

CAMT 2018 Sessions (Grades 3-5)

Opening Sessions, Monday 8:00 AM-9:30 AM

Teaching Beyond the Task	As more teachers look to add high-yield tasks to their repertoire, the struggle to make it all work becomes real. Let's examine how problem-based lessons can be used throughout the scope of a unit and how we can harness their power to move student thinking forward. We'll identify strategies and explore some tasks that help us find a healthy balance between application, conceptual understanding, and procedural fluency.
Heartprint: Living a Fully Engaged, High Energy and Well-Balanced Professional Life!	In this inspirational address, Dr. Timothy Kanold draws from his new book HEART! Fully Forming Your Professional Life as a Teacher and Leader, to provide research, insights, and tools from thought leaders inside and outside our education profession. He examines ways for mathematics educators to lead an energetic, happy, and well-balanced professional life. The relational expectations, give and take, and daily chaos of our school life and culture can sometimes be overwhelming. By understanding the impact of their effect on others, participants can become more inspiring, more fully engaged in their work, and have a magnified impact on students and colleagues—season after season.

Extended Sessions, Monday 10:00 AM - 12:00 PM

Empowering Equity in Problem Solving	Research indicates that minority students can compete with and outperform their peers if given the opportunity to discuss math problems, talking about how they choose solution methods and why they work. This highly interactive session teaches a process that is entirely student-centered and uses discourse as the pathway from understanding the problem's situation and comparing solution pathways to finding a solution and making sense of the process.
The Power of Ideas	Historically, the teaching of mathematics is particularly guilty of giving students the message that their ideas aren't important and that they only need to memorize and regurgitate the ideas of others. If students are to become critical thinkers, they need to realize that the ideas they bring to the classroom are worthwhile. They should also have opportunities to express and refine those ideas, as well as to learn to listen critically to the ideas of others. We'll talk about some examples of ways in which we as mathematics teachers ignore students' ideas, then explore different routines and strategies for making students' ideas play a more central role in the classroom.
The Power of Progressions: Untangling the Knotty Areas of Teaching and Learning Fractions	Let's explore some key understandings involving fractions by examining the developmental progression of models, strategies, and concepts, and how they all build on one another. Many times, as our fraction units near, the emphasis on teaching and learning mathematics shifts to rules and procedures which shouldn't be the case. To avoid this approach, we'll identify how simple changes in everyday practice can leave a math residue that builds solid reasoning and makes student understanding stick.
So, Is Failure Really an Option?	Wanting to help your students succeed with failure? What does that mean for how we approach teaching and learning mathematics? What connections are there among equity, grit, resilience, a growth mindset, and failure that can help you help your students? Explore activities, participate in conversations, and leave with tools.

Monday, 10:00 AM-11:00 AM

20/20 Division: Helping Students See the Process of Division Clearly	In this session, we will explore the progression of understanding that will lead students to success with the traditional algorithm in division. No tricks, just solid conceptual understanding that will lead to procedural fluency. Let's eliminate the blurry vision from common misconceptions and help students see division clearly!"
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A Framework for Supporting All Students: Perimeter, Area, and Volume, Grade 5 Mathematics	Experience classroom-ready activities that integrate research-based instructional strategies designed to narrow academic gaps related to perimeter, area, and volume. Purposeful small-group intervention suggestions are incorporated to facilitate learning for a broad range of students including English Language Learners and struggling students."
Building Mathematical Literacy	Have you ever read math text aloud to your students because you did not think students could understand it themselves, rewritten math tasks to eliminate difficult vocabulary, or wished your students were more literate so you could teach them more math? If you answered yes to any of these questions, join us as we engage in activities to build mathematical literacy. Participants will walk-away with strategies that embed reading, discourse, vocabulary building, and writing in the math classroom."
The Math Party: Learning Math Through Music and Dance	"In this electrifying session, you will sing, dance, and most importantly, learn! The math party session encompasses songs, raps, chants, and movements that can be infused into your existing mathematics curriculum. Aligned with the National Council of Teachers of Mathematics (NCTM) Standards, the motivating, musical, mathematical repertoire includes age-appropriate content for all grade levels. This session is interactive, motivational, inspirational and educational!!!! Don't be tardy for the MAAATH PAARTY!!!"
The Power of Technology in Math Classrooms	"In this session, teachers will work on elevating teaching with technology to maximize student learning. This interactive presentation will feature 21st Century tools to integrate technology to engage and empower students with math future-ready skills."
Let's Talk Money—Decimal Operations!	How do we progress from whole numbers to decimal operations? Talk money! We will model fun and engaging ways to develop students' fluency with decimals and fractions computation through numeracy routines and strategies that relate to money.
The Amazing World of Arrays and Area Models	"According to Jo Boaler, "Visual mathematics is an important part of mathematics for its own sake and new brain research tells us that visual mathematics even helps students learn numerical mathematics." Let's explore the many ways to use arrays and area models to visually represent and solve problems with whole numbers, fractions, and decimals. Participants will learn how arrays and area models strengthen student understanding of numbers, operations, and algebraic reasoning. Using virtual number frames, base-ten pieces, and geoboards, participants will be encouraged to represent their thinking using drawing and annotation tools."
Numberless Word Problems	"Do your students struggle decoding word problems? As soon as your students begin a word problem do they immediately start circling or boxing the numbers in the problem...before they have even read the problem?! Let's see if the students even understand what the problem is asking by removing the numbers from the problem! Yes, this is math class and we are removing the numbers to the problem! If the students do not understand the problem, the numbers within the problem are not going to assist them at all. Typically the numbers cause further misunderstandings ... the students just start adding, subtracting, multiplying, and dividing the numbers before thoroughly reading and understanding the problem! By removing the numbers we will allow the students to notice and wonder various questions about the problem that will allow them to truly begin to question and understand the word problem presented to them. After this process, we'll add the numbers back in and the students will be able to word through the problems with ease!"
Where Can We Go From Here? Assessing Progress in Geometry	Let's look at the development of geometric reasoning in children! Discussed will be open-ended geometry tasks and a framework for examining children's thinking elicited in these tasks. We'll also talk about how we can use the information gathered from students in lesson planning.
Using Coffee Stirrers to Develop and Test Geometric Concepts—RUSMP	"Get ready to experience hands-on activities using coffee stirrers and chenille sticks to develop reasoning about two- and three-dimensional shapes and their attributes by making and testing conjectures. Attendees will receive a list of literature selections, apps, and other resources that will enhance development of the concepts presented."
Investigating Two-Dimensional Figures	"During this session, participants will learn about different teaching strategies, such as using children's literature, Exploragons, and coffee filters, to teach students about two-dimensional figures and their properties."

Fold with Focus: First Steps and Decisions with Foldables®	"Do you wonder where to begin implementing Dinah Zike’s Foldables® in your classroom? Do you leave a Foldable session motivated and inspired, then find yourself overwhelmed at the prospect of using this highly-effective strategy with students? This session is for you! Clear hurdles to implementation in this highly engaging and interactive presentation. Leave ready to address TEKS standards, vocabulary, and more—find your focus with Foldables®!"
High-Quality Mathematics Teacher Professional Development	"NCTM (2014) calls for mathematics teachers to ensure success for all students. As facilitators of mathematics professional development, we are challenged with supporting teachers making the transition toward enacting the guiding principles and practices. This session discusses components and research to determine how high quality MPD meets the needs of mathematics teachers as well as impact student achievement."
Kids are Fearless: Let Primary School Students Use Child-Friendly Apps to Build Digital Portfolios	"Secondary students are required to understand and use technology in this day and age. Why do we expect secondary students to understand technology if they have no chance to use it in the primary ages? Most apps providing digital portfolios are for older students, and it is easy to see why. Older students are very creative, and often know how to express their own thoughts on and off of paper. However, we should also be looking to younger students to build their portfolios at as young an age as six. There are child-friendly apps for use that can do just this. This session will cover growth tracking, accommodation, and documentation. Although this session focuses on one digital portfolio app, this is just scratching the surface of resources at our students' fingertips!"
Math Learning Disabilities, Dyslexia and ADHD: Remediating Effectively	"When we hear dyslexia, we think reading and writing, but 80% of people with Specific Language Impairments and 31% of people with ADHD struggle with math. Yet, many students miss out on high-quality mathematics remediation because schools and parents so frequently focus on literacy. Through lecture supported by powerpoint, discussion, and hands-on activities, Diana Kennedy will explore explicit teaching, concept/procedure integration, incrementation, error analysis, and accommodations for teaching students with MLD. Participants will leave with games, lessons, and approaches to help all math students excel."
Problem Strings: A Powerful Instructional Routine	"A Problem String is a powerful lesson format where all students learn, have access to the problems, and are challenged. The success hinges on the teacher's purposeful question order, class discussion, and modeling student strategies to build connections. In this extended session, you will experience a variety of problem strings across the grade levels. We will also unpack the elements of the routine—how they work together to increase access for all students to sophisticated mathematics. Want to get your students really thinking and mathematizing? Come join us!"
Tech Tools Perfect for Teaching Math TEKS	"The Standards for math stress real-world relevance, creative problem solving, collaboration, and communication. In this session, we will provide teachers and students with mathematics relevant to our world today and easily search a collection of real-world scenarios by category or math level. These real-world questions combine media with interesting challenges involving math. We will explore Math Map challenges using google maps and Google documents for collaboration in the classroom. Tackling real-world problems can be daunting for students who may be use to completing practice problems out of a book. Encouraging students to work together to identify what they know and need to know creates a support system. Asking students what they have learned and how they can apply what they have learned allows them to reflect as a group and collaborate to extend their understanding of a mathematical concept. Come learn how to creatively teach using technology!"

Monday, 11:30 AM - 12:30 PM

Conquering Rigorous Problems—It's the Words	"We're being asked to teach to a new level of depth and rigor. Come learn a strategy that will help all of your students attack word problems by turning word problems into a visual model—Strip Diagrams! Included will be hints for helping your struggling learners, English Language Learners, and high achievers. We'll even talk about bringing their parents along on the journey. Leave with strategies you can use regardless of your current textbook."
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Developing Algebraic Thinking and Problem-Solving Proficiency	"Strategies to develop algebraic thinking will be shared, including patterns, use of the equal sign, other representations, and solving for unknowns, together with the exploration of problem-solving strategies and real-life applications. The speaker will actively engage attendees with manipulatives, effective questioning strategies, adaptive technology, and real-life problem solving that promotes algebraic thinking. She will model differentiation strategies to advance mathematics achievement for every child. Handouts provided."
Got Some Notebooking Skills?	"Got skills in journaling or interactive notebooks in your elementary classroom? Come to our session if you would like some general strategies, hands-on journaling activities, assessment ideas, checklists, and organization ideas, as well as editable templates. Even if you have never journaled, you will love this session! Activities shared will be specific to 5th grade TEKS, but all templates will be easily editable for other grade levels."
Know the Words? Do the Math	"Numerous studies have shown that you cannot teach math with computation alone. In accordance with the TEKS and state and district assessments, students must be able to bridge the gap between language and computational skills in order to do the math. It is not only a struggle for our English Language Learners but also for some of our native English speakers. So, how do we build vocabulary and reading skills in the math classroom? What strategies can we use to ensure student comprehension of word problems? These questions and more will be explored in this session."
Math Shakers- Catch Your Student's Attention With Shake Breaks	"Who knew there was so much math inside dollar store pill containers filled with dice? Come play a wide variety of math shaker games that help you teach the following concepts: all operations, place value concepts including decimals, fractions, mixed operations and balanced equations, probability and statistics, and more. This manipulative has proven to be the most popular for both students and teachers. The math shake break activities incorporate all learning channels, allow students to move and learn in your daily math program and are easy to quickly implement for daily practice. The activities are instantly differentiated to meet the needs of all learners in your classroom. Gameboards, journal writing and math talk extensions will be shared, as well as ideas for assessment. A list of our favorite shake break movement will be provided, come prepared to be actively involved! John's newest and favorite workshop."
RTI—What? When? How?	"This session will present teachers with the background of what a Response to Intervention process looks like within their schools. Information will be given on how to set up the process, identify students, and make data-driven decisions. Topics will include progress monitoring and tiered models of delivery, along with high-quality instruction and scientific, research-based tiered intervention that is aligned with individual student needs."
Tools for the Mathematics Toolbox: Anchor Charts and Interactive Notebooks	"Anchor charts and interactive journals are great tools for students to use, but how can we make these tools even more effective and encourage their use by students on a daily basis? Join us as we explore ways to create and structure these tools to maximize student learning and help make the mathematics in them become even more meaningful to our students! Come ready to learn with a pair of scissors and a glue stick!"
Solving the Problem with Word Problems or How to Teach Literacy in Math	"Word problems in mathematics often pose a challenge because they require that students read and comprehend the text of the problem, identify the question that needs to be answered, and finally create and solve a numerical equation. Math teachers are not necessarily trained to teach reading. This presentation will help math teachers understand the need to focus on reading for math problem solving and will offer strategies and ideas to help students use reading strategies for problem solving."
5 Fundamentals of Basic Fact Fluency	"The ""facts"" tell us we need to rethink basic fact instruction and assessment. Come explore five fundamental ways to teach basic fact fluency. We will explore many games and other enjoyable, meaningful practice, as well as formative assessment tools that lead to fluency and automaticity while also supporting the development of students' number sense and positive mathematics identities."

