

WVCTM
Draft Conference Program
March 16 - 17, 2018
Stonewall Jackson Resort, Roanoke, WV

Friday 8:30

Session - 1 Room - Ballroom 2 All Grades
Opening Session

Presented by Myrtle Holland ()

Friday 10:00

Session - 95 Room - Ballroom 2 Grades K-K
Keynote Address: Creating Success in Mathematics for All Students

Presented by Dr. Karin Wiburg ()

In this session Dr. Karin Wiburg will share her experience in successfully addressing all students to improve their mathematics performance. She will share research findings on core areas of mathematics that are troublesome for students. She will share Math Snacks games and videos that address these gaps and engage the audience in some math related to a video. She will share the two actions that will result in success for all students: to teach math differently and to form a school or district-wide effort to improve mathematics performance. She has built capacity for mathematics achievement by working with district systems and will illustrate how she worked as part of a team in a district.

Friday 11:15

Session - 3 Room - Ballroom 1 All Grades
Inspire Instruction: An Overview of WV Geometry Standards Grades K-12

Presented by Dennine LaRue (Fairmont State University)

Participants will be provided with an overview of the vertical alignment of WV geometry standards in Grades K-12. Knowing what content was taught in prior grades and what content will be taught in future grades has an impact on current grade level instruction. How student knowledge progresses from concrete to abstract concepts will be explored. Activities to foster geometry concepts will be discussed. Participants will briefly share their favorite geometry lesson.

Friday 11:15
Session - 500 Room - Restaurant All Grades
FIRST LUNCH

choose only one lunch

Friday 11:15
Session - 7 Room - Gauley Grades K-5

Engaging Strategies to Integrate Literacy in Mathematics Instruction

Presented by Natalie Dillinger (June Harless Center, Marshall University)

“Children’s literature offers the vehicle to assist teachers with mathematics instruction” (Marilyn Burns). Use literature books to make mathematics lessons come alive as an introduction to a lesson or as an application of content. Activities and lessons integrating books and mathematical topics will be shared. Additionally, ideas for incorporating children’s books focusing on mathematical riddles will be part of the presentation. Topics include numeracy, area, perimeter, measurement, and money.

Friday 11:15

Session - 4

Room - Potomac

Grades K-2

Inspiring Number Sense in Kindergarten Through Second Grade

Presented by Alicia Holcomb (Clay County Middle School)

This presentation will reveal the importance of placing an emphasis on students developing an understanding of place-value concepts in relationship to counting and grouping, using real-life experiences to construct meanings for whole numbers, seeing patterns in number sequences, and developing a sense of number magnitudes (representations of a number).

Friday 11:15

Session - 5

Room - Pecan

Grades K-2

Inspiring Fluency

Presented by Beckey Hall (Lewis County)

Come learn some games to inspire young learners to develop fluency and number sense. Walk away with games ready to implement in your classroom.

Friday 11:15

Session - 6

Room - Ballroom 2

Grades K-2

Math Workstations in the K-2 Classroom

Presented by Jennifer Davis (Burch PK-8) and Joy Hunt(Burch PK-8)

This session will consist of a general overview of math workstations and offer set-up and organization ideas for use within the classroom. Implementation strategies that align with content standards will be discussed and sample activities will be shared. Using a wide range of manipulatives and math vocabulary, those in attendance will be able to experience working in pairs or small groups in workstations designed for the K-2 classroom.

Friday 11:15

Session - 11

Room - Greenbrier

Grades 3-8

Bringing Nutrition and Wellness to Math Class

Presented by Kyle Berry (Barboursville Middle School)

Math class has much to offer in the struggle against rising childhood obesity rates in America. In this interactive session you will discover how effortlessly nutrition and wellness can be worked into your math curriculum to equip children to take ownership of their well-being.

Friday 11:15

Session - 8

Room - Tygart

Grades 3-5

Morning Math:A Daily Routine for Upper Elementary Students

Presented by Kim McCord (Johnson Elementary School)

Morning math is a daily review/preteach for upper elementary, similar to primary grades' Calendar math. As upper elementary teachers, how can we use a quick daily review to get our students thinking mathematically? Morning math addresses whole number operations, factors/ arrays, prime/ composite numbers, basic fractions and decimals. Morning math is a quick daily routine that has been used in this teacher's classroom with students who are below level, on level and above level.

Friday 11:15

Session - 9

Room - Kanawha

Grades 3-5

Spring into Real-World Math

Presented by Victoria Beller (Poca Elementary School) and Debra Hackett(Poca Elementary School)

We all know the facts, but how do we use them every day? Example: Students can multiply 2.89×12 , but can they explain WHY or use this math equation in a real-world situation? How can teachers teach students to apply what they know from traditional algorithms into meaningful and useful everyday practices? This session will give you some helpful tips and activities that can turn any basic math lesson into an extended real-world mathematical experience! See you soon!

