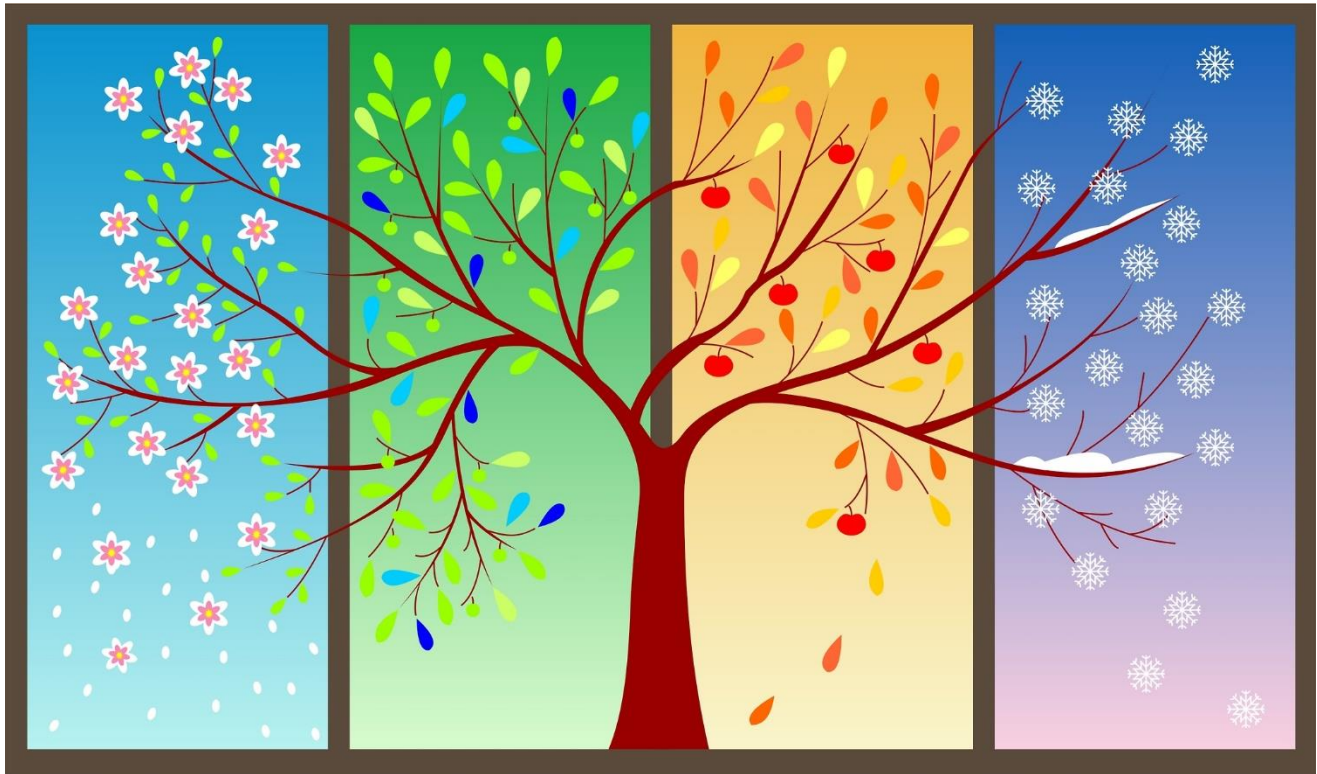


# Middle Tennessee Mathematics Teachers

## Math for All Seasons

February 23<sup>rd</sup>, 2019

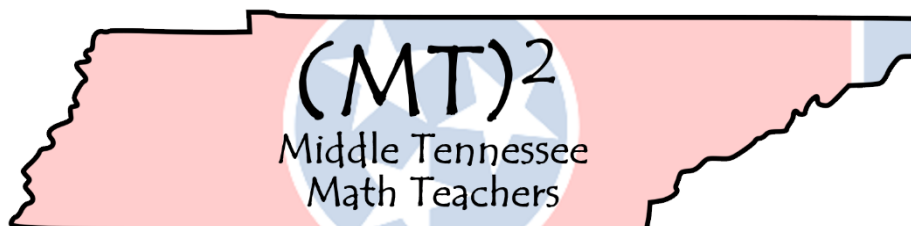
Pope John Paul II High School, Hendersonville, TN



Special thanks to Betty Mayberry and Amanda Peper, Conference Co-Chairs, for their hospitality. We appreciate the use of your wonderful facility and all the help from your Math Dept.