Comparison Problems Using Strip Diagrams	"Are you wondering how to support students with additive and multiplicative comparison problem solving? Learn how to incorporate strip diagrams, purposeful questioning, and solution strategies to help move students towards mastery of the TEKS. Experience classroom-ready activities that promote a learning progression of problem solving in the mathematics classroom."
TEKS-Based Strategies and Models for Elementary Math (K–5)	Models are essential for students to understand the mathematics behind mathematical processes. We will explore the different types of models and how each model is necessary for students to deepen their understanding of mathematics.
Escape From Math	"How can you engage students in word problems? In this session, teachers will be introduced to an escape from math concept. This is based on an escape room. Students work together to solve clues and tasks to reach an end goal. Teachers will discover and play this game of escape from Captain Fury. We will then use 5th grade materials to show how you would create 5th grade game. Teachers will be able to take home a 3rd or 4th grade lesson."
Hands-On Exploration: 3-5 Student-Centered Activities	"This session will focus on approaching problems by engaging students in hands-on activities and building/drawing representations of reasoning and thinking, rather than introducing a pre-set way to solve problems. Resources for finding grade 3 through grade 5 tasks will be shared with attendees of this session."
#CloneMe!	"Have you ever stressed wondering if the material you left for the sub is being taught correctly? Come see multiple ways to implement videos into your instruction. Be sure to bring your Apple/Android tablet for some collaborative brainstorming and the creation of sample videos. The ShowMe App is an innovative app that can be used for a plethora of activity types within your classroom (i.e. flipped classrooms, intervention, substitute days, and centers/stations)."
Data-Driven Math Instruction	"Apply the best practices of a former NASA system engineer to the design of effective and research-based learning experiences for students. Encounter a systematic approach to incorporating vertical alignment, establishing teacher and student clarity, analyzing student work, and integrating high-yield instructional strategies into every unit of study. Participants will learn the four critical components of an effective data driven instructional system, engage in sample activities that demonstrate the connections between systematic instructional planning and lesson delivery, hear testimonials about improved job satisfaction and teacher morale as a result of systematic instructional leadership, and leave with practical next steps that can be immediately applied to their unique educational environment."
Modeling and Solving Equations— Vertical Alignment	Come find out how math in the elementary years sets the foundation for modeling and solving equations in the middle and high school grades. Leave with resources and many ideas for engaging lessons and activities!
Pedagogy and Paper Folding	Origami is the art of paper folding to construct a sculpture from a square. This art usually results in the paper having many shapes and patterns which we intend to use to explain mathematical concepts. We will go over TEKS from the primary level and use origami as a manipulative to teach them.
Teaching Middle and High School Students to Speak the Language of Math (Part One)	Back by popular demand! After the overwhelming participation at CAMT 2017, come join part one of this two-part series about teaching kids to speak the language of math! Although it can seem daunting, both middle and high school students can learn to participate in meaningful discussion when they have the instructional support they need. In this session, come see "math talk" in real classrooms and explore a set of principles that provide support for young mathematicians as they learn to articulate their own ideas, consider the perspectives of peers, and construct mathematical understandings.

Online Resources that Promote Higher-Level Thinking	"There are many online resources available to us as educators. Due to the vast number of these, it can be overwhelming to know where to start and which resources are best for you in your classroom. Through time and reflection, we have curated many resources that promote what we believe is the most essential component in a classroom—students engaged in higher-level thinking. In this session, participants will rotate through stations that model these teaching strategies and activities from our curated list. Participants will leave with our list and descriptions, as well as having experienced a number of the resources themselves."
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Extended Sessions, Monday 12:30 PM - 2:30 PM

"See" the Power of Math in the Hundreds Chart!	"Come and discover how many ways the hundreds chart can be used to show patterns, teach multiples and factors, discover divisibility and more! You will love the book we will make along with lots of new games that are ready for your classroom! Create a work station with these ideas that will be used all year! You will love the meaningful handout along with the singing and dancing that will make the session fly by!"
Feedback That Feeds Forward	Feedback is only effective if it is a catalyst for change in student learning. Effective feedback is timely, descriptive, and specific to both the work and the student's needs. In effective feedback episodes, both the teacher and student learn something. Effective feedback is coupled with immediate opportunities for students to use it. Participants in this session will analyze examples of feedback and learn feedback strategies that help students answer the question, "Where am I now, and what do I do next?" Participants in this session will: -- Look at feedback through three lenses -- Learn to provide effective feedback messages to students -- Learn to create opportunities for students to use feedback and improve.
In-RIGOR-ating Math Notebooks through Differentiation	Different strategies can be used to teach content and some of these same strategies can be changed and used by students as products to show their mastery of content. In math, products include writing a testable question or solving a real-world problem; however, there are other quick project formats that can be used to strengthen and/or assess content knowledge while communicating crosscutting concepts. Some of these quick project formats include: • Plan and conduct a survey. Analyze and communicate data collected. • Make a model and use it to present a short lesson with a clear purpose. • Outline the pros and cons of a local, national, or world math event or legislative action, e.g., Daylight Savings Time. In this new session, Dinah will share her thinking and strategies about generating rigor in interactive student notebooks, with a focus on differentiation. You'll see and hear ways to differentiate math content while creating samples to take away with you and adapt. All materials provided
Calling All New Math Teachers!	Are you new to teaching elementary math or still feeling as though you are learning the ropes? Are you a math coach who is working with new teachers and wants to gather some strategies to take back to them? Join Sue O'Connell to gather practical strategies and effective math routines for getting your primary students thinking like mathematicians. Whether you love math or are a bit fearful of your new role as a math teacher, you will gather a wealth of ideas that will have your students excited, engaged, and eager to learn math with you!

Monday, 1:00 PM - 2:00 PM

#S.W.A.P.—What Are Your Students Telling You?	"What is S.W.A.P. anyway? S.W.A.P., Student Work Analysis Protocol is a tool that, through meaningful conversations centered on student work, educators can utilize in order to dig deeper into student data to change instruction and increase student learning. In this session, we will explore the process of this protocol in order to aide teachers in strengthening both first-time instruction and reteach/intervention. Participants will have an opportunity to process through the protocol by analyzing student work in grades 2-5 problem solving and gain strategies that can be implemented upon their return to the classroom."
Algebraic Thinking for All Students—RUSMP	"This session focuses on hands-on and minds-on algebraic thinking activities that will transform real-world problems into situations which develop students' abilities to generate, represent, and justify generalizations. You will leave with classroom-ready activities and ideas to challenge the different abilities of the students in your classroom."

Getting Wild About Technology	"Take your classroom instruction to the next level using creativity, innovation, critical thinking, problem solving, communication, and collaboration using 21st century math learning experiences. 21st century math classrooms are not defined with program adoptions, learning resources, and online tools, but rather are defined by how the learning experience is brought to life. (Krohn) Come learn strategies to integrate technology into your everyday lessons in a fun way."
Introduction to Strip Diagrams	"Are your students struggling to understand word problems? Learn new strategies to attack word problems, including Singapore's proven Model Drawing (Strip Diagram) technique and why it works with all students! Included will be hints for introducing strip diagrams and how to incorporate them into your day. We'll examine ways to help your struggling learners, English Language Learners, and high achievers! Leave with strategies you can use regardless of your current textbook."
Math on a Budget: New Ideas for 2018! Million Dollar Games from Dollar Store Dreams	"You don't have to break the bank or break a sweat to create math games for stations that are irresistibly engaging, meaningful, and effective. Participants will leave with their minds racing with fun ways to save time and money with overwhelmingly creative game ideas. These ideas are simple, flexible, and easily implemented into guided math classrooms, stations/centers, intervention, tutorials, and more! Come see new ideas for 2018 and learn how to turn dollar store items into million-dollar math games that bring learning to life!"
Mathematizing Your Campus	Are you wondering how mathematics can be put on the map at your school? Are you looking for ways to promote students' excitement about mathematics? Join us as we explore three simple ways to create a school environment that showcases and encourages the love of mathematics on your campus! Let's mathematize our campuses!
Meeting the Needs: Implementing Differentiated and Small-Group Instruction	"Maximizing your Math Workshop block by meeting the needs of all learners is every teacher's goal, but often times falls short because of organization and management. This workshop will present a variety of ways to differentiate instruction within Math Workshop. We will discuss management and organization of small groups and how to differentiate your instruction to meet the needs of students for math intervention."
Strategies for Teaching Addition and Subtraction to Increase Student Conceptual Understanding!	"Why should the standard algorithm for addition and subtraction be taught last? We'll explore strategies such as open number line, decomposing numbers, and partial hundreds charts to add and subtract. We'll also discuss how to help the parents on your campus understand the various strategies and how they can support their child at home."
What's the Problem with Word Problems?	Come dive deep in solving addition and subtraction word problems. Discover how to help students understand how to solve addition and subtraction word problems through research-based instruction. This session is appropriate for K-2 teachers also.
Math Club—The Only Club That Counts	"It's time to take math outside of the classroom! Our session is designed for the beginning, intermediate, and advanced math thinkers who are willing to start a Math Club at an elementary school. In our presentation, we will discuss the necessary tools to set up an after-school Math Club that will allow for exploration and application for diverse learners. Math Club students will be able to develop and reinforce mathematical skills to raise the confidence level of all students in various areas of mathematics."
Hit An Intervention Home Run!	Teachers will leave this session with ready-to-use ideas that have a proven track record with making intervention effective and long lasting. Learn how to identify student weaknesses and strengths to implement a differentiated intervention plan for each student. You will learn how to effectively monitor progress and adjust the instruction to meet needs that arise from intervention while maximizing already limited time. Teachers will be able to knock intervention out of the park for a home run hit that everyone will benefit from. All interventions and products that will be shared are free to all participants.

Problem Solving vs Solving Problems	"Solving problems happens routinely in math classes, but getting students to problem solve is much harder. Problem solving implies a deeper level of thinking and an increased level of complexity that goes beyond traditional problems used for class and homework activities. This session will focus on ways to get students to probe deeper, think differently, and analyze mathematical concepts that can be easily incorporated into routine instruction and make learning middle school concepts anything but routine. Math Cut Ups will be featured in this session."
A Framework for Supporting All Students: Addition and Subtraction, Grade 3 Mathematics	Experience classroom-ready activities that integrate research-based instructional strategies designed to narrow academic gaps related to addition and subtraction. Purposeful small-group intervention suggestions are incorporated to facilitate learning for a broad range of students, including English Language Learners and struggling students.
Word Walls + Work Stations = Academic Language	"Many classrooms have word walls and many classrooms have work stations—but do we have work stations that utilize word walls? Join us as we explore how to merge two valuable classroom resources, word walls and work stations, to develop students' use of mathematical academic language."
Convergence: How a Collaborative, Inquiry-Based Classroom Earns Top Marks on Any Rubric	"The number of research-based best-practices rubrics (including T-TESS) can make your head spin. Living up to all of those expectations isn't as difficult as it seems. As a mathematics educator, I will provide some clarity by ""working a simpler problem."" By tapping into students' natural inclination for collaboration and curiosity, teachers can transform classrooms into highly engaging work spaces. In this session, I will explain how all the research lines up and give practical steps to get you started. Bring an existing lesson plan to transform. Ideal for beginning (or just frustrated) teachers!"
Grit in Mathematics: Designing Lessons to Cultivate Passion and Perseverance	"Grit is the combination of passion and perseverance. Passion builds from interest and curiosity, which should be at the heart of our curriculum. Perseverance, the ability to face and overcome challenges, has to be cultivated through purposeful practice. Participants will learn practical ways to infuse their mathematics courses with passion and perseverance in an effort to generate a culture of gritty and inspired students."
Strategy-Based Instruction for Addition and Subtraction Facts	"Educators will learn effective and efficient strategies to help students achieve mastery of the basic addition and subtraction facts. The Texas Essential Knowledge and Skills (TEKS) require students to use strategies when solving problems, including when learning the basic math facts. The National Council of Teachers of Mathematics (NCTM) considers fluency with numbers and operations an essential skill for algebra readiness. Furthermore, strategy-based instruction for basic math facts builds flexible thinking and mathematical reasoning in all of our students, which in turn, increases students' procedural fluency."
Number Line: Math Teacher's Swiss Army Knife	"The Number Line is the only tool mentioned in every grade of the TEKS (1-8). See why it is so important, and how it bridges concepts across grades. Learn to use the number line to teach whole numbers, fractions, addition, subtraction, multiplication, division, decimals, integers, and so much more."

