that 601 was a solution to this problem. Both students were correct! The question is why? Through the use of technology, we will view patterns that fit the mold of linear, quadratic, cubic, quartic, Fibonacci-like and exponential behavior. Many of these sequences are studied in various mathematical branches including number theory, discrete mathematics, statistics and computer science. Posing open ended problems that generate multiple correct answers stimulates interest, poses thoughtful questions, develops a community of learners and leads to further research. Please bring a graphing calculator such as the TI-84 and come prepared to be inspired.

Participants working in small groups will engage in these sequence queries and share their findings with the entire group. In a mindset where far too many students are solely answer driven, these sequences open a world of possibilities and help render mathematics meaningful.

#### **Connect 4: Standards for Mathematical Practices, Academic Standards, Rich Tasks and Engagement (3-5)** Presented By: Tolene Pitts (PIMSER)

Room: Salon E

Description: Connect 4 will allow participants to connect Standards for Mathematical Practices, Academic Standards, Rich Tasks and Engagement by allowing participants to participate in tasks designed to address the standards. Participants will leave with access to tasks and ideas for engagement.

#### Fostering Fluency: Structuring Numbers through Fun and Engaging Activities (Pre-K, K-2)

Presented By: Andrea Brandenburg (Westside Elementary School)

Room: Salon F

Description: Structuring, or combining and partitioning, numbers is an essential component of fluency with number. Students need to participate in a variety of activities that provide them with opportunities to work with numbers in this way. In this interactive session, participants will learn fun and engaging activities to incorporate into their number talks, centers, and whole-group instruction that will foster students' abilities to structure numbers. Participants will walk away with numerous games and instructional activities that can easily be implemented in the classroom.

#### Card sorts and more! (6-8)

Presented By: Amy Wagner, Melissa Plank (Simons Middle School) Room: Salon HG

Description: Tired of boring worksheets? Want to provide engagement among ALL students in the middle school math classroom? Then this hands-on presentation is for you! We will demonstrate a variety of different card sorts, turn-over cards, using dice, Kaboom game(s), using Wikki Stix, and building models to support visual learning. You will receive templates to make your own turn-over cards, as well as ready-made card sorts to take back and use in your own classroom. This presentation goes hand in hand with the conference theme as we 'Foster Mathematical Minds and Communities' in our classroom using a variety of different strategies to enhance student learning.

#### Fluency Connection: Integrating Fluency to Foster Mathematical Minds (K-2, 3-5)

Presented By: Leslie Morris (Paris Elementary School)

Room: Darby Dan/Calumet

Description: How can teachers move their students forward in fluency? We will look at research, best practices, assessments, and practical ideas for teaching students K-5 mathematical fluency. Participants will see examples of how to engage students and connect fluency goals within their existing curriculums. Participants will also learn how to have meaningful conversations that allow students to assess their own fluency knowledge.

#### All the World's a Stage (in Primary) (K-2)

Presented By: Cindy Townsend, Emily Futrell (Mary Todd Elementary)

#### Room: Dixiana/Lane's End

Description: Join us as we share our experiences fostering mathematical minds and communities with story problem theater! Each problem solving cycle includes a series of steps allowing students to think about and make sense of story problems. Beginning with real-world context, students' progress through the concrete-representational-abstract stages. Participants will leave with a structure for including story problem theater in their own classrooms. We hope 'theatrical' story problems in primary will eliminate future 'number pickers' while engendering life-long problem solvers.

# New Math Game

COMP10 - A New Math Card Game

CAGO PARK

Market Debut at the 2019 KCM Conference! A fast and competitive game of numbers and strategy. Initially created for inner city youth of the non-profit 5:30 Scholars Program. Students play 5-10 minute rounds to improve flexible thinking, spatial skills and build number sense by practicing addition, subtraction, subitizing, geometry and more. A fun and easy game kids and adults will love to play!

Visit: The Critical Thinking Child Booth Stop by for a demo and a chance to win for your classroom.



THE CRITICAL

THINKING CHILD



Simple Solutions.







# www.SimpleSolutions.org



"This has been a very valuable class. I wish all elementary teachers were required to have such impactful instruction." - Classroom Teacher Participant

Find us speaking during the conference on 3/11 at 9:15 & 3/12 at 10:30!

Looking for professional development that leads to proven results in the classroom?

US Math Recovery Council<sup>®</sup> provides dynamic, research-based mathematics professional development focused on essential numeracy learning for all students.

See available 2019 course opportunities on our website! www.mathrecovery.org

Join us at our annual conference in Rhode Island Nov. 18 - 21st! www.mathrecovery.org/2019-national-conference

## Math Practice that is Hands-on, Self-Correcting and FUN! We are celebrating 35 Years in business by giving a 35% Discount.







Seamless articulation from K-AP®

**Big Ideas Math** uses a balanced approach to engage students' inquiring minds and give them the opportunity to see how mathematics affects their everyday lives.

With a consistent author voice from level to level, students make connections



NATIONAL GEOGRAPHIC

ARNING

#### Grades K-5









through cohesive progressions and rich instruction.







Ask your Sales Consultant about the Advanced Pathway!

#### Grades 9–12

Integrated Mathematics courses also available!









Emily O'Brien Sales Consultant, Grades K–8 emily.obrien@cengage.com 513-229-1703 Diane Haas Sales Consultant, Grades 9–12 diane.haas@cengage.com 513-229-1528

NGL.Cengage.com/Bigldeas 888-915-3276

Big Ideas Math® and Big Ideas Learning® are registered trademarks of Larson Texts, Inc. AP® is a trademark registered and/or owned by the College Board, which was not involved in the production of, and does not endorse, this product. "National Geographic", "National Geographic Society" and the Yellow Border Design are registered trademarks of the National Geographic Society ® Marcas Registradas

#### Stop by the National Geographic Learning & Big Ideas Learning booth for a chance to win a \$50 gift card!

Fill out the form below and tear off to participate in the raffle.

Name:	School District:	Title/Position:	Grade Level:
Email Address:	School:	When is your school/district planning to a new math program?	o implement

-----

×.....

**MATH in PRACTICE** 

# A math coach for every K-5 teacher

Kindergarten Math

Aligned with popular math programs

MathInPractice.com

A Guide for Teac



Fourth-Grade Mat

Fifth-Grade Math

**DEDICATED TO TEACHERS** 

# **CPM EDUCATIONAL PROGRAM**

Empowering mathematics students and teachers for 28 years through exemplary curriculum, professional development, and leadership

- + Curriculum written by a team of experienced teachers
- + Problem-based lessons for active student engagement
- + Free, comprehensive professional learning progression to support teacher expertise, growth, and leadership
- + Educational nonprofit 501(c)(3)

We are pleased to support the Kentucky Center for Mathematics Conference. **Stop by our booth to meet with a CPM mentor teacher, see our materials, and request a preview.** 

Visit CPM.ORG/cpminfo or scan the QR code to get more information and view our conference sessions.



**MORE MATH FOR MORE PEOPLE** CPM EDUCATIONAL PROGRAM



# 

# Let GO of your current Math Curriculum!

**:enVision** Mathematics K-5

• Focus, coherence, and rigor of the Common Core State Standards

# GO for something Brand NEW! Convision

 Problem-based learning at its best



• Flexible, powerful, and balanced

Contact your Pearson Representative or visit PearsonSchool.com to learn more!

**Clifford Mims** 

Account General Manager 859-494-4858

Cliff.mims@pearson.com



PearsonSchool.com 800-848-9500

Copyright Pearson Education, Inc., or its affiliates. All rights reserved. 615E2166