### Today's Schedule

7:30-8:00	Registration
8:00-8:50	Session 1
9:00-9:50	Session 2
10:00-10:50	Session 3
11:00-11:50	Session 4
12:00-12:50	Lunch, Business Meeting, Door Prizes
1:00-1:50	Session 5
2:00-2:50	Session 6



## Session 1 (8:00-8:50)

Room	Session	Audience and Topics
101	<p style="text-align: center;"><b>Have no fear, Guided Math is here!</b></p> <p>Ready to move beyond whole group instruction and meet the needs of all students? If yes, this session is for you. We will go through the steps of a guided math lesson. You will leave with some ready to use ideas, sample lessons, suggested websites, and new love for teaching math.</p> <p style="text-align: center;">Dr. Alisha Hayes, Franklin Road Academy</p>	<p style="text-align: center;">K-2</p> <p>Number and Operation, Algebra, Geometry/Measurement, Data Analysis, Statistics and Probability, Mathematical Processes, Special Education, Rigor, Real-world Applications</p>
105	<p style="text-align: center;"><b>Early Math Mentality</b></p> <p>This presentation is meant to highlight the importance of building up students' mathematical confidence at an early age.</p> <p style="text-align: center;">Chelsea McCall, Caleb Marston and Isamar Rachal, Austin Peay State University</p>	<p style="text-align: center;">K-8, Pre-Service</p> <p>General Activities, Testing/Review Strategies</p>
106	<p style="text-align: center;"><b>Why I Love My Flipped Classroom!</b></p> <p>In this session, I'll describe some of the pros (and cons) of using a flipped classroom and share some of the technology and tools you can use to flip your classroom. Bring questions!!</p> <p style="text-align: center;">Stacey McGee, Centennial High School Stacey.mcgee@wcs.edu</p>	<p style="text-align: center;">Middle, High</p> <p>General Activities</p>
108	<p style="text-align: center;"><b>Statistics in the Middle</b></p> <p>Let's explore inference and other middle school stats standards with engaging activities.</p> <p style="text-align: center;">Alice Carson, Powell High School alice.carson@knoxschools.org</p>	<p style="text-align: center;">Middle</p> <p>Data Analysis, Statistics and Probability, Real-World Applications</p>
206	<p style="text-align: center;"><b>When Will I Ever Use This? Benchmarking 101</b></p> <p>Participants will build a 1/4 scale model wooden park bench. Concepts used are complementary angles, fractional scales, transferring measurements, scaling lengths, interpreting diagrams, etc.</p> <p style="text-align: center;">Samuel Ligo, Austin Peay State University ligos@apsu.edu</p>	<p style="text-align: center;">Middle</p> <p>Geometry/Measurement, STEM, Real World Applications, Project Based Learning</p>
211	<p style="text-align: center;"><b>Linear Systems, Inequalities, and Programming</b></p> <p>Helping students make sense of Linear systems, Linear Inequalities, and Linear Programming using some no-tech methods, low-tech methods, and technology.</p> <p style="text-align: center;">Sharon Glenn, Ensworth High School glenns@ensworth.com</p>	<p style="text-align: center;">Middle, High</p> <p>Algebra</p>
210	<p style="text-align: center;"><b>Investigating the Conic Sections through Multiple Representations</b></p> <p>Learn how to construct the conic sections using various methods that demonstrate the underlying structure of the conic sessions. Participants will use Patty Paper, Technology, String, and Graph paper to construct each of the four conic sections.</p> <p style="text-align: center;">Sheila Horstman, Clarksville High School Sheila.horstman@cmcss.net</p>	<p style="text-align: center;">High</p> <p>Algebra</p>