Monday, 2:30 PM - 3:30 PM

#S.W.A.P.—What Are Your Students Telling You?	"What is S.W.A.P. anyway? S.W.A.P., Student Work Analysis Protocol is a tool that, through meaningful conversations centered on student work, educators can utilize in order to dig deeper into student data to change instruction and increase student learning. In this session, we will explore the process of this protocol in order to aide teachers in strengthening both first-time instruction and reteach/intervention. Participants will have an opportunity to process through the protocol by analyzing student work in grades 2-5 problem solving and gain strategies that can be implemented upon their return to the classroom."
4 Things You Should Know About Any Number	Do your students struggle with division and operations involving fractions? Come find how to give them a strategy that will have them devouring division and fractions for breakfast. These four items will change how learners view numbers and give them a strategy to unravel any number they encounter. Also we will show creative and easy-to-apply ideas for teaching factoring and making an engaging number line.

Dividing Fractions: Ours Is to Know We Flip the Second and Multiply!	"In this session, we will connect models and methods to allow students to discover the meaning of the traditional algorithm for dividing fractions. We will use context to explore various interpretations of division of fractions, enabling students to have conceptual understanding prior to introducing the standard algorithm. Participants will use manipulatives and representations to model division word problems effectively."
Engaging Students in Elementary Mathematics	This session will address major key concepts in grades K-5 and common misconceptions. Participants will explore activities involving the process standards and some student-centered strategies that will help students attain the STAAR master level. Multiple response strategies will be modeled throughout the presentation.
Math Fun'die' Mentals - Math Games Using Regular Dice	"Come experience a favorite from last year's CAMT with updated games and activities. There is a whole lot of math unlocked when students use simple dice. Concepts covered include: mixed operations, place value including decimals, rounding and expanding, fractions, statistics and graphing, coordinate geometry, will be highlighted during this session. Gameboards, journal writing questions and extensions, student samples will be shared throughout to demonstrate how to assess and differentiate the games to meet the needs of all learners in your classrooms."
Individualized Instruction with Google Sheets	Learn how to create personalized math assignments using Google Sheets or Excel. These assignments may also be designed to provide instant student feedback and final scores to simplify teacher effort.
Our Favorite Activities for Interactive Notebooks	Are you looking for activities that will turn your ordinary interactive notebook into extraordinary? Join us as we share some of our favorite interactive notebook activities that support various learning styles as well as the diverse needs of English Language Learners!
The First 20 Days of Guided Math	"Join me as we explore the First 20 Days of Guided Math and discuss tips on how to set up a classroom of math reasoning and thinking, workstation rotations, small-group instruction and other routines to help kick start your math classroom for student success! Participants will walk away with an overview of the first 5 weeks, tried and true tips for finding success with a workshop model, and a detailed day-by-day guide for the first 20 days for immediate implementation! Resources are geared for grades K-5, but can be adjusted for use at any level."
Revolutionize Student Learning with the Mathematician's Journal	"Discover how interactive math journals can be used to cater to your students' individual needs, reflect the math identity of each student in your classroom, and provide students with a venue to express their thinking! Explore how journals can be used to promote differentiation, self-monitoring, number sense, and reasoning skills, as well as guide small-group instruction!"
#GotProblems? Supporting Student Success in Solving Problems	"During this interactive workshop, participants will exploring how the use of language and discourse, visual models, and strategy/thinking games can foster reasoning skills and develop deeper understanding of concepts. Participants will work through a variety of real-world problems which foster students' thinking and reasoning skills to engage all levels of learners."
Five Ways to Enrich Multiple-Choice Questions in Mathematics	"Surprisingly, research finds multiple-choice questions can be a valuable learning experience! But can instruction with STAAR multiple-choice questions also be a rich learning experience? Learn five strategies to differentiate instruction with multiple-choice questions. Each strategy is illustrated using released STAAR test items, because students benefit from instruction and practice in the format of the STAAR test."
Growth Mindset Meetup	Network and learn with educators who are interested in, or excited about, applying growth-mindset strategies in education. This highly interactive gathering will start with a basic discussion of emerging trends in the field, and then focus on practical application of growth-mindset strategies in classrooms, faculty teams, and more. Bring your ideas and questions! We provide a structure for participation and conversation. Participants will be encouraged to add their own stories and wonderings to the discussion. Leave with inspiration, fresh ideas and new collaborators. Optional: bring contact information or business cards to share.
NCSM—Math Leadership Resources	"NCSM is a national organization supporting math education leaders at the campus, district, regional, and university levels. Come find out more about NCSM resources that you can use as you support math teachers in your work. Resources include three-act tasks, coaching strategies, and formative assessment techniques."

Simple Centers, Seriously?	"Preparation, classroom management, differentiation can all make using centers a challenge. Come learn new strategies and share ideas to make center learning meaningful for students and realistic for the teacher. See new tools from ETAhand2mind to engage your students. Get free manipulatives that you can start using in class right away."
TEA Update for Elementary Mathematics	This session will present the most current information regarding kindergarten – grade 5 mathematics education. Critical issues such as instructional resources, ESTAR/MSTAR initiatives, Texas Gateway, state and federal requirements, PAEMST, and STAAR will be discussed. Attendees will be given the opportunity to ask questions.
Supporting the Newcomer in the Mathematics Classroom	Do you have students who are new to the United States? Join us as we discuss ways to create a safe and successful learning environment for students who are learning English. Explore ways to incorporate research-based strategies that help students acquire language and make math more accessible.
Ed Camp for Math Instructional Coaches	"Ed camps are participant-driven professional learning. In this session, math instructional coaches will gather together to discuss topics such as, how to help the struggling teacher, how to support teachers who have more years experience than you, how to use data to impact instruction, how to enroll teachers in coaching cycles, and anything you would like to ask other coaches about."
Lights! Camera! Principles to Action!	"In Principles to Actions, NCTM set forth a set of research-based actions for all teachers, coaches, and specialists in mathematics; all school and district administrators; and all educational leaders and policy makers. These recommendations are based on the Council's core principles. We have developed Innovation Configuration (IC) maps to provide clear pictures of what an ideal state would look like in each of these principles and descriptions. In this session, we will explore the IC map developed for ""Using and Connecting Mathematical Representations."""

Extended Sessions, Monday, 3:00 - 5:00 PM

Sense Making: Is It At the Core of Your Classroom?	The National Resource Council points to a “productive disposition” as one of the key strands of mathematical proficiency. A major part of this strand is viewing mathematics as something that makes sense. Are your students making sense of the mathematics they explore? Do they feel that mathematics is an inherently sensible endeavor? We’ll look at ways in which students don’t make sense of mathematics, consider why, and discuss strategies for making it a larger part of the expectations in your classroom.
Becoming Fluent in Developing Procedural Fluency	Principles to Actions (NCTM, 2014) describes eight effective teaching practices that support student mathematical learning. We will zoom in on one of these: “Build procedural fluency from conceptual understanding,” and see how we can build such fluency into our teaching practices. Specifically, we will explore 5 big ideas and 5 research-based instructional strategies that improve students’ procedural fluency (and conceptual understanding).
Integrating STEM Learning Through Mathematics, Modeling, and More	All students need more STEM knowledge than ever, starting with quantitative reasoning and scientific thinking. And many students need to be prepared for STEM careers. K-12 mathematical modeling offers a rich opportunity to integrate math and STEM. Let’s help every student learn to think, reason, and solve rich problems in math, STEM, and more.

Monday, 4:00 PM - 5:00 PM

A Framework for Supporting All Students: Classifying Figures, Grade 4 Mathematics	Experience classroom-ready activities that integrate research-based instructional strategies designed to narrow academic gaps related to classifying figures. Purposeful small-group intervention suggestions are incorporated to facilitate learning for a broad range of students including English Language Learners and struggling students.
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Improving Student Achievement Through an Effective Formative-Assessment Process	"Today teachers have access to the most assessment data since the inception of the schooling system. However, even with the wealth of assessment data readily available the achievement gap continues to persist. This session will actively engage participants in the development of an effective classroom-level formative-assessment process focused on standards-guided assessment, an effective record-keeping mechanism, and continuous improvement. In addition, participants will learn strategies to implement a proven data-informed culture structure inclusive of all stakeholders. Participants will leave the session empowered to enact a formative-assessment process and data-informed culture within their respective settings."
Know the Words? Do the Math	"Numerous studies have shown that you cannot teach math with computation alone. In accordance with the TEKS and state and district assessments, students must be able to bridge the gap between language and computational skills in order to do the math. It is not only a struggle for our English Language Learners but also for some of our native English speakers. So, how do we build vocabulary and reading skills in the math classroom? What strategies can we use to ensure student comprehension of word problems? These questions and more will be explored in this session."
Live. Love. Math. The Nitty Gritty About Math Interactive Journals!	Explore how to plan and implement Math Interactive Journals in your classroom. Learn how they can be effective in your instruction and in your team planning. Fall in love with their flexibility and your students' engagement with learning. Join me in discussing Math Interactive Journals and how they will benefit you and your students!
Multiplication and Division: Concrete to Abstract	"Participants will engage in a hands-on experience exploring multiplication and division from concrete manipulatives, through pictorial models, and into abstract representations, and will leave with extended knowledge of how to apply these strategies in their classrooms."
Off the (Word) Wall Vocabulary Games—Engaging Mathematicians with Academic Vocabulary	"Vocabulary is a key component to student success in mathematics. Understanding the language of math equips students with skills necessary to approach problem solving with confidence. Come explore fun and engaging ways to build student vocabulary and bridge gaps in learning using visual vocabulary cards, creative extensions of graphic organizers and some amazingly fun games. You will leave this session with your mind racing with ways to put your word wall to work!"
Solve Numeracy for Your Whole Campus!	"It can be challenging to implement a numeracy program, but this foundation is critical to student success. Hear best practices and solutions for developing numeracy school-wide. Learn how to get everyone involved, build incentives to drive student engagement, and see excitement about math become part of your campus culture!"
Math Workshop: A Focus on Small-Group Instruction	"As part of a Balanced Math approach, Math Workshop provides teachers a structure in which to meet the needs of diverse learners. Join me as we review procedures for setting up a successful workshop model, with an intense focus on the small-group instruction that is key to student success. Participants will walk away with a clear understanding of how to use data to form meaningful small groups, workshop planning and organization tips, example small-group lessons, and templates for immediate teacher use!"
Fractions: A Part of the Whole, You Know!	"Kathy Collins of Kim Sutton Associates will model best practices for grades 3-5 using area, set, and number-line models of fractions! You will experience "hands on" strategies sure to create powerful connections to multiplication and other content areas of mathematics. You will sing, dance, play dice games, and learn how to make this difficult area of mathematics challenging and meaningful for all students!"
The Plot Thickens with Data	"In this session, participants will engage in different activities involved with bar graphs, frequency tables, stem and leaf plots, and dot plots, and how they are tested on STAAR. This session will focus on the misconceptions that students have, how teachers can remediate this, and ways to solidify instruction in regards to categorical and numerical data. Participants will receive digital and hard copies of the activities, as well as Google Classroom components."

Ditch Whole Group: Teach Math Effectively Using Small Group Instruction	"Is whole-group instruction not working for you anymore, but you don't know what else to do? Join us to see how you can use only small-group instruction in class to reach all students, differentiate to meet their needs, and still meet all the requirements expected of you (like grades!). See how to incorporate different types of notebooks, technology and data collection. Walk away with ready-made templates and station activities you can easily implement."
Simple Centers, Seriously?	"Preparation, classroom management, differentiation can all make using centers a challenge. Come learn new strategies and share ideas to make center learning meaningful for students and realistic for the teacher. See new tools from ETAhand2mind to engage your students. Get free manipulatives that you can start using in class right away."
Data-Driven Math Instruction	"Apply the best practices of a former NASA system engineer to the design of effective and research-based learning experiences for students. Encounter a systematic approach to incorporating vertical alignment, establishing teacher and student clarity, analyzing student work, and integrating high-yield instructional strategies into every unit of study. Participants will learn the four critical components of an effective data driven instructional system, engage in sample activities that demonstrate the connections between systematic instructional planning and lesson delivery, hear testimonials about improved job satisfaction and teacher morale as a result of systematic instructional leadership, and leave with practical next steps that can be immediately applied to their unique educational environment."
Learning Targets - Helping Students Aim for Understanding	"The first thing students need to learn is what it is that they are supposed to be learning. Sharing learning targets and criteria for success is the fundamental formative assessment method, upon which all the others depend. Learning targets are often characterized as simply instructional objectives in student-friendly language. This is not true! A learning target is only a target if students are aiming for it, and a learning target is tied to what students actually do in an individual lesson. Participants in this session will discover strategies for helping students answer the question "What am I supposed to be learning?" Participants will learn to: -- View a learning target from the student's point of view -- Make learning targets "live" in a lesson -- Use success criteria (student look-fors) to develop assessment-capable students"
Strike 1, Yerrrrr Out!	"Repeated warnings in a mathematics classroom do nothing more than empower students to push a teacher to their breaking point. The power in the classroom shifts as teachers lose control. Teachers are frustrated, everyone loses, and precious instructional time is lost. Learn how to get that time back! Introduce a new approach to discipline in your mathematics classroom that teaches your students to recognize their own behavior problems once they lose focus. The result is a happier classroom with increased math achievement! Stop writing referrals, drop bad behavior, and roll on with instruction!"
Naming Problems—A Strategy for Solving STAAR Math Test Items	"Naming problems helps students read STAAR word problems actively by giving them a concrete task: to identify what is given and what is asked for. Naming can help students see a problem's larger structure, and help them move forward in solving it. Using released STAAR test questions, we will model this problem-solving strategy and show ways you can apply it in your classroom."
Conceptualizing Multiplication	"Multiplication is traditionally taught as a series of procedures that students follow. By shifting the focus in mathematics from procedural to conceptual understanding, learners are able to reason mathematically, allowing flexibility and creativity in the way they approach multiplication. Join us as we critically explore the concept of multiplication by looking at transferable big ideas that underlie this concept. Knowing these big ideas will allow learners to multiply with all number forms, including algebraic expressions, in ways that are deeply rooted in the concept of multiplication itself and bring true understanding to what is typically viewed as a collection of various procedures to be memorized."