Friday 11:15

Session - 10

Room - Birch

Grades 3-5

Getting Excited About Teaching Fractions

Presented by Joseph Wood (Glenville State College) and Jeff Hunter(Glenville State College)

Teachers who attended a workshop last summer at Glenville State College took the role of student and worked through several hands-on activities to develop fraction sense and reasoning. This session will allow you to experience some of their favorites which they have now used with collaborative groups in their own classrooms.

Friday 11:15

Session - 12

Room - Summersville

Grades 6-12

Supporting Mathematical Argumentation with Comparing Quantities Activities

Presented by Matthew Campbell (West Virginia University)

A key mathematical proficiency and practice is the ability to construct and justify mathematical claims, often involving whether or not something is always true. This, in part, requires students to consider the nature of variables and a range of cases. Teachers must have tools to support students' development of those skills. In this session, the presenter will share examples of "Comparing Quantities," a routine that supports this effort. Specific examples will be modeled and provided to participants.

Friday 11:15

Session - 13

Room - Bluestone

Grades 9-12

Utilizing College Board Resources to Prepare Students for the SAT

Presented by Joel Gulko (The College Board)

Participants will learn about resources that are available to help students prepare and feel confident to take the SAT. Educators will also learn about various training modules, implementation guides and other resources that explain the content of the SAT.

Friday 12:30

Session - 501

Room - Restaurant

All Grades

SECOND LUNCH

choose only one lunch

Friday 12:30

Session - 17

Room - Potomac

Grades K-5

Effectiveness of Using Manipulatives

Presented by Jennifer Ringler (Bethany College, WV)

How can we make math more effective and fun? Join Jennifer as she discusses how manipulatives can encourage student engagement in hands-on exploration and learning. Use of strategies involving movement and manipulatives allows all students to develop a deeper understanding of important concepts.

Friday 12:30

Session - 16

Room - Kanawha

Grades K-2

Addition and Subtraction: The Connection Between Learning and Instruction

Presented by Lynn Baker (Retired-West Virginia Department of Education)

This session will connect the learning progression for addition and subtraction to classroom instruction. Teachers will consider the learning progressions related to counting in kindergarten and how this understanding leads to understanding of addition and subtraction in first and second grade. Teachers will explore the use of manipulatives that support student learning and examine models that will NOT expire over time. Join us as we explore the complexity of mathematics for young children.

Friday 12:30

Session - 20

Room - Pecan

Grades 3-8

Understanding the New Assessments for Grades 3-8

Presented by Stacey Murrell (WV Department of Education)

This session will focus on the interim assessments for grades 3-8 in ELA and mathematics. It will include introductions to resources, tools, and the reporting system for the interim assessments.

Friday 12:30

Session - 18

Room - Gauley

Grades 3-5

Number Talks with Fractions

Presented by Lisa Sutton (Conner Street Elementary) and April McConihay(Conner Street

Elementary)

Number Talks aren't just for whole numbers. Learn how to use Number Talks with Fractions! Come and learn many hands-on activities to help your students gain number sense with fractions. Participants will learn strategies to get students to reason and defend their solutions when learning about fractions.

Friday 12:30
Session - 19

Room - Tygart

Grades 3-5

Fractions- I Love Fractions!

Presented by Coleen Vannoy (Retired-formerly Kanawha County)

Whether the session title is your mantra or not, this session is for you. Participants will look at fractions from the foundation up, starting with Fraction Number Sense. Elementary students need to have a good understanding of Fraction Number Sense and concepts to be able to advance to other areas of mathematics. Lessons, resources and practical ideas will be shared that help accomplish this goal. This session will be a review of the content from the 2017 WVDE Summer Math Academy-Fractions.

Friday 12:30
Session - 21

Room - Greenbrier

Grades 6-12

Inclusive Math Practices for Struggling Learners With and Without IEPs

Presented by Danielle Bottesch (Mountain Ridge Middle School) and Lee-Dorah Wokpara(Mountain Ridge Middle School)

This session will explore common difficulties students experience in an inclusive math class. Strategies discussed will focus on students with mild-moderate special education needs, but they can be used with a wide range of students. Topics covered will include co-teaching, teaching strategies to reach a range of ability levels, and supportive technology (such as Doceri and NearPod). The session will be led by a co-teaching duo of dual certified math and special education teachers.