**Session 2 (9:00-9:50)**

<b>Room</b>	<b>Session</b>	<b>Audience and Topics</b>
102	<p align="center"><b>Looking for Principles of Meaningful Counting</b></p> <p>Participants will discuss principles of meaningful counting such as cardinality and abstraction. We will watch videos of young children counting to look for these characteristics.</p> <p align="center">Audrey Bullock, Austin Peay State University, bullocka@apsu.edu</p>	K-2, Pre-Service Number and Operation
105	<p align="center"><b>Early Math Mentality</b></p> <p>This presentation is meant to highlight the importance of building up students' mathematical confidence at an early age.</p> <p align="center">Chelsea McCall, Caleb Marston and Isamar Rachal, Austin Peay State University</p>	K-8, Pre-Service General Activities, Testing/Review Strategies
107	<p align="center"><b>Middle School Stats Is Where It's At!</b></p> <p>Activities that build students' understanding of selected Grade 6, 7, and 8 standards in the Statistics and Probability strand.</p> <p align="center">Jennifer Yantz, Austin Peay State University, yantzej@apsu.edu Christina Ploeckelman, Richview Middle School, christina.ploeckelman@cmcss.net</p>	Middle Data Analysis, Statistics, and Probability
108	<p align="center"><b>Come Waltz with Me</b></p> <p>Music and math have a relationship. Let's learn this relationship and code a song.</p> <p align="center">Alice Carson, Powell High School, alice.carson@knoxschools.org</p>	High Algebra, STEM, Real World Applications
201	<p align="center"><b>What I Wish I Would Have Known About Data Analysis</b></p> <p>Overwhelmed by data? This session focuses on strategies to help with data analysis building skills in Excel to support when digging through formative and summative assessment data.</p> <p align="center">Jacqueline Montileone, Tennessee Department of Education Jacqueline.Montileone@tn.gov</p>	K-12, College, Pre- Service, General Data Analysis, Statistics, and Probability, Teacher Data
202	<p align="center"><b>Math Activities That Aren't Another Worksheet</b></p> <p>We will discuss how to effectively implement activities that aren't worksheets in the secondary classroom and how it can help you and your students</p> <p align="center">Lindsay Wall Newsom, Creek Wood High School, lwall@dcb.e.org</p>	Middle, High General Activities
206	<p align="center"><b>When Will I Ever Use This? Benchmarking 101</b></p> <p>Participants will build a 1/4 scale model wooden park bench. Concepts used are complementary angles, fractional scales, transferring measurements, scaling lengths, interpreting diagrams, etc.</p> <p align="center">Samuel Ligo, Austin Peay State University, ligos@apsu.edu</p>	Middle Geometry/Measurement, STEM, Real World Applications, Project Based Learning
208	<p align="center"><b>Engaging Students with Fraction Tasks and Models</b></p> <p>Come explore rich fraction tasks that engage students with models without taking the entire class period. Tupelo township, movie theaters, and flower garden contexts abound!</p> <p align="center">Holly Anthony, Tennessee Tech University, hanthony@tntech.edu</p>	Middle, Pre-Service Number and Operation, Mathematical Processes, Teacher of Teachers
211	<p align="center"><b>Linear Systems, Inequalities, and Programming</b></p> <p>Helping students make sense of Linear systems, Linear Inequalities, and Linear Programming using some no-tech methods, low-tech methods, and technology.</p> <p align="center">Sharon Glenn, Ensworth High School, glenns@ensworth.com</p>	Middle, High Algebra