Opening Sessions, Tuesday, 8:00 AM - 9:30 AM

Math and Democracy	Should the government increase the minimum wage? How have global temperatures changed over time? How much should health insurance cost, and who should buy it? As a country, we seem increasingly unable to discuss issues that matter. Instead of engaging with one another thoughtfully and respectfully, we rely on partisan news to reaffirm our beliefs and social media to retreat deeper into ideological silos. Fortunately, math teachers can help. Mathematics is the language of logic and reason, and math class is a place where students can discuss the most important topics facing society. In this presentation, we'll use math to explore one such topic...and from a variety of perspectives. With civics no longer taught in many schools, it's up to math teachers to help students become the thoughtful, analytical citizens our democracy depends on.
Six Spheres of Influence for Mathematics Teaching and Learning	When teachers are instructional leaders in their schools there are positive outcomes. Effective leaders of mathematics teaching must know what to promote in instruction. Effective leaders must be "critical consumers" of the structures and practices imposed on teaching practices to prevent the support of requirements that could inhibit student achievement in mathematics. This is best accomplished by understanding leaders' six spheres of influence in mathematics teaching and learning. Dr. Juli Dixon models best practices as she shares these six spheres through the exploration of mathematical tasks and how to plan for them as well as through the use of authentic classroom video. Objectives: - Make sense of six spheres of influence to support students to engage in rigorous mathematics standards, - Explore productive strategies to increase student achievement in mathematics, and - Create a shared image of best practices in mathematics teaching.

Extended Sessions, Tuesday, 10:00 AM - 12:00 PM

Planning and Facilitating Problem Strings	How do you plan to facilitate powerful instructional routines? What are the important teacher moves in making the lesson format of Problem Strings work well? A Problem String is a powerful lesson structure where all students learn, have access to the problems, and are challenged. The success hinges on the teacher's purposeful question order, class discussion, and modeling student strategies to build connections. In this extended session, we will unpack the planning process so you can learn to facilitate strings in your classroom. You will participate in rehearsals, where the teacher makes important teaching moves explicit as the problem string plays out. Want to get your students really thinking and mathematizing? Come join us!
Feeding Your Inner Mathematician through Math Teachers' Circles	Counting the number of ways to decompose a number into sums is an accessible but challenging puzzle. In this general interest session (particularly geared for elementary teachers), we will "feed our inner mathematicians" by exploring various ways to represent sums and the patterns that emerge from them, and see how changing our point of view can help us get started on a novel problem! Through investigating this problem, we will also introduce the format of a Math Teachers' Circle (MTC). MTCs are communities of K-12 teachers and higher-education professors who meet regularly to investigate mathematics together. A growing body of research suggests that MTC participation increases mathematical knowledge for teaching, supports healthy teacher mindsets, contributes to greater professional engagement, and increases the use of high-leverage classroom practices that promote student learning. Based at the American Institute of Mathematics, a research institute supported by the National Science Foundation, the MTC Network provides centralized mathematical, organizational, and mentoring resources for a growing national community of MTCs.

Tuesday, 10:00 AM - 11:00 AM

#GotProblems? Not Like These!	"Generate excitement among your students by modeling how to take risks in mathematical problem solving. Energize and enrich your curriculum by encouraging your students to dialogue with each other and reminding them that a real problem is not the same as a practice exercise. Through the use of problems with multiple solution paths, teachers will learn techniques that will help their students reduce the need to "cram" for any states' assessments."
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Don't Be "Last in Line"	Come learn ways to make connections from all forms of representations to the number line and keep your class in the "front of the line."
Fractioned: Developing Understanding Through Meaningful Tasks and Discussion	"Participants will examine various fraction tasks, fractional models, and student work in order to explore ways to build conceptual understanding about equivalency and computation. We will explore specific strategies for utilizing the Mathematics Teaching Practices to promote fractional understanding. Video and math tasks from classrooms will be analyzed."
Keeping All Your Numbers In Line	"The number line is an easy model to understand and has great advantages in helping students understand the relative magnitude and position of numbers, as well as to visualize operations. In this session, participants will experience the many ways to use open, closed, and double number lines to represent and solve problems with whole numbers, fractions, and decimals. Using a virtual number line, participants will be encouraged to represent their thinking using drawing and annotation tools."
Starting the Year with Guided Math	"In this session, elementary math teachers (K-5) will receive information on how to plan, organize, and implement a guided-math block within the context of the math workshop approach for teaching math. Teachers will learn tips on how to use initial assessment data to create flexible learning student groups in order to deliver differentiated and scaffolded instruction. An overview of how to design guided math lesson plans will also be shared with participants, along with resources for creating engaging activities for small groups of students. Participants will be encouraged to use technology to deliver math content in their classroom as well as the collection of formative assessment data to guide future instruction."
#gotgames? Engaging Children in Mathematical Thinking Through Games!	"This session presents free sources of high-quality lesson plans, games, and activities for the 3-5 math classroom. We will provide an overview of each resource and then play an example game. In addition, presenters will engage the audience in an interactive discussion of various modifications and classroom considerations. Come play with us and learn new ways to engage students in mathematical thinking!"
5th Grade—Are You Ready for Readiness?	"How can we really be sure we are getting our students ready for the Readiness standards on the 5th grade STAAR exam? In this session, we will look at how they really test the Readiness standards by looking at the most recently released STAAR exams and comparing the Readiness standards side by side while answering some key questions about each one. For example: What kind of questions are our students missing, and why? Can we plan ahead to help our students prevent those mistakes? Can our students apply these strategies themselves to assess their own progress and learn from their own mistakes? While we are looking at the 5th grade test specifically in this session, any grade level is welcome to join us. These strategies can be applied to any grade level."
Got Number Sense or 100's Chart Strategies?	Got 100 Chart Number Skills? Want some? Come play with us and find out about some great hands-on and engaging 100s chart activities. We will share examples of games, missing numbers, pattern recognition, and logic fun. Activities will include several levels of difficulty and extensions perfect for aiding teachers in differentiating instruction for all levels of learners. Even if you have never used 100 charts, you will love this session! Activities shared will be easily editable for all elementary grade levels.
Anticipation Guides in Mathematics	"Let's leverage what we know about high-quality literacy instruction by utilizing anticipation guides for mathematics. As pre- and post-assessments, these tools can facilitate access to prior learning, promote discourse, and foster a growth mindset with students in K-12. Careful questioning can open the door to responses from all students and the use of images and reduced text can remove barriers so they may access the content. I will share examples of anticipation guides and provide access to these tools digitally as well."

Connect 4: Considering Connections for the Progression of Mathematical Ideas from Grade to Grade	"he Connect 4 planning process aids educators in distinguishing between enduring concepts and procedural computations—the latter often replacing deep mathematical learning. Often in mathematics, big, universal, mathematical ideas are segmented into bite-sized pieces, never allowing students to make connections back to previous learning. In this session, participants will explore one of the Connect 4 connections. Participants will take a deeper look at the vertical connection by engaging in a sample math concept and the connections that create a coherent mathematical idea and leave equipped to replicate the process with other mathematical ideas."
Fold with Focus: First Steps and Decisions with Foldables®	"Do you wonder where to begin implementing Dinah Zike's Foldables® in your classroom? Do you leave a Foldable session motivated and inspired, then find yourself overwhelmed at the prospect of using this highly-effective strategy with students? This session is for you! Clear hurdles to implementation in this highly engaging and interactive presentation. Leave ready to address TEKS standards, vocabulary, and more—find your focus with Foldables®!"
Two Pedagogy Game Changers: Spaced Repetition and Accelerated Math-Fact Mastery	"The session discusses two symbiotic pedagogical methods to accelerate students 'back to grade level' and increase the instructional efficacy classroom teachers for grades 1-8. The presentation highlights a differentiated spaced repetition system that affords instructional flexibility in conjunction with a differentiated numeracy system, an existing paper-based warm-up system and a rapid mastery of grade level math process skills. The presentation will also focus on accelerated math fact mastery in conjunction with daily numeracy and teacher-focused spaced repetition for all four math fact operations. The success of these instructional techniques have produced two (2) National Blue Ribbon Schools. Both urban Title 1 elementary schools were also selected and featured as "Profiled School for Academic Excellence" on the United States Department of Education Blue Ribbon website."
We Like to Party! And by Party We Mean Teach Math!	Come see how much fun teaching math can be! Learn mathematical card tricks, dice tricks, number tricks. Re-spark your enthusiasm to teach math knowing that enthusiasm is contagious and your students will be loving your class! There is a free deck of cards to all participants.
Wild 'n' Wacky Workstations (K-5)	"During this hands-on and engaging session, teachers will learn how to incorporate TEKS-based workstations related to number relationships, number operations, and algebraic reasoning to increase student engagement. These workstations incorporate higher-level thinking skills, problem solving, student accountability, and are just plain fun! Activities utilize materials that are low to no cost, so start collecting! Participants will walk away with a QR code and links to plentiful workstation games and activities."
I Hate Math... When Did This Happen?	"As students progress from elementary through to high school, it seems that many of them lose their zest for learning mathematics and problem solving. When does this change in attitude occur and why? This study investigates the math attitude of 5th and 6th grade students and quantitatively compares multi-year and multi-district data. Also, qualitative data is used to pinpoint some causes of this change in attitude."

Tuesday, 11:30 AM - 12:30 PM

#Powerful Mathematics	What role does conceptual understanding play in assisting struggling math students? What are the steps to linking effective instruction and assessment for these students? Participants will tackle these questions during this interactive workshop.
Getting Started with Interactive Notebooks	Are you ready to incorporate interactive notebooks into your mathematics instruction? Are you unsure of how or where to begin? Join us as we explore the steps needed to create interactive notebooks and share how we use interactive notebooks to support vertical efforts.
Getting Started: Creating Engaging Workstations for Grade 3 Mathematics	"What do workstations that engage students in mathematical thinking look like and sound like? What kind of activities are needed? How is the use of academic language embedded into the activities? Join us as we explore how we create TEKS-aligned, engaging workstations, and sample some as well!"

Got Math Habits	"Process Standards...Habits of Mathematicians—Are they for real, or are they just an unbelievable wish? How do you build a classroom culture that makes the process standards the ""habits"" of mathematicians? How do process standards come alive in the classroom? How are they a part of your classroom every day? Come visit with a school district that has begun this journey into how to introduce the process standards to students during the first five days of school, changing the culture for the rest of the year."
Improving Daily Math Instruction by Integrating Number Talks	"Do you wonder how to have enough time in your math block to incorporate a Number Talk in addition to the lesson? We'll explore strategies for using a Number Talk to engage students and pre-assess what they already know, while introducing and reinforcing concepts."
Making Guided Math Work for You and Your Students (Gr K – 5)	"Guided math provides a structure for best practices: differentiation, formative assessment, hands-on learning, small group and whole group, spiral review, etc... but it isn't easy. Whether you are just learning about guided math or have been using it for years, this session is designed to make guided math work for you and your students. You will leave with resources and ideas to put into your classroom immediately."
Representing Mathematical Ideas	Want to learn how to represent mathematical ideas? Then join this session as we explore bar models and number lines and their connection to understanding several mathematical ideas.
The World of Interventions: Filling the Gaps Using Small-Group Instruction	"Teaching Math can be fun and exciting! However, it can be difficult to meet the needs of all our students. Students have unique learning styles that sometimes cannot be addressed in a whole-group setting. Some students come to us with certain learning gaps that hinder them from reaching their highest potential. In this session, we will talk about the ways we can diagnose what our students need, construct a plan that will help fill the gaps, and find ways to implement best teaching practices. We can make a difference in each of our students' lives. Making them feel successful in our math class is a good start!"
Place Value and Number Line Games	"Come learn old favorites and brand new math games that focus on the concepts directly related to place value: whole number and decimal place value, expanded notation, rounding, patterns and sequencing, fractional number line concepts. Number lines are easy to find, versatile to use and work seamlessly with place value dice and cards. Using a variety of number lines can also help you differentiate your instruction. Gameboards, journal extensions, student work will be shared. Bring your cameras along to take pictures of strategies that really bring these concepts to life for your students."
Deepening Math Reasoning Through Notice and Wonder	"Ask students to notice and wonder in math class and you will see engagement soar. You will see curious learners explore math with enthusiasm. And most importantly, you'll notice students making sense of math. This session will explore various ways to incorporate noticing and wondering in your daily math routines. Participants will discover how to use notice and wonder as part of the problem-solving process as well as a vehicle for making connections between mathematical concepts. Noticing and wondering promotes rich discourse as students justify their thinking, share ideas, and ask questions. Find out how this strategy empowers learners to make mathematical discoveries. This versatile strategy allows for learners of all abilities to be successful and challenged."
Got Interactive Notebooks?	"Do you want more from your interactive notebooks than cutting, pasting, and copying? Come to this session to explore ways to focus your interactive notebook around students' thinking and learning. Investigate ways you can adjust your notebook entries to uncover possible student misconceptions and provide opportunities that allow students to use creative and analytical thinking. Links to access the materials and resources will be provided."
You Can't Build a Foundation Without Concrete! Guide Math Through the C-R-A Model	"Most teachers know the Concrete-Representational-Abstract (C-R-A) model is best practice for student learning in the mathematics classroom. But sometimes teachers feel like they don't have enough time to include the use of concrete manipulatives. Come to this session to see modeled concrete concepts/skills that make learning more tangible for students so they truly understand math at the abstract level. Participants will leave with a better understanding of the C-R-A model, as well as ideas and tools to incorporate in their future lessons."