Friday 12:30
Session - 22

Room - Birch

Grades 6-12

Card and Board Games in the Classroom

Presented by Jennifer McIntosh (Parkersburg South High School)

Many students enter middle and high school without mastery of basic skills. Using math-based card and board games in the classroom will strengthen basic skills and some algebra. By using games, students have fun while learning. Students are fully engaged and don't realize the amount of math they are using as they compete with other students and become more confident.

Friday 12:30
Session - 99

Room - Bluestone

Grades 6-12

Innovations Pave the Road to Success

Presented by Joanna Burt-Kinderman (Pocahontas County Schools) and Laurel Dilley(Pocahontas County High School)

Innovation in education can hide in plain sight. Join coach Joanna Burt-Kinderman and teacher Laurel Dilley as they describe the substantial math achievement gains their students made as a result of math coaching and teachers' efforts to improve their practice. After a discussion of the principles underlying Burt-Kinderman's approach to math coaching, Dilley will share her experiences as a teacher learning to address problems of practice in her math classroom. There will be an opportunity for participants to share their observations and ask questions.

Friday 12:30

Session - 23

Room - Summersville

Grades 9-12

Standards-Based Grading in the Mathematics Classroom

Presented by Brittany Dameron (Riverside High School)

In this session, Mrs. Dameron will share her math department's implementation of Standards-Based Grading (SBG). She will discuss the process, benefits and stumbles involved with SBG. A traditional quiz and a SBG quiz will be shared to compare the two methods. The importance of classroom discussions and reflections and how the use of journals has incorporated literacy (writing) into the mathematics classroom will be included in the presentation.

Friday 12:30

Session - 24

Room - Ballroom 2

Grades 9-12

Statistics Is the Future and It Is on the SAT

Presented by Steven Alley (Tug Valley High School) and Amy Salmons(Tug Valley High School)

After hours of research and creating lessons to prepare students for the SAT, presenters will share their work. Participants will gain awareness of the SAT content and instructional strategies supporting mastery. Lessons focusing on problem solving and data analysis tailored to all students will be provided.

Friday 1:45

Session - 26

Room - Tygart

All Grades

Free Mathematics Software

Presented by Gary Seldomridge (Potomac State College (Retired))

A range of free mathematics software developed by the presenter will be demonstrated.

Friday 1:45

Session - 29

Room - Kanawha

Grades K-5

Make it Mathtastic!

Presented by Stacey McKenzie (New Creek Primary)

Students need some fun in their lives! Creating fun games to enhance the learning of skills helps students. The presenter will show ways to incorporate multiple intelligence activities into the math class so students of all learning styles can learn the skills.

Friday 1:45

Session - 30

Room - Summersville

Grades K-5

Making Student Reasoning Central to Class Discussions with Choral Counting

Presented by Stephanie Jones (Fairmont State University)

To gain a thorough grasp of mathematics, students must have opportunities to share their reasoning with others and to listen and respond to other students' reasoning. Participants will experience Choral Counting, an activity that may be used to help facilitate students' thinking and classroom discussion. Participants will receive a framework of the activity and sample prompts for a variety of mathematics content. Strategies for using the activity with students will also be discussed.

Friday 1:45
Session - 27

Room - Ballroom 1

Grades K-2

Making Guided Math Game-er-iffic!

Presented by Jennifer Zickefoose (Nutter Fort Primary) and Terra Burnett(Nutter Fort Primary)

This session will lead K-2 fellow educators through the steps of a guided math lesson and ways to make it exciting for both teachers AND students! Presenters will discuss management ideas, games to support grade-level standards and strategies, ways to differentiate stations, as well as online resources.

Friday 1:45
Session - 96

Room - Pecan

Grades K-2

Using Math Snacks Videos, Games and Supplementary Materials in Your Classroom

Presented by Dr. Karin Wiburg ()

Join us to learn how to use games and hands-on activities to teach core math concepts in the early grades. Teachers can share this technology. Bring a laptop and/or an iPad to the session.

Friday 1:45
Session - 33

Room - Sutton

Grades 3-12

Building Better Bellringers

Presented by Jami Packer (Follansbee Middle School)

We all want a math class where students are engaged from the very start of class, where student curiosity and mathematical thinking set the stage for any learning experiences that follow. Come and learn about a series of activities that can be used to launch classes where student thinking and discourse are the foundation.

Friday 1:45
Session - 31

Room - Potomac

Grades 3-5

Strategies That Can Be Inspired Through Math

Presented by Debra Hackett (Poca Elementary) and Victoria Beller(Poca Elementary)

Attend a vocabulary social, make templates for non-math strategy activities, connect world events and math lessons through Flocabulary and newspaper.