**Session 3 (10:00-10:50)**

<b>Room</b>	<b>Session</b>	<b>Audience and Topics</b>
209	<p align="center"><b>Managing Math Block for Elementary Students</b></p> <p>This session will look at manageable methods to organize an elementary math block and make math FUN!</p> <p align="center">Kiersten Wyatt, Kenrose Elementary School, Kiersten.wyatt@wcs.edu</p>	<p align="center">K-2</p> <p align="center">General Activities, Teacher of Teachers</p>
101	<p align="center"><b>Froggy Fun: Leaping into Numbers, Operations, and Estimation</b></p> <p>Use science as a context for teaching math! Join us to measure and analyze the jumping abilities of origami frogs while exploring force and motion.</p> <p align="center">Jennifer Meadows, Tennessee Tech University, jrmeadows@tntech.edu Meghan Clemons, Tennessee Tech University</p>	<p align="center">3-5</p> <p align="center">Number and Operation, Geometry/Measurement, STEM, Mathematical Processes, General Activities</p>
102	<p align="center"><b>Q&amp;A Session for Pre-Service Teachers</b></p> <p>This session will be an open discussion of questions pre-service teachers may have about anything teaching-related, such as testing requirements, edTPA, or applying for jobs.</p> <p align="center">Audrey Bullock, Jackie Vogel and Rebecca Darrough, Austin Peay State University bullocka@apsu.edu, vogelj@apsu.edu, darroughr@apsu.edu</p>	<p align="center">Pre-Service</p> <p align="center">General Activities</p>
106	<p align="center"><b>Taking Math Online</b></p> <p>Using Google forms for Homework, creating online tests with Schoology and Using other iPad apps for How to Videos</p> <p align="center">Lauren Miller, H G Hill Middle School, lauren.miller@mnp.org</p>	<p align="center">Middle, High</p> <p align="center">General Activities, Real World Applications</p>
107	<p align="center"><b>Middle School Stats Is Where It's At!</b></p> <p>Activities that build students' understanding of selected Grade 6, 7, and 8 standards in the Statistics and Probability strand.</p> <p align="center">Jennifer Yantz, Austin Peay State University, yantzj@apsu.edu Christina Ploeckelman, Richview Middle School, Christina.ploeckelman@cmcss.net</p>	<p align="center">Middle</p> <p align="center">Data Analysis, Statistics, and Probability</p>
201	<p align="center"><b>What I Wish I Would Have Known About Data Analysis</b></p> <p>Overwhelmed by data? This session focuses on strategies to help with data analysis building skills in Excel to support when digging through formative and summative assessment data.</p> <p align="center">Jacqueline Montileone, Tennessee Department of Education Jacqueline.Montileone@tn.gov</p>	<p align="center">K-12, College, Pre- Service, General</p> <p align="center">Data Analysis, Statistics, and Probability, Teacher Data</p>
202	<p align="center"><b>Math Activities That Aren't Another Worksheet</b></p> <p>We will discuss how to effectively implement activities that aren't worksheets in the secondary classroom and how it can help you and your students</p> <p align="center">Lindsay Wall Newsom, Creek Wood High School, lwall@dcb.org</p>	<p align="center">Middle, High</p> <p align="center">General Activities</p>
203	<p align="center"><b>Maximizing Outcomes in a Supported Classroom</b></p> <p>This session will look at ways to build the relationship between subject-area teachers and their support teachers/teacher assistants, and how to leverage that relationship to help students (especially those with IEPs/504s)</p> <p align="center">Clark Ramey, Centennial High School, clarkr@wcs.edu</p>	<p align="center">Middle High</p> <p align="center">General Activities, Special Education</p>
210	<p align="center"><b>Investigating the Conic Sections through Multiple Representations</b></p> <p>Learn how to construct the conic sections using various methods that demonstrate the underlying structure of the conic sections. Participants will use Patty Paper, Technology, String, and Graph paper to construct each of the four conic sections.</p> <p align="center">Sheila Horstman, Clarksville High School, Sheila.horstman@cmcss.net</p>	<p align="center">High</p> <p align="center">Algebra</p>

**Session 4 (11:00-11:50)**

Room	Session	Audience and Topics
101	<p align="center"><b>Build It: Combining