Math Coach Must-Have Tools	"How do you organize your time each day as a mathematics coach? How do you organize your materials each day? Join us as we explore some must-have tools a mathematics coach must have to support teachers with coaching, planning, and data analysis!"
Developing the Whole Teacher Using Social Networks	"Like students, teachers have social and emotional learning (SEL) needs that are key to their development. School and districts have begun work around student SEL, but little has been done to look at teachers' SEL needs within professional development. This session will examine just how important these needs are for teachers, as well as ways social media can provide support. Let's use the full potential of social networks to develop and change teaching practices for greater student achievement!"
Innovatively Teaching Solving Equations Through Real-Life Applications	"Technological advances are making traditional procedural focused worksheets antiquated. In addition, these traditional worksheets do not effectively engage students nor build their authentic problem-solving skills. In this workshop, participants will learn how to transform the concept of 'solving equations' into fun hands-on activities, real-life application scenarios, and collaborative projects that will help students formulate a profound insight and conceptual understanding of solving equations. Participants will be provided with tools and resources that can immediately be utilized in their respective classrooms."
It's All About Culture	As rigor increases in the classroom, student engagement becomes critically important. This session will introduce activities that involve students in the learning process. From the very first day, students will begin to take responsibility for their own learning and accept the challenge of independent thought, even when collaborating. This fosters a culture of teachers and students learning from one another in an environment of active engagement.
Next Steps on TI-Nspire CX for Intermediate Users	Have you started using TI-Nspire, but know you could be doing so much more? During this hands-on session, attendees will use the TI-Nspire™ CX to explore a variety of 6–12 grade concepts to support instruction of the TEKS. The session will also focus on many TI-Nspire features including multiple and linked representations of data to dive deeper into mathematical thinking. The TI-Nspire™ CX Navigator System will also be used for instruction.
Integrate Problem Solving, STEAM Connections, and Formative Assessment	"Evidence has consistently indicated that traditional mathematics curriculum and instructional methods are not serving students well and fail to prepare them for an accredited undergraduate STEM degree program and high-paying STEM-related careers. Instead, students face barriers that impede engagement and motivation in mathematics education, including learning anxiety. Come see how integrating math topics, using relevant, worthwhile problems, real-world STEAM connections, and authentic assessments used in the classroom on a regular basis help develop mathematically proficient students who have a positive disposition towards math."
Tips and Tricks on the TI-84 and TI-84CE(color) for Grades 7-12	For new and experienced users, learn several creative ideas to utilize the TI-84 and TI-84CE (color), much more effectively, develop conceptual understanding, use the 84 as an evaluator of complex expressions easily, trace on a graph and table simultaneously, use color photos to teach transformation graphing, and much more. See how to fully utilize the TI-SmartView graphing-calculator emulator.

Extended Sessions, Tuesday 12:30 PM - 2:30 PM

Geometry Field Trip! Everyone's Invited! Directions Are Included!	Experience how exciting a journey with polygons and circles will be! Both hands on the steering wheel, we have work to do! You will build, construct and have your eyes opened to the beauty of this trip. You will leave with a handout rich in souvenirs to use right away in your classroom. There will be many photo opportunities as we use 53 geometric terms, play games with polygons and see math as art!
Interactive Math Journals: A Math Wikipedia	Discover how to create journals with your students that are a useable reference throughout the year. Participants will learn how to set up and organize journals, as well as see and make samples from most of the math strands. Foldables and suggestions for preferred materials will also be included. This is a hands-on session. Be ready to cut, fold, and glue! A spiral theme book can be useful.
Engaging Tasks + Powerful Questions = Lesson Magic in the Form of +/- 8 Slide Lesson Guides	Most of us struggle to craft and implement effective mathematics lesson that live up to the high expectations of the 8 Mathematics Teaching Practices found in Principles to Actions. We'll explore a development process and some examples of +/- 8 slide lessons that have emerged from the process and that guide the planning and implementation of great lessons.

Helping students make up their minds: How to create better puzzle-solvers in & beyond mathematics	Here's a Puzzle: How can we joyfully and impactfully engage our students so that they will thrive in their math courses as well as in life? How can we inspire our students to appreciate the beauty and power of mathematical thinking? Here we will offer some practical strategies of thinking that will allow our students to not only make greater meaning of mathematics, but use those mindful practices beyond their math classes and for the rest of their lives. We will illustrate these thinking practices through some illustrative puzzles.
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Tuesday, 1:00 PM - 2:00 PM

Fractions without Fear	"Understanding fractions is our biggest challenge! This hands-on session will explore the important, foundational TEKS of unit fractions, and move to comparing fractions. We explore the complex algorithm of adding and subtracting fractions, using the concrete to pictorial to abstract model that helps students understand why, so they retain how. We'll focus on the Mathematical Process standards as we delve into rigorous anchor tasks, games, and strip diagrams with fractions."
FUNctional Teaching Strategies for Differentiated Learning	"We will explore different cooperative-learning strategies and small-group instruction formats for the intermediate grades, 3-6, presented in a problem/solution format of everyday classroom challenges. Teachers will walk away with sample calendars of how to maximize these teaching components in a typical unit window, as well as a new toolbox of techniques that will turn skills practice into quality differentiated learning."
Hands-On, Minds-On: A Mini Make-and-Take Workshop: Math Games, Puzzles, and Project Ideas	"This is a mini "Make-and-Take" workshop that will help teachers create their own games and puzzles that target a specific TEKS or topic. Teachers will end up with sample products of their OWN games and puzzles that can be modified and used in their own classroom. Teachers will also learn how to integrate Paper Roller Coaster using Project Based Learning. Students learn best when they are fully engaged and there is nothing more engaging to young people than fun. They also perform best when they are intellectually challenged but do not feel threatened to participate and express themselves. These games, puzzles, and projects can be used for different class sizes and settings."
Interactive Anchor Charts and Content Walls	"Learn how to engage your students and build their math knowledge and conceptual understanding by interacting and manipulating content through the use of interactive anchor charts and content walls. These guided and purposeful activities will increase student success by allowing the transfer of knowledge and academic vocabulary for all learners. In addition to building student knowledge capacity, teachers are able to formatively assess where each student is in their learning journey. Participants will leave with a plethora of exciting, engaging, hands-on ideas and activities ready to begin implementing immediately to make their math workshops a fun and successful place of learning."
Stepping Up Through Multiplication	"Throughout this session, we will evaluate the progression of multiplication, beginning with the skills starting in 2nd grade with whole numbers, and working our way up through 5th grade with decimals. We will discuss the various models and representations, such as base 10 blocks, area models, properties of operations, and more!"
Getting Wild About Technology	"Take your classroom instruction to the next level using creativity, innovation, critical thinking, problem solving, communication, and collaboration using 21st century math learning experiences. 21st century math classrooms are not defined with program adoptions, learning resources, and online tools, but rather are defined by how the learning experience is brought to life. (Krohn) Come learn strategies to integrate technology into your everyday lessons in a fun way."
Teaching Mathematical Concepts Through Hip Hop Music—RUSMP	"The session will focus on providing teachers an innovative and fun way to teach mathematical concepts through hip-hop music. Whether it's fractions, multiplication, division, or measurement, teaching math concepts through hip-hop music assists students in retaining and applying information to decrease frustration. Participants can create their own hip-hop songs for selected concepts and will walk away feeling empowered."

Tabor Rotation: A Proven Framework for Simplifying Small-Group, Guided Math, and Stations	How can a teacher successfully and easily use small groups, stations, and create balanced instruction in math? How can a teacher personal instruction that meets the needs of all learners on a regular basis? It's simple—use the Tabor Rotation Framework! This interactive session will explore the specific components and activities that will help you begin using math stations & guided math immediately. Come learn and have fun at the same time—just like your students will!
Word Walls + Work Stations = Academic Language	"Many classrooms have word walls and many classrooms have work stations...but do we have work stations that utilize word walls? In this session, we will explore how to merge two valuable classroom resources—word walls and work stations—to develop students' use of mathematical academic language."
Numbers Got You Boggled? Use a Model!	"Participants will experience and practice creatively solving story problems using strip diagrams to make a plan, and models to help them through the computation process. Participants will leave ready to create flexibility in problem solving to reduce stress for students and teachers!"
Math Vocabulary, Gestures, and Motion	"Come learn fun ways of learning math lessons and vocabulary words through gestures and motion. The audience will practice movements of vocabulary words, games, and activities that will engage students in their classrooms. More than 120 vocabulary words and mostly all lessons can be introduced, learned, and practiced with gestures and motion. www.facebook.com/adrianmendozaeducation "
The Number Line Activity: Empowering Mathematical Thinking	Students can develop incredible fluency with mental mathematics using this easy-to-implement strategy. Adaptations make the lesson a perfect fit for arithmetic through algebra. A ready-for-Monday handout is available.
"Donut Worry!" We Can All Learn From Mistakes	"We all know that learning is assessed in a variety of ways on high-stakes tests. Items will never be repeated on these tests, but the visuals and errors associated with the content will be seen again. Teachers can use these items strategically and purposefully to help students learn from their mistakes. Purposeful and strategic strategies teach for: access—students use the information from the problem to determine a concept, rigor—students learn to adapt errors in learning found in the distractors, and transfer—students explore the variety of ways a standard can be assessed. We will engage in these instructional strategies to learn from our mistakes, while using hands on resources, like Learning Palettes, that provide immediate self-correction, allowing students to understand and correct errors and evaluate their math progress."
I'm a Math Leader: Now What?	"Are you a math leader on your campus? Is this your first year as a math coach? Then, come join us as we share our lessons learned and different tools that have helped us succeed in this dynamic role in elementary mathematics."
Increasing Equity: Structures and Strategies that Promote Productive Conversations	"Do you want to advance equity and improve achievement for each student in your school or district? How do you set the stage for discussions around challenging the status quo and advocating for change? Purposeful action is needed to identify, acknowledge, and overcome disparities in access to high-quality instruction and instructional resources by demographic. Come explore structures and strategies that promote honest and reflective conversation about the reasons achievement gaps exist and the need for high-quality instruction that allows each student to maximize their potential."
Innovatively Teaching Solving Equations Through Real-Life Applications	"Technological advances are making traditional procedural focused worksheets antiquated. In addition, these traditional worksheets do not effectively engage students nor build their authentic problem-solving skills. In this workshop, participants will learn how to transform the concept of 'solving equations' into fun hands-on activities, real-life application scenarios, and collaborative projects that will help students formulate a profound insight and conceptual understanding of solving equations. Participants will be provided with tools and resources that can immediately be utilized in their respective classrooms."

Walk the Number Line for Research-Based Results for K-5!	"Elementary learners need a number line for powerful math concepts like skip counting, adding on, alternative algorithms for regrouping, making change, elapsed time, rounding, factoring and fractions! Number lines are the most frequently discussed math tool to achieve the TEKS. You will be amazed at the unique strategies that Kathy Collins of Kim Sutton Associates will use with this tool! You will be ready for action with all the latest ideas for teaching every area of mathematics using number lines!"
The Three "I"s to Mathematize Anything	"Math is everywhere and in everything, yet we only see it in the classroom with paper and pencil. Let's explore the three "i"s" to supercharge anything to become a math experience that enhances engagement and learning for all."
Formula Chart Fixes	Are your students struggling with academic vocabulary and are unable to make the connection between the lessons experienced in class and the problems used in summative assessments? Learn to use the STAAR/EOC Reference Chart to help students make the connections between content terminology and successful application. Join us for a hands-on session of converting your grade-level reference chart into an instructional tool students can personalize and adapt to not only master concepts throughout the school year, but achieve success on high stakes state-level assessments as well.
Where's the "On" Button?—The TI-Nspire CX for Absolute Beginners	This hands-on session will explore basic features of the TI-Nspire CX handheld to support classroom instruction of the TEKS. Become familiar with all the built-in applications, and learn how to navigate around the handheld and through documents. This is truly for beginners. Handhelds will be provided, but feel free to bring your own.