Friday 1:45
Session - 32

Room - Greenbrier

Grades 3-5

SMART about Money

Presented by Cheryl Ingraham (Brookview Elementary)

Participants will explore the poem SMART by Shel Silverstein as an introduction to money and move on to the book Alexander, Who Used to Be Rich Last Sunday. Math concepts will include money, addition, comparison, logic and counting. We will discover how much money Alexander lost and see how much our names are worth and engage in a few other money activities.

Friday 1:45

Session - 38

Room - Maple

Grades 6-K

Inspiring Students to Learn Mathematics Through the Use of Basic Structures

Presented by Karen Mitchell (Marshall University)

A student recently requested that he be shown the easy way because he wasn't smart enough to learn real mathematics. This session will begin by considering the student's definition of easy way and real mathematics. It will continue by having participants examine certain mathematical structures and how such structures can be used to inspire students to learn, use, and retain real mathematics.

Friday 1:45

Session - 34

Room - Birch

Grades 6-12

Dipping Your Toe into the Edulastic Waters: Rich Actionable Data

Presented by Barbara Zingg (Washington High School)

Edulastic.com provides a rich standards-aligned bank of interactive question types from which to create assessments. Explore setting up an account, creating classes, creating assessments from the question banks, and viewing the variety of reports to create actionable plans for better student engagement, achievement, and mastery.

Friday 1:45

Session - 35

Room - Gauley

Grades 6-12

Reading to Fire Up Math Success!!

Presented by Bobbie Gelpi (Parkersburg High School)

Confused students frequently don't read and process the symbols of mathematics accurately. Students are clueless about word meanings in mathematical contexts. This session provides hands-on activities to help students learn to read and write mathematics and be more successful.

Friday 1:45

Session - 36

Room - Ballroom 2

Grades 9-12

Pinterest Math

Presented by Sara Klesel (Parkersburg South High School)

This session demonstrates high school appropriate hands-on activities found on Pinterest. Topics include systems of equations, quadratics, and other math reasoning skills.

Friday 1:45

Session - 37

Room - Bluestone

Grades 9-12

Utilizing College Board Resources to Prepare Students for the SAT

Presented by Joel Gulko (The College Board)

Participants will learn about resources that are available to help students prepare and feel confident to take the SAT. Educators will also learn about various training modules, implementation guides and other resources that explain the content of the SAT.

Friday 3:00

Session - 44

Room - Tygart

Grades K-12

Do You Know a Teacher Who Can Use \$10,000?

Presented by Cathy Walker (Southern Regional Education Board) and Cindy Burke(WVDE)

Learn how to apply for the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) to win a \$10,000 cash prize and a trip to Washington, DC for you and a guest. We will connect you with a mentor and provide hints to help you showcase your best teaching on your application.

Friday 3:00

Session - 40

Room - Potomac

Grades K-8

Solve Problems the Write Way

Presented by Victoria Ford (Hampshire County Schools) and Melanie Meck(Hampshire County Schools)

In this session, participants will learn how to guide their students in building a framework to express their thoughts as they write through the steps to solve a problem. By using the writing process, students will deepen their own understanding of math concepts and problem-solving skills.

Friday 3:00

Session - 39

Room - Sutton

Grades K-2

Mindset Matters

Presented by Teresa Stanley (Midland Trail Elementary) and Stacey Thaxton(Midland Trail Elementary)

Mistakes...Have you ever made one? Do you have a growth mindset? Do your students have growth mindsets? This session will give you tips on how to cultivate a growth mindset in young learners by establishing a classroom culture that embraces mistakes. We will discuss the role of the teacher in praising effort and engaging students in classroom conversations that allow them to explain their thinking and respond to the mathematical thinking of their peers. Mindset DOES matter!

Friday 3:00

Session - 41

Room - Summersville

Grades 3-5

Addressing the Mathematical Habits of Mind through Number Talks

Presented by Teresa Hammond (West Virginia Department of Education)

Discussion will target how to use Number Talks to spark classroom interest in mental math and address the Mathematical Habits of Mind through classroom interaction and discussion.

Friday 3:00
Session - 42

Room - Birch

Grades 3-5

Bridging the Gap Between Math and Literacy

Presented by Joseph Wood (Glenville State College) and Shelly Ratliff(Glenville State College)

Teachers who attended a workshop last summer at Glenville State College took the role of students and worked through several hands-on activities that connected literacy and mathematics. This session will allow you to experience some of their favorites which they have now used with collaborative groups in their own classrooms.

Friday 3:00
Session - 46

Room - Gauley

Grades 6-8

Understanding Fractions Using Paper Folding, Rods and Math Drawings

Presented by Lucie Refsland (New River Community & Technical College)

Students struggle to understand operations with fractions when presented in a problem-solving format. Paper folding, rods and math drawings can be used to facilitate this understanding. Manipulatives will be available for use during the session.