Tuesday, 2:30 PM - 3:30 PM

Accountable Talk	"Learn a structure for helping your students to have deep mathematical conversations that lead to insightful mathematical understanding and application. Learn how one teacher took her structures for Number Talks and Intentional Talk to the next level. Participants will have the opportunity to view a video of students in an accountable talk circle. Let your students do the talking with their accountable talk stems while you act as the facilitator. Participants will then learn steps to implement accountable talk circles in their own classrooms. Structures for open and comparison sharing for guiding students through the C-R-A will be shared, along with suggestions for when to use them. If you want to learn a structure that increases student knowledge, you won't want to miss this!"
Algebraic Activities + Geometric Strategies	Participants in this session will experience a "Parallel Modeling Strategy" that supports students in transferring a process and a "Technical Reading Technique" that supports students in reading and understanding applications of mathematics.
Illustrate Math	Do your kids struggle with problem solving? Do they get hung up on the length of a word problem? In this session, we will demonstrate and discuss ways to make cross-curricular connections in reading and math which will allow students to view word problems through a new lens! Through simple illustrations, you will learn how to lead students to better comprehend word problems and find solutions which will foster engagement and advancement.
Linking the Learning - Domino Math Games	"Come prepared to play games that incorporate the use of easily found standard dominoes that teach the following concepts: all operations, including multi-digit work, place value including decimals, fractions, data management and analysis, problem solving and more. This manipulative is easy to use and integrate into your math program, easy to differentiate and appealing to all learners. We often think dominoes are just for primary classrooms, but they are mathematically awesome for upper elementary and enjoyed just as much by the older students. Come experience the math potential sitting in a set of 28 dominoes. Gameboards, management tips, journal writing extensions will be shared throughout. Great for regular, ELL and special ed. The games presented would also make an awesome family math night!"

Math, No Problem!	"The Four Cs are what industrial leaders determine are the most important skills that K–12 students need to learn in order to succeed in the 21st Century. These Four Cs are Critical Thinking, Communication, Collaboration, and Creativity. Having students learn to engage and work in partnership with others is a primary educational tool that will allow students to flourish in the 21st Century. This session will offer a number of games and activities that students can use to master the math skills they need to succeed while using the Four Cs. We will discuss strategies for working with students of all abilities in math and how reinforcing positive attitudes in math brings about positive math growth."
SWAG—Students with a Goal	Growth mindset starts with believing in your students by providing quality instruction. Math fact fluency goal setting supports math standards while developing automaticity which is effortless recall of arithmetic facts. Goal setting with students identifies the how and why math fact fluency is needed while developing perseverance in meeting goals.
Using Differentiated Workstations to Support Student Learning	"Are your workstations meeting the needs of your students? Are all of your students doing the same workstation regardless of their instructional level? In this session, we will use data to determine the need for differentiated workstations, examine different plans for differentiating workstations, and sample differentiated workstations in the areas of place value, facts, and rounding."
#GotDifferentiation?	"I will give examples of math-differentiated lessons. The lessons will be vertically aligned and focused for struggling students, on-level students, and challenging for students that are above level."
#gotmath! Workshop—Getting Started	"What is all of this talk about Math Workshop? What does it look like and how do you make it happen? Join us as we examine the basic ""must haves"" for getting Math Workshop started—such as setting a classroom schedule, planning for whole group and guided math instruction, and using tools such as interactive notebooks, anchor charts, and manipulatives to facilitate instruction. Let's explore ways to structure our daily block of mathematics instruction in a way that supports all learners!"
The Coach's Playbook: Key Roles for 3-5 Mathematics	What does it take to be an effective coach in upper elementary mathematics? How do you support individual teachers and teams of teachers in a way that honors all stakeholders and promotes student success in Grades 3-5 mathematics? Join us as we share our lessons learned from the field and explore key roles and characteristics of an effective mathematics coach!
Focus on Practical Formative Assessment	"#engagement! This presentation will help participants define and understand the importance of creating a balanced classroom-assessment approach by using formative assessment. Participants will walk away with formative-assessment strategies that are engaging, simple, differentiated, and effective."
Visualizing Fractions with Pattern Blocks	"Come explore the use of Pattern Blocks to promote conceptual understanding of fractions. In this hands-on session, we will use Pattern Blocks to develop the area model of fractions, equivalent fractions, operations with fractions, and more."
Creativity vs. STEM	Where does the creative impulse belong in STEM education? Why are tech companies recruiting Liberal Arts majors? Is mathematics still the fundamental part of STEM? If so, why is it so often taught without any challenge to demonstrate creative thinking? MIND Research Institute's Vice President of Content Creation, Nigel Nisbe, will demonstrate how using innovative technology based on neuroscience and motivational research can transform the learning process of mathematics for students, teachers, and parents.
So You're A Math Coach—Now What?!?	"This session will affirm all of your struggles and successes as a new math coach! We will focus on relationship building with your team, decoding an instructional coach menu of services, and sharing best practices via sample forms, videos, and real experiences."
Use Discourse to Access English Learners' Language and Mathematics	"Discourse in the classroom will increase English learners' productive and receptive language functions and their comprehension of mathematics concepts. All students need to reason, construct viable arguments, and critique the reasoning of others. Increasing discourse will support students' language development as well as their learning of rigorous mathematics as they engage in these practices."
Three Act Math Tasks with TEKS!	"Dan Meyer's Three Act Math tasks include engaging students through an entry event, providing more information, and setting up for extension lessons. Come to this session to experience some sample Three Act Math tasks and learn how to use them in your classroom. This session will also provide participants with a link to a crosswalk of Three Act Math tasks that are aligned to the TEKS."

Influence. Impact. Grow. Lead.	"Are you leading with or without a title? Are you wanting to lead? Let's explore ways to become a leader of influence, impacting efforts within a team, campus, or district. Let's collaborate to consider ways to encourage growth for ourselves and our colleagues to positively impact students and their learning."
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Extended Sessions, Tuesday 3:00 PM - 5:00 PM

Feeding Your Inner Mathematician through Math Teachers' Circles	Counting the number of ways to decompose a number into sums is an accessible but challenging puzzle. In this general interest session (particularly geared for elementary teachers), we will "feed our inner mathematicians" by exploring various ways to represent sums and the patterns that emerge from them, and see how changing our point of view can help us get started on a novel problem! Through investigating this problem, we will also introduce the format of a Math Teachers' Circle (MTC). MTCs are communities of K-12 teachers and higher-education professors who meet regularly to investigate mathematics together. A growing body of research suggests that MTC participation increases mathematical knowledge for teaching, supports healthy teacher mindsets, contributes to greater professional engagement, and increases the use of high-leverage classroom practices that promote student learning. Based at the American Institute of Mathematics, a research institute supported by the National Science Foundation, the MTC Network provides centralized mathematical, organizational, and mentoring resources for a growing national community of MTCs.
Making the Connection: Linking Concepts and Procedures	Concepts and procedures are most valuable when they are connected. Engage in experiences designed to bridge concepts and procedures. Explore three critical components demonstrated as essential for connecting concepts and procedures in grades K-12. The three components for bridging concepts and procedures are to: (1) Know the mathematics; (2) Choose the right tasks; and (3) Make the connection explicit. Make sense of the three components through tasks, classroom video, and discussion. Objectives: Participants will: - Delineate between concepts and corresponding procedures through tasks; - Examine three components for supporting K-12 students to connect concepts and procedures; and - Develop a shared image of these components through classroom videos.

Tuesday, 4:00 - 5:00 PM

"Hands-On, Minds-On" to a Mini Make-and-Take Workshop: Math Games and Puzzles for Elementary	"This is a mini "Make-and-Take" workshop that will help teachers create their own games and puzzles that target a specific TEKS or topic. Teachers will end up with sample products of their own games and puzzles that can be modified and used in their own classroom. Teachers will also learn how to integrate Paper Roller Coaster using Project Based Learning. These games, puzzles, and projects can be used for different class sizes and settings. rs 5. Special Education Students 6. English Language Learners"
Explore the Core—With Math On the Floor!	"Math makes more sense when you actively create and communicate your conjectures with others! Participants will build professional understanding as they focus on critical understandings of each operation and fractions using activities that build conceptual knowledge of foundational mathematics. Specific ideas to directly address common misconceptions that occur with learners will be the focus of the work. Teachers will see that by engaging children in the exploration of math concepts using games and a large 100-square floor grid, each student can build a depth of knowledge in mathematics. Assessment and differentiation suggestions will also be shared."
Improve Student Fluency with Math Talks and Number Strings	We know timed tests do not teach fluency, but what does? Learn how to use number strings to teach strategies to improve student efficiency and flexibility with numbers and math talks to improve students' math language and sharing of ideas. Students will learn strategies for addition and multiplication including fractions. They will gain confidence in their math skills. Every student can be a math person!
Problem Solving: Changing "I Can't" to "I Can!"	Have your students ever said "I don't know what to do" when problem solving? How can strip diagrams be used to visualize word problems and provide a stepping stone to student understanding? Join us as we explore effective problem-solving models and mathematics workstations that give students a starting point.

Transform Your Classroom with Nearpod—Engage, Motivate, and Excite Your Students!	"Imagine a classroom with 100% participation in math, where the teacher receives instantaneous feedback and real-time reports. Imagine students excited about learning math and empowered to participate. I have described an amazing teaching tool called Nearpod! In this workshop, join me to discover how you, too, can transform your students' learning through the use of interactive hands-on lesson content with features such as: Virtual Field Trips, 3-D Objects, Sways, Polls, and much more! You will also receive digital resources for continued discovery, including how to create your own customized lessons!"
Using Context to Unlock Division	"How do we develop meaning for the operation of division? We will explore the relationship between multiplication and division in real-life examples using ratio tables and array/area models. We will use concrete objects to model the different types of division situations, including interpreting the remainder."
Using the TEKS to Develop Fluency Transition Students from Using Storage Memory	Math Fluency is so much more than memorization of math facts and equations. Procedural fluency in mathematics is essential to a student's ability to apply math concepts accurately and efficiently. Let our experts show you how the TEKS are structured vertically and horizontally to develop a conceptual understanding of addition and subtraction.
Math Workshop: Needs-Based Instruction	"We all know that pre-assessing, differentiated instruction, and small-group instruction is best for our kids. We also all know how hard it is to make those three best practices of teacher instruction work. Using Math Workshops, you can easily integrate differentiated instruction with small group teaching driven by pre-assessment that is tailored to your lessons. In this session, you will receive ideas that have been used in our personal classrooms, a make-n-take version of our Math Workshop blueprint, and tangible ways to implement this model into your classroom on day one."
Fraction Success for Every Child: Concepts, Fluency and Real-Life Problem Solving	The speaker will actively engage attendees with strategies and tools to develop deep understanding of fractions, focusing on fractions as numbers, equivalent fractions, operations with fractions, and decimal notation. She will engage attendees with real-world problems that use fractions, modeling how to deepen understanding and increase student engagement with real-life applications. She will model differentiation strategies, use of manipulatives, and effective questioning strategies, to advance achievement for every student. Handouts provided.
OMG! Math!	"Come see how graphic organizers can transform your class! Make an Outstanding Math Guide (OMG) containing graphic organizers with steps, examples, and vocabulary for every key concept taught throughout the year. This creative guide offers students a quick reference that will put the year's curriculum at their fingertips! The OMG will transform your classroom and help you introduce or review material in a way that is fun and exciting for students! Our session will explain how we transformed our school from moderately passing performance on math standardized tests to an exemplary performance while maintaining a stable student population and the same teaching staff. We will model making the organizer and three of the graphic organizers in a make-and-take session for you to replicate our success in your school!"
Math Workshop: Getting Started and Making it Work!	"Are you wanting (or needing) to spend more time in small groups with your students, focusing on skills that need deeper and further investigation? Are you wanting to differentiate on the regular, but don't know where to start? Come join me in this workshop, where I share some of my tried and true strategies and tips to help implement Math Workshop (also known as Work Stations) in your classroom today, so you can set your scholars up for success!"
To Proficiency and Beyond: A Strategic Approach to Multiplication and Division	This workshop will provide educators with powerful visual models to support students' understanding of multiplication and division computational fluency strategies necessary for Number Talks. It includes a demonstration of visual aids for developing these powerful mental strategies that begin with number facts and broaden as they extend to greater numbers. This interactive workshop will be as much "hands on" as it is "minds on." Participants will leave with a range of practical activities and games that can be immediately used in the classroom.
Help! My Students Are Bored! How Can I Engage Them?	"For teachers to engage students, they must begin from the students' point of view. What is it that drives students to learn? Experience an interactive teaching strategy designed to motivate and engage students while deepening conceptual understanding."