Friday 3:00
Session - 48

Room - Greenbrier

Grades 9-12

Increase Your Achievement by 18% - We Did!

Presented by Amy Salmons (Tug Valley High School) and Steven Alley(Tug Valley High School)

Come hear the story of how this school worked with a low-performing group of sophomores to dramatically improve their scores in just one year! Amy and Steven will share their formula for success: teacher collaboration, knowledge of the test, and the use of strategies to accommodate all learning styles.

Friday 3:00
Session - 49

Room - Maple

Grades College-College

The Role of HE in Mathematics Education and Teacher Preparation in WV

Presented by Karen Mitchell (Marshall University)

This session is open to any individual who wishes to discuss issues, concerns, and projects with higher education faculty. The session will also include how changes in K-12 education will impact universities and colleges.

Friday 3:00
Session - 45

Room - Kanawha

Grades K-12

Ins(pi)re the World, One Strategy at a Time

Presented by Sarah Lee (Nicholas County Schools) and Tony Nichols(Nicholas County Schools)

Discover ideas for low prep, high impact strategies to help students make the most of classroom time, while capitalizing on what we know about the brain and student engagement. Participants will experience strategies learned from brain based learning experts such as Eric

Jensen and Lavonna Roth as well as Himmele and Himmele's Total Participation Techniques.

Friday 3:00
Session - 97

Room - Pecan

Grades 3-6

Exploring More Math Snacks and Games

Presented by Dr. Karin Wiburg ()

Come explore the Math Snacks games and materials using ratios. Participants will watch videos, and play games that help students to learn more about proportional thinking. The games will be connected with hands-on math activities that bridge from games to classroom learning. Bring your laptop, iPad, and/or phone.

Friday 3:00
Session - 47

Room - Bluestone

Grades 6-12

Engaging Secondary Students Everyday with MHE WV Glencoe Math and WV AGA

Presented by Dena Norris (McGraw Hill Education)

Come see MHE's newest resources including virtual manipulatives, interactive lessons and more! Session will focus on how these technology components can be incorporated into everyday teaching to enhance instruction and engage students.

Saturday 8:30

Session - 55

Room - Summersville

Grades K-12

Differentiation for All

Presented by Cynthia Goodman (Houghton Mifflin Harcourt)

Do you have tools and resources that allow every student the opportunity to be successful? This session will encourage participants to reflect on their current and future practices so they can develop a Growth Mindset that can be transferred to creating a Learning Mindset. This will enhance classroom culture and develop student ownership of learning. Participants will explore how to get started engaging and encouraging students to be life-long math learners.

Saturday 8:30
Session - 50

Room - Tygart

All Grades

A History of Number

Presented by Gary Seldomridge (Potomac State College (Retired))

The presenter will discuss whether number is an innate concept or whether it was invented. We will also consider why more advanced number systems were developed.

Saturday 8:30
Session - 54

Room - Kanawha

Grades K-5

Moving from Books to Numeracy: Literature in the Elementary Math Classroom

Presented by Joy Hunt (Mingo County Schools/Burch K-8)

Math at the elementary level requires teachers to use every resource available to get concepts across to students. Children's literature books can lend themselves to teaching or reinforcing math concepts. In recent years, many books have been written for the express purpose of

teaching specific math concepts or skills. The presenter will share some books and strategies to add depth to mathematics instruction.

Saturday 8:30
Session - 51

Room - Ballroom 2

Grades K-2

Legos: Creating a Space for Mathematical Thinking

Presented by Sara Dailey (John J. Cornwell Elementary)

Join Sara, 2017 Golden Holtan recipient, as she shares her project. Learn hands-on Lego activities for grades K-2, Special Education, and Title I. Topics will include: composing and decomposing numbers, dot patterns, partners to 10, story problems, patterns, and graphing.

Saturday 8:30
Session - 52

Room - Gauley

Grades K-2

Parents as Partners: Teaching Math in PreK and Kindergarten

Presented by Gayle Allen (Springfield Green Spring Elementary)

During this session, activities that inspire PreK and Kindergarten teachers to use parents of their students as partners in teaching math will be shared. Activities that work in the classroom to improve counting and cardinality as well as geometry objectives will be included.

Saturday 8:30
Session - 53

Room - Ballroom 1

Grades K-2

Guided Math/ Math Workstations in the K-2 Classroom

Presented by Pamela Brotherton (Edgewood Elementary) and Debbie Shaffer (Edgewood Elementary)

Join Pamela and Debbie for some helpful hints on setting up math workstations in your primary classroom. Get some new ideas on incorporating technology and using hands-on activities to practice fluency and problem-solving skills.

Saturday 8:30
Session - 57

Room - Bluestone

Grades 6-12

Going Beyond the Basics with Edulastic: Creating and Editing Rich Questions

Presented by Barbara Zingg (Washington High School)

In this session, participants will experiment with creating interactive math questions using Edulastic.com, editing and aligning current questions, and making the most out of the rich actionable data in the reports. Bring your favorite assessment and we will convert it to an online version.

Saturday 8:30
Session - 58

Room - Potomac

Grades 6-12

Delta Strategies

Presented by Holly Crowson, M.Ed., M.A. (Big Ideas Learning)

Delta Strategies is about change. We will think differently about everyday practices and how to use resources around us to engage learners. This session is hands-on, collaborative, and involves participants interacting in roles of teacher and student. Hands-on experiences explore

ways to encourage student ownership, while promoting a deeper understanding using concept maps, manipulatives, and engaging tasks. Participants will be challenged to create a delta strategy.

Saturday 8:30
Session - 59

Room - Birch

Grades 6-12

Math Investigations: Using Inquiry in High School Math

Presented by Elaine Schwing (West Virginia University)

Do you want to incorporate more inquiry in your high school classroom? Inquiry lessons on probability, statistics, and systems of equations will be shared, as well as a 5E framework and suggestions for creating inquiry-based lessons for your own classroom.

Saturday 8:30
Session - 56

Room - Maple

Grades 6-8

Using Manipulatives to Engage Students in Middle School Mathematics

Presented by Natalie Dillinger (June Harless Center, Marshall University)

Students are active learners with the need to master concepts through the use of manipulatives before attempting to understand abstract concepts. Manipulatives such as geoboards, hinged mirrors, counters, hundreds boards, and algebra tiles can engage students during instruction, as well as strengthening their understanding of mathematical concepts. Participants will work through investigations utilizing manipulatives to teach middle school mathematics content.

Saturday 8:30
Session - 60

Room - Greenbrier

Grades 9-12

Interactive Trig: Investigating Maps, Roller Coasters and Matchbox Tracks

Presented by Brittany Dameron (Riverside High School)

In this session, Mrs. Dameron will discuss the use of matchbox tracks to investigate angles of elevation as well as using trig to calculate lengths. The presenter will also discuss an activity using numbers on student iPads to investigate trig with roller coasters, and how maps are used to look at law of sines and law of cosines and find missing lengths.

Saturday 8:30
Session - 98

Room - Sutton

Grades 9-12

Problem-Based Tasks in a Student-Centered Classroom

Presented by Mary Donlan (Walch)

When students are the center of instruction, they are active, engaged, and noisy. We will explore and model the instructional moves needed to create a student-centered classroom using problem-based tasks.

Saturday 9:45

Session - 63

Room - Ballroom 1

All Grades

MATH is a Four Letter Word!

Presented by Kristine Hobaugh (Carnegie Learning Inc.)

Do you hear students say, I'm not good at math or parents say, I was never good at math? Math fear causes a lot of anxiety and stress for everyone. This session will address some of those beliefs that math is hard, only for smart people, and those who think they don't have the math gene. Everyone can learn to love math if taught correctly. Attend this session and take away practical knowledge and activities that you can incorporate into your communities. Math is FUN!

Saturday 9:45

Session - 66

Room - Kanawha

Grades K-5

Thinking Math and Number Sense

Presented by Gregory Merritt (Wood County Schools)

Following in the tradition of the excellent professional development offered through AFT's Thinking Math, this workshop will allow participants to examine their students' overall understanding of numbers and provide practical activities that build number sense. For students who struggle, the building of number sense will lead to a building of confidence with mathematics.

Saturday 9:45

Session - 67

Room - Bluestone

Grades K-5

Engaging K-5 Students Everyday with MHE WV MY MATH

Presented by Dena Norris (McGraw Hill Education)

Come see MHE's newest resources including virtual manipulatives, interactive lessons and more! Session will focus on how these technology components can be incorporated into everyday teaching to enhance instruction and engage students.

Saturday 9:45

Session - 64

Room - Potomac

Grades K-2

Daring to Use Data with Primary Students

Presented by Claire Gates (Nutter Fort Primary) and Terra Burnett(Nutter Fort Primary)

Teachers use data every day (running records, STAR Math, fact quizzes, oh my!) How can you make collecting and analyzing data fun for your students? In this session, presenters will discuss how to incorporate your students' opinions and how to cover dozens (no really) of math standards into an exciting daily routine.

Saturday 9:45

Session - 65

Room - Maple

Grades K-2

R U³: Are You-Cubed?