Who's In? Strategies for Inclusion Classrooms!	"Do you have students that you deal with? Don't deal, instead, build relationships! Instead, ask, "Who's in?" Teachers who build relationships with their students are involved socially, emotionally, and take time to connect with the students in class. Learn inclusion classroom strategies and social supports to help build relationships and maintain predictability and stability for your students. Communication and consistency are keys to building their trust, and it lets students know, "Who's in!""
#tech2teach: Transforming your Classroom with Technology	Today's students are more technologically-minded and able than we could ever be. Come explore some of the most effective tech tools that will promote engagement, reinforce conceptual understanding for our students, and maximize your valuable time. Learn about the latest educational apps and programs that will make your students go crazy for math.
Friends With Math	We need to change society's relationship with math. What happens when you break math out of its artificial shell and spend time with it like you would with a friend? You get even more learning! Let's crack open the world of math experiences and see what building a friendship with math can be like for all of us.
Use Hip-Hop Math Songs to Excite and Empower Learners	"Music can effectively lower anxiety, promote deep student discourse, empower students, and create an exciting learning environment. Come and learn how to use music in the classroom to tap into student emotions, lower affective filters, be culturally responsive, and teach students before math even begins."
Need Closure? Strategies for Moving On	Some teachers have difficulty closing a lesson. This session will focus on engaging strategies and techniques to help teachers wrap up learning and get ready to move on to the next lesson. Participants will leave with multiple resources and activities for immediate use in their classroom.

Opening Sessions, Wednesday 8:00 AM - 9:30 AM

What's Important in Math Today?	The primary purpose of the school system has always been to prepare students for society. But with society changing more rapidly than ever before, it seems our students are being prepared for yesteryear's economy. This session will reflect on recent decades to see how the mathematics curriculum prepared students for the society of the day. In doing so, it will provide a rationale for expanding the focus of classroom mathematics to include the thinking skills that students now need in order to engage effectively in today's (and tomorrow's) world. Additionally, participants will discover how to stimulate thinking and reasoning skills through language and discourse and by building a solid foundation of conceptual understanding.
Deliberate Optimism: Reclaiming the Joy in Education	Do you feel like you are doing more and enjoying it less? Are there certain colleagues who are "getting on your last nerve?" Dr. Debbie Silver discusses how educators can maintain a positive sense of self through proactive principles of working and living. Learn how to maintain your sanity while performing the important job you do. Debbie offers participants an entertaining and thought-provoking look at how teachers can regain their power and rejuvenate their positive attitudes.

Extended Sessions, Wednesday, 10:00 AM-12:00 PM

Developing Fact Fluency with Understanding – Not Gimmicks!	Fluency is more than the memorization of isolated facts. Students need to see connections between basic number facts. They need representations of number that help form a "mind picture" that connects to a thinking strategy. This session will demonstrate simple visual aids that help students to master basic facts of the four operations with understanding – using strategies that can be extended beyond the number fact range.
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Fall Down 7 Times, Get Up 8: Teaching Kids to Succeed	Dr. Debbie Silver is one of the most sought-after keynoters and professional development presenters in the United States. Audiences everywhere respond to her use of humor, candor, and common sense. Her insights into human behavior are as undeniable as they are funny. In this presentation, she delves into motivational concepts including self-efficacy, attribution theory, zone of proximal development, deliberate practice, and growth mindset. Based on her best-selling book, Fall Down 7 Times, Get Up 8: Teaching Kids to Succeed, Debbie provides down-to-earth examples of concrete, applicable guidelines for helping students overcome setbacks and failure to foster lifelong success.
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Wednesday, 10:00 AM - 11:00 AM

#gotmathRtI? (2nd - 6th)	"Do you wish you had a different way to teach or re-teach concepts? Do you want screening and progress monitoring tools that align to the TEKS? Come hear how one district worked to create workable screening, monitoring, and aligned instructional resources to move students in mathematics. This is an update from a session in San Antonio at CAMT 2016."
Making Math Meaningful, Not Just for Many, But for All!	"The Quantile Framework for Mathematics helps an educator to differentiate instruction and monitor growth in mathematics, putting students on the path to success in school, college and career. Because student Quantile measures tell you which skills and concepts your students are comfortable with, you can personalize learning for them and follow their progress. At Quantiles.com, participants will find their Texas Math TEKS and see how easy it is to reach the needs of all students. During this session, we will explore resources, Texas math curriculum standards and numerous activities that K-12 educators have available to them. All of the resources are FREE and educators just need to be aware of these and how to access them efficiently."
Stations...It's All About Those Details!	"Do you feel like your stations could be more effective? Do you need more accountability for your students while they are in stations? In this session, participants will engage in stations to analyze the details that make stations effective and meaningful for each student in the classroom."
Uncovering Mathematical Thinking with Flip Grid	This session will highlight and showcase ways use Flipgrid to uncover student misconceptions in hard to teach math concepts. Participants will create and view student Flip Grid videos while learning ways to integrate Flipgrid inside and outside of their classrooms!
Daily Promote Numeric Fluency and Mathematical Reasoning	"How do we work smarter to create numerically nimble students? Experience engaging activities and discover effective ways to improve your students' numeric competence and confidence. The handout includes many high-interest games to enhance numeric sense-making, mathematical reasoning, and algebraic thinking, as students improve their numeric competence."
They Should Already Know This - Catch Up Math Games	"This session will focus on strategies and math games teachers can use to help their upper elementary students ""catch up"" on some of the concepts they should have already mastered. We will cover basic addition, subtraction, multiplication and division fluency, basic place value and number sense. Games help rebuild understanding, provide practice, lessen math anxiety and keep the needs of the learner always up front. A perfect way to play ""catch up"". Handout will contain our favorite basic games that use cards and dice, and commonly found multi-sided dice - all great manipulatives for motivating reluctant learners. Come prepared to play. This was one of the most popular workshops from CAMT 2017. Our new rewrite of bestselling All Hands on Deck math games with cards will be featured, come prepared to play."
Hands-On Number Sense with Growth Mindset	"In this session, you will be provided with hands-on and classroom-ready activities that bridge concrete, pictorial, and abstract representations in order to support teachers and students to build their number understanding. Learn more ways to solve problems (all operations) that will make sense to students and will build on students' growth mindset."

I Like to Move It! I Like to Learn It!	"Do you like to move? Come experience math activities from a new book "Moving INTO the Classroom: A Handbook for Movement Integration in the Elementary Classroom." Participants will be doing movement activities that develop the understanding of different math concepts such as numbers and operations, fractions, measurement, and data. In this session, the participants will rotate through four math content centers, participating in math activities that use movement. Information about the book and the activities will be shared and everyone will walk away with activities to use in their classroom."
Instructional Coaching in Mathematics: Lessons Learned and Next Steps	"Are you new to your role as a mathematics coach? Are you an experienced mathematics coach looking for additional ways to hone your craft? Join us as we explore the lessons learned from a veteran mathematics coach and explore strategies for getting started, building relationships, enrolling teachers, and guiding teachers through reflective practice."
Workstation Ideas to Inspire and Engage	"Need some hands-on ideas for grades PK-2? Harris County Department of Education, HCDE, has prepared a preview of some of their workstations from their make and take series. Join us and experience what teachers are saying is a must do grade-level workshop."
Fun With Fractions	"How well do your students understand how to multiply and divide fractions? In this session, we will explore interactive activities that build student understanding around the "why" behind multiplying and dividing fractions, without using the standard algorithm."
Dana Center/Agile Mind Course Program Users Meet Up	"Have you been teaching with the Dana Center/Agile Mind middle school or high school mathematics course programs for a year or two? Are you planning for your first year of implementation? Are you currently teaching with other resources, but want to learn more about what Agile Mind has to offer? Network and learn with educators who are using the Dana Center/Agile Mind middle school and high school mathematics programs. This highly interactive gathering will start with an overview of what's new in the course programs, and then focus on how you and your students can get the most out of Agile Mind. Bring your ideas and questions for the designers and developers of the courses! Participants will be encouraged to share their own success stories, strategies, and challenges. Leave with inspiration, fresh ideas, and new collaborators!"
Engage and Motivate All Students with Differentiated Instruction	What exactly is differentiation? How can one lesson meet the needs of all learners? Are you tired of one-size-fits-all instructional methods? Discover how to approach differentiation to meet the needs of all mathematics learners.
Progress Monitoring Tools for K-5 Mathematics	"Within a system of intervention, we know we must monitor the progress of our students toward their goals. But, what tools do we use? Where do we start? On what topics do we focus? How do we determine growth? In this session, I will share examples of the K-5 progress monitoring tools I developed to answer these questions, and more! I will also provide digital access to these tools. Did I mention they are aligned to the TEKS and I will share them all with you (for free!)"
TI-Nspire Navigator™ System Activities for Intermediate or Advanced Users (TI)	This hands-on session will demonstrate some advanced features of the TI-Nspire CX Navigator using the TI-Nspire handheld technology to support instruction of the TEKS and STAAR preparation. An overview of TI-Nspire Navigator resources available at the www.timathnspired.com website will also be provided. If you have the TI-Nspire CX Navigator system, and have been using it for instruction, this session is for you.
Student Songwriting 101	"Since writing leads to deeper understanding, let's use the novel experience of songwriting to increase students' depth of knowledge. In writing songs, learners begin to own math content and develop pride in the work they do. Students become content experts as they write math songs that can be used in many ways!"

How to Effectively Plan for the Math Classroom	"How do you use the resources provided to effectively plan for an engaging math classroom that hits the TEKS and helps students to achieve mathematical understanding? Wendy will talk about the ""prep versus planning"" approach that her campus uses to help students become successful in the math classroom. She will share what resources they use and how data is used to plan lessons and make good instructional decisions for students. You will get a glimpse into what a planning room looks like where teachers come together in a true PLC to make planning decisions for students success."
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Wednesday, 11:30 AM- 12:30 PM

#AmazingNumberLines: A Powerful Model for Representing Numbers	"Students need models to gain a deep understanding of number and proficiency with skills. This interactive session for K-5 educators explores the progression from number tracks to number lines and highlights the versatility of the number line model to represent whole numbers, fractions, decimal fractions, relative position, magnitude, rounding, and even computational thinking. Participants will engage in a variety of games and activities to enhance students' experiences with number lines and their mathematical achievement."
Fraction Frenzy with Cuisenaire Rods	"Come explore how to use Cuisenaire Rods to promote conceptual understanding of fractions. During this interactive session, we will practice using ""the keyboard of mathematics"" to compare and order fractions, find equivalent fractions, use fractions on a number line, compute fractions, decompose fractions, and more."
Let's Talk About It	"How do we move our mathematics classrooms away from "answer-getting" to "sense-making"? Research tells us that we need to increase the mathematical discourse and get kids talking. "Mathematical discourse is the way students represent, think, talk, question, agree, and disagree in the classroom," says Catherine Stine in a past article for NCTM. In this session, we will explore ways to increase mathematical discourse at the beginning, during, and after the math lesson. So join me and let's talk about it!"
Math Workshop and English Learners	"Are you interested in learning more about making mathematics accessible to English Learners (ELs)? Do you need ideas on how to adjust your current math workshop to meet the needs of ELs? During this session, we will examine and explore sheltered instruction, vocabulary instruction, academic language strategies, and formative assessment strategies that can be used during different components of math workshop (whole group, small group, and workstations). The strategies explored can be put into action with ELs in bilingual and non-bilingual classrooms."
Teaching to Mastery Upside Down	"Every educator knows there is never enough time in the school day! Our session is designed for the beginning, intermediate, and advanced technological who is willing and able to ""flip"" their classroom. In our presentation, we will discuss the necessary tools to restore lost class time and allow for exploration and application for all learners. Flipping facilitates students to be able to take control of their learning—and it could be your new normal soon!"
Visual Models and Equivalent Fractions	"This session focuses on exploring hands-on activities that will offer elementary math teachers the opportunity to deepen their understanding of using visual models, such as fraction wheels and the area model to create equivalent fractions."
Double Dare You - Our Best Probability Games and Activities	"Come learn a few old favorites and many new math games that use double dice from our newest Double Dare You resource. These dice are highly engaging and motivating for students to use but often go underutilized. Come learn how to double the learning potential - problem solving, probability, statistics, and graphing concepts are integrated into games that teach: mixed operations, fractions, place value, operations, and geometry. The games are student favorites and are easy to integrate into your weekly math program. The games allow for great journal writing opportunities, lively math talk discussions and practice. This is a new workshop and one of John's favorites! Gameboards provided."
Work Stations 101: The Basics	Are you ready to incorporate work stations into your instruction? Are you wondering how to set up or arrange work stations? Are you wondering when to use work stations or how to use them? Are you looking for ideas about the types of activities that could be used in work stations? Join us as we explore the basics for incorporating work stations into mathematics instruction.