Presented by Allison Miller (Spencer Elementary School)

Join Allison to learn more about mind growth in math, low-floor/high-ceiling tasks, and view FREE resources available for Kindergarten to Grade 2 students on the You-Cubed website.

Saturday 9:45

Session - 70

Room - Pecan

Grades 3-12

Polygraphs, Marbleslides, and More!

Presented by Jami Packer (Follansbee Middle School)

Desmos' ever growing database of class activities provide a rich set of experiences for students to interact with content in challenging and engaging ways. Come dip your toes into some of the resources available and learn a bit about how you might create your own resources in the Desmos Activity Builder. (Laptops needed)

Saturday 9:45

Session - 68

Room - Gauley

Grades 3-5

Inspiring Students to Solve Problems

Presented by Deborah Seldomridge (Keyser High School, Retired)

As students become engaged in mathematical ideas within a context, they develop a deeper understanding of mathematics concepts. This new understanding improves confidence, increases opportunities for students to transfer learning, and positions them to grow mathematically. This session will explore instructional implications for teaching problem solving in third through fifth grades.

Saturday 9:45

Session - 69

Room - Ballroom 2

Grades 3-5

Legos: Creating a Space for Mathematical Thinking

Presented by Sara Dailey (John J. Cornwell Elementary)

Join Sara, 2017 Golden Holtan recipient, as she shares her project. Learn hands-on Lego activities for grades 3-5, Special Education, and Title I. Topics will include: multiplication and division strategies, skip counting, fractional thinking, operations with fractions and decimals, and data analysis.

Saturday 9:45

Session - 75

Room - Sutton

Grades 6-16

What's New in Desmos's Activity Builder

Presented by Mark Alvaro ()

In this session, participants will see and learn about what is new in Desmos's Activity Builder from the new dashboard to rotating images to the Computation Layer. Starting with a simple activity that shows off the new tools, participants will learn how to make their own activities on Activity Builder!

Saturday 9:45

Session - 71

Room - Birch

Grades 6-12

Using Algebra Tiles from Polynomials to Completing the Square.

Presented by Tim Scripko (College Preparatory Math)

Participants will be engaged in using Algebra tiles to show operations on polynomials, algebraic multiplication, factoring, and completing the square. While using the tiles, teachers will learn how to help students transition from the concrete (manipulative) to the abstract (paper and pencil). Participants will leave the session with lessons that will engage students in these topics.

Saturday 9:45
Session - 72

Room - Tygart

Grades 6-12

Assessing Assessment

Presented by Neil Reger (Buckhannon-Upshur High School) and Cheryl Reger(Buckhannon-Upshur High School)

Neil and Cheryl will present an overview of different types and purposes of assessment in the mathematics classroom. They will explore assessment as it guides instructional decisions for teachers and gauges learning for students. Specific techniques they have used will be shared.

Saturday 9:45
Session - 74

Room - Summersville

Grades 9-K

And Now for Something You'll Really Enjoy: Math From the Past!

Presented by Adam Fletcher (Bethany College)

Join Adam for a trip on the WABAC Machine! Our secondary and college standards and objectives have a purpose, rooted in history. Rediscovering this historical reasoning may give some surprising insights into how to better teach. We'll use some of these methods to compute geometric formulas, hone trig skills, find solutions of polynomials and radical functions, and describe conics. This will lead to a discussion of how to incorporate the past into making math relevant to our students.

Saturday 9:45
Session - 73

Room - Greenbrier

Grades 9-12

Rich Tasks

Presented by Jerry Pomeroy (Retired educator) and Judy Pomeroy(Retired educator)

Participants will engage collaboratively in tasks designed to promote student thinking and discourse. A packet of tasks will be provided. Participants are encouraged to bring tasks to share with fellow educators.

Saturday 11:00

Session - 82

Room - Summersville

Grades K-12

One and Done...Now Teaching Is Fun!

Presented by David Frongillo (Retired teacher)

20% of your students take up 80% of your time. Often disruptive classroom behavior dominates that 80%. Imagine speaking to your troublesome student(s) just once, and it ends there. It can happen and it does. Participants will take away simple classroom adjustments that produce: a decrease in discipline occurrences, an increase in academic performance, and a more positive environment in both the classroom and the school building.

Saturday 11:00
Session - 83

Room - Sutton

Grades K-12

My First Year with Google Classroom

Presented by Jeremy Knight (Spring Mills Middle School)

This year all the middle school students in my county got chrome books and we began using

Google Classroom as a resource. During this session, I'll share the things I've come to love about it and how it can be used to enhance instruction, make up work, assessment and communication. There will also be time to share your discoveries. I'm no expert -- yet. Looking to share my pitfalls and successes!