#Got Mathematical Proficiency!	"In aiding students to achieve mathematical proficiency, teachers must skillfully weave an environment that includes the elements of adaptive reasoning, strategic competence, conceptual understanding, productive disposition, and procedural fluency. Participants will explore how to employ mathematical habits of thinking, process skills, discourse, questioning, and visual models, to weave these elements together in order to cultivate mathematically proficient students."
#3-5GotMathGaps?	This session will discuss ways teachers can collect and analyze student understandings in math. We will provide participants the opportunity to explore various forms of student data to name and notice students' level of understanding. We will use what was noticed to then share ideas for what to do next for students to support growth.
Looking for Enrichment in Mathematics? Try a Math Lab!	"We've all heard about labs for science, but what about labs for mathematics? What would math labs look like and sound like? Join us as we share the steps our campus took to create a mathematics lab that students visited on a weekly basis for enrichment!"
Thinking Strategies to Teach Students How to Navigate Word Problems	Often times math teachers provide students with the steps needed to work through a problem, such as See, Plan, Do, Reflect, but are unsure of how to teach a student how to think through a problem. This session will discuss specific thinking skills and strategies students need in order to successfully navigate through any word problem.
Sorting Through Shapes—How They Relate	Help your students go beyond shape recognition to a robust understanding of how two-dimensional shapes relate! Participants will receive grade-specific activities to take back to the classroom.
Assessment Strategies Can Make an Impact	"Summative assessments are inevitable in the math classroom. What if there was a way to build student confidence and have each student engaged in academic discussion before and after an assessment? In this high-energy session, we will model and share strategies that allow assessments to become tools for engagement, rigor, and student learning."
Integrating Physical Activity into the Mathematics Classroom	"The connection between physical activity, health, and academic performance is well-documented, and schools have been identified as an ideal access point to increase movement. Specifically, moderate-intensity activity prior to math lessons increases student engagement and math performance. In this interactive session, participants will learn about the association between movement integration and math achievement, engage in discussion and activity regarding barriers to implementing classroom physical activity that addresses common barriers and methods of diminishing or overcoming barriers, and become familiar with various math-specific sample activities to implement in their own classrooms."
Processing the Process Standards K-5	"In this session, participants will take an in-depth look at the mathematical process standards. They will engage in activities that cover each strand and collaborate with each other on how to incorporate these activities in the classroom. Participants will receive a variety of instructional activities (digital and hard copy) and implementation documents for easy collaboration with teachers on their campuses. This session is open for grades Kindergarten through fifth grades."
The Students Won't Stop Talking—And That's A Good Thing!	As social creatures, students make sense of their world through communication and interaction. Why is it, then, that so many math teachers want to keep their students quiet? Learn the importance of student talk and how it can be used easily and effectively to build relationships. Walk away with three strategies you can use to build a positive classroom environment that won't drive you nuts!

#PD2C: Connect and Capitalize on Social Media as a Professional Learning Tool	"Given the undeniable prevalence of social media, it makes sense to utilize the power of virtual platforms to extend professional learning in mathematics beyond the traditionally passive sit-and-get style. By intermingling professional learning into social and personal communications, educators can develop and share ideas in real-time, making important connections among instructional content and authentic contexts in short and manageable bursts. When used effectively, Mobile Learning and Social Media allows for longer and deeper thinking and discussion about critical mathematical content. The Charles A. Dana Center at The University of Texas at Austin will share how we are capitalizing on these unique learning formats and the research that supports these practices. Through the use of memes and short videos, participants will engage in rigorous tasks and thought-provoking questions that entice discussion and encourage professionals to make immediate changes in their practice."
Effective and Successful Grant Writing Strategies (TI)	This session will provide practical advice to help prepare grant proposals for federal, state, local, foundation, and corporate funds to purchase equipment and materials for classroom instruction. A variety of resources prepared by Texas Instruments and other open sources materials will be provided to participants. This session is not just specific to calculator technology—learn basic grant-writing skills to prepare a grant for any materials and resources you might need in your classroom.
Real Math for All Students	How do different perspectives on learning math affect both the teacher and learner? How can we leverage those differences to help all students construct real mathematics? What is real math versus fake math? I'll share insights and suggestions for helping more students learn more math.
Graphing Calculators—Tips, Tricks, and Good Stuff You Need to Know	This hands-on session will focus on various features of the TI-84 Plus family of graphing calculators. Topics will include the equation solver, storing pictures, using Boolean Logic to test answers, memory reset for testing, archiving, games, table setup, zoom memory, grouping, split screens, and much, much more. Don't miss this one.

Extended Sessions, Wednesday 12:30 PM - 2:30 PM

Rich Math Problems for the Elementary Grades; They Don't Need a Lot of Words!	"Many people see math as black and white. Either you do computations and boring skill questions or you have very text-heavy contextual problems. I think math is a little more gray! We will explore a variety of very rich math problems that lead to lots of thinking and lots of conversation that are presented with very little text. You will be surprised at how easy it is to create these sorts of problems and your students, whether ELL or not, will certainly appreciate them."
One Size Does NOT Fit All: Personalizing STEM Classrooms	We can't prepare today's students for tomorrow's challenges using only yesterday's techniques. This interactive session will investigate how to integrate STEM topics into mathematics instruction, the hallmarks of personalized learning environments, and how to build a bridge from current practices to your goal.
Can't Stop This Feeling for Math!	How about ten new games with dice and dominoes? These will be your "go to" games because students willingly play and the play is practice of important math skills like telling time, money, multiplication, division, factoring, fractions in area, set and number line models. You will love the handout. Boogie to new tunes for building skills and create awesome for your classroom energy with math dances.

Wednesday, 1:00 PM - 2:00 PM

Problem Solved!	"Students at every grade level should be able to ""Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution."" in accordance with the mathematical process standards. How does one get that started? How do I live up that conversation? What strategy works best to peak my students' interests? This session will explore the Say W.H.A.T. strategy and how to use it for problem-solving success!"
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Long Walks with Google	"Do you have available technology in your classroom, but aren't sure you are using it to capacity? Would you like to make better use of Google Apps for Education? Learning Paths are an ideal way to shift your role as teacher to facilitator. Learning Paths are standards-based, backward-designed, easily differentiated sets of learning activities that will help your students master their objectives and gain 21st-century skills in the process. In this session, you will see how a series of thoughtfully planned activities can be just what you're looking for to help develop student ownership in your class. If you want to learn more about Learning Paths and how you can build one using Google Apps for Education, this session is for you!"
Making Algebra Child's Play® (3 - 8)	See how the Hands-On Equations® approach to teaching algebraic linear equations can open up the world of algebra to even your "weakest" students. Inspire them by their success in solving equations such as $4x + 3 = 3x + 9$ and applying the concepts to word problems.
Multiplication Made Easy! Believe It or Not!	"Come and see how to use the distributive property to help students master their math facts quickly and easily! You will be amazed how easy it is to teach the students to break apart one factor. We will also spend time doubling and halving numbers to make mental multiplication fast and easy. Handouts will be given, along with plenty of time to practice with your partner."
#Road to Success: Using Success Criteria to Increase Learning in Math	"Learn how teachers and students at an Allen ISD elementary school are using success criteria, continuums and rubrics to increase clarity regarding math instruction among students, parents, and teachers. With tools and ideas presented in this session, teachers will be able to increase student ownership in learning and move students on the road to success in math."
Deepening Math Reasoning Through Notice and Wonder	"Ask students to notice and wonder in math class and you will see engagement soar. You will see curious learners explore math with enthusiasm. And most importantly, you'll notice students making sense of math. This session will explore various ways to incorporate noticing and wondering in your daily math routines. Participants will discover how to use notice and wonder as part of the problem-solving process as well as a vehicle for making connections between mathematical concepts. Noticing and wondering promotes rich discourse as students justify their thinking, share ideas, and ask questions. Find out how this strategy empowers learners to make mathematical discoveries. This versatile strategy allows for learners of all abilities to be successful and challenged."
Making the Most of Modeling— Hands-On Strip Diagrams	"Do your students struggle with strip diagrams? In this session, participants will engage in hands-on practice to make strip diagrams come alive."
Exploring Fractions, Grades 2-4	"Do your students struggle with fraction concepts? If so, join us as we explore the use of models and instructional methods to develop students' conceptual understanding of fractions. Participate in activities incorporating research-based approaches that build and deepen knowledge of identified learning targets, including supports for diverse learners."
Understanding Fraction Division: Don't Just Flip and Multiply!	"The "keep-invert-multiply" algorithm is a popular and convenient method for dividing fractions, and yet it is the least understood approach by students and teachers. In this session, we will demonstrate how the Singapore approach—Concrete, Pictorial, Abstract (CPA) model can be used to develop a deep and sustainable understanding of fraction division. Participants will leave with hands-on activities, visual models, story problems to use with students that build on their fraction sense to understand the division of fractions."
Count Me In: Playing with Math in the Classroom and Beyond	"It's no secret that people of all ages love to play games! Come join the Children's Museum for a hands-on session where you will explore their newest math games that can be seamlessly incorporated into classrooms or after school programs. These games and activities help children by actively engaging them in a variety of tasks and decision-making scenarios that reinforce their learning and help deepen their understanding of mathematics. All games and activities were developed for the numbers and operations, algebraic reasoning, geometry and measurement, and data analysis strands and are aligned to the 3rd to 5th grade math TEKS."

Math Teacher's Survival Guide: Working With Students With A Visual Impairment	"IDEA requires that all visually impaired students have access to grade-level curriculum and materials at the same time as their peers. Often times this can be a challenging task for math teacher as the content they are required to teach is so spatial and abstract. Join us for a fast-paced session learning how to use everyday materials to adapt and modify a lesson in order to meet your students' unique needs. We will discuss a process for getting materials into an accessible format for your student in a timely manner, how to properly arrange a classroom for a student with a visual impairment, and offer strategies using everyday materials to modify and adapt lessons for your student. You will leave the session armed with the resources to make your classroom as inclusive as possible."
Changing Minds: Coaching for a Mathematical Mindset	Teachers' identities as math learners and fundamental beliefs about the nature of mathematics play a critical role in shaping both the learning opportunities given to students and students' math mindsets. This session will examine the impact of mindset on teacher learning and instructional improvement. It will consider ways that coaching can help teachers reflect on their unconscious beliefs and take steps towards adopting a growth mindset.
Making Sense of the TQE Process	"In this engaging session, participants will experience how selecting the correct tasks and engaging with them as learners is crucial preparation for effective instruction. This engagement includes developing effective questions that provide evidence of student learning through tasks, questions, and evidence (the TQE process). Edward C. Nolan uses video of authentic classrooms to create a shared image of rigorous mathematics instruction and to support the importance of making sense of mathematics for teaching."
Math Coach's Cafe	"As a coach, your head is often swimming with ideas of "what could be."" This interactive session is intended for math coaches, specialists, or other educators who support math teachers by encouraging the use of best practices. Session participants will gain practical ideas, collaborate, address challenges, and celebrate successes."
Personalize Your Students' Learning Experience Using IXL	XL Learning is a web-based program used to reinforce curriculum. It does not take the place of direct instruction. IXL enables teachers to individualize instruction, allows students to work at his/her own pace, so learning is moved forward because of detailed, real-time data that is provided upon completion of technology time. The IXL program offers skills that range from Pre-K through 12th grade. Subjects offered are Language Arts, Math, Science and Social Studies. Participants will engage in activities and be provided a lecture that will clearly paint a picture to give participants a visualization of what students experience as they rotate through whole-group instruction, small-group instruction, technology, and independent workstations.
Infusing our Math Classrooms with Loving Kindness—Opportunities and Challenges	Wouldn't it be nice if our math classrooms had an atmosphere of loving kindness? Loving kindness is the warmth and openness in one's heart for the well-being and happiness of others. Participants will learn about different kinds of kindness, two types of happiness, the link between kindness and happiness, and how to cultivate kindness within and then infuse one's classroom with kindness. In this interactive session, participants will inspire each other through stories of kindness they experienced in their classrooms and share ideas such as nurturing without pampering or building students' confidence in math without reinforcing their ego, discuss how kindness can guide us through adverse situations, identify obstacles to practicing kindness in our math classrooms, and come up with strategies to overcome those obstacles.
Promoting Student Ownership of Learning Using Checklist	"See how students can use student-friendly objectives, or ""I can"" statements, to monitor their own learning progress to create shared ownership for mastery of standards. In this session, participants will learn how to create and use a one-page document to help students, including ELL and Inclusion, track mastery of standards. Participants can use the chart as an informal assessment tool to inform classroom instruction."

How Do We Know What They Know? Visible Mathematics Learning

We must know what students know to guide them forward. John Hattie's Visible Learning database helps us make good decisions about what strategies to use for what purpose for effective mathematics teaching. Learn about this research and its implications for mathematics teachers and students. Participants will engage in mathematics tasks and discourse strategies grounded in the meta-analyses built from the Visible Learning database. The session will model a sequence of learning experiences designed to make learning visible to teachers and students at all levels. The Visible Learning research tells us what is most effective for students from a wide range of populations. This session translates this research into practical strategies for mathematics teachers so they can use this foundation to create classrooms with equitable opportunities where every learner is empowered to access rich mathematics.