Saturday 11:00

Session - 84

Room - Bluestone

Grades K-12

Engaging K-12 Students Everyday with Adaptive and Personalized Learning

Presented by Dena Norris (McGraw Hill Education)

Come see MHE's newest programs for Adaptive and Personalized Learning, including Redbird and Aleks! Session will focus on how these programs can reach ALL students and increase mastery in an engaging and personalized platform.

Saturday 11:00

Session - 76

Room - Tygart

All Grades

West Virginia Mathematics Teacher Education Partnership: Building Community

Presented by Matthew Campbell (West Virginia University)

This session is designed to provide a "launching point" for an emerging community of mathematics teacher educators and teacher leaders across West Virginia to support networking and improvement. Ideas for collaboration can be shared and plans for future activities will be established. Open to all who are interested, including university-based mathematics teacher educators, school-based coaches and teacher leaders, and district-based curriculum coaches and coordinators.

Saturday 11:00

Session - 77

Room - Potomac

Grades K-5

Teaching Literacy in the Mathematics Classroom to Improve Problem Solving

Presented by Allison Shriver (Bradley Elementary School) and Juliana Huff (Bradley Elementary School)

Creating an immersive cross-curricular classroom is easier than you think. In this session participants will be given a series of teacher-created tiered rubrics that will deepen students' problem solving by using Language Arts skills to build mathematical understanding and support productive struggle. Offering experience in reflective practice, student work samples will be shared. Learn how to use the rubrics with a variety of ability levels while focusing on a growth mindset.

Saturday 11:00

Session - 78

Room - Birch

Grades K-5

Please Excuse My Long-Held Misconceptions

Presented by Teresa Hammond (West Virginia Department of Education)

This session will address misconceptions and tricks that are often perpetuated in the early learning years. Often teachers try to make a math concept easier by teaching a mnemonic device or use a trick, but this leads to confusion, circumvents the conceptual understanding, and is sometimes just wrong.

Saturday 11:00
Session - 79

Room - Pecan

Grades K-5

Around the World with Measurement

Presented by Roger Bennett (Carnegie Learning and NCTM)

Participants in this group will discover techniques to teach measurement to their students in a fun but informative way. Money, time, length, and shapes will all be explored. Add to your tool box. This session is not a repeat of the summer institutes.

Saturday 11:00
Session - 85

Room - Maple

Grades 3-8

Movin' on Up with Math

Presented by Alisha Wallis (Beale Elementary School) and Dawn Bays(Beale Elementary School)

This session is designed to help teachers reach those struggling math students through the use of hands-on approaches to hold students accountable for their own learning. Teachers will be given ideas and activities that low-performing students can use to help them be successful with those hard-to-master math skills.

Saturday 11:00
Session - 86

Room - Greenbrier

Grades 3-8

I Never Knew You Could Do That!

Presented by Sheila Ruddle (Retired)

Participants will take an In-depth and hopefully Ins(pi)ring look at multiplying and dividing fractions. Sheila will share the moment she had to say to a student, I never knew you could do that!

Saturday 11:00
Session - 80

Room - Ballroom 2

Grades 3-5

Using Centers

Presented by Traci Phillips-Roach (Carnegie Learning Inc.)

Participants will be given the opportunity to engage in a variety of centers designed to encourage fluency and conceptual understanding of mathematics in their students.

Saturday 11:00
Session - 81

Room - Kanawha

Grades 3-5

Millions, Billions and Double Trouble

Presented by Marsha Sarver (Alderson Broaddus University)

Discover innovative, hands-on activities to help students understand very large numbers and the effects of doubling using real-world examples from the environment and the global community. Presented games and simulations enhance students' abilities in measurement, data analysis and graphing representation. Receive electronic lesson plans matched to state standards.

Saturday 11:00

Session - 87

Room - Ballroom 1

Grades 6-8

We're Rich!

Presented by Dave Kennedy (Shippensburg University of PA)

Let's dive into two rich problems that can get your students engaged in the good stuff: exploring, reasoning, communicating, and sense making. The first problem involves \$5 and \$8 chips. The second concerns whole numbers expressed as a difference of squares. If you don't like patterns or mathematical connections, please stay away!

Saturday 11:00

Session - 88

Room - Gauley

Grades 9-12

A Mathematical Montage

Presented by Allan Meck (Hampshire High School)

Join Allan for a mix of math fun. Presenter will share ideas for how to increase student engagement in math class. Session includes discussion of hands-on activities that can be done with everyday materials; cooperative learning strategies to promote mastery and retention; and Brain Break ideas for when students start looking glassy-eyed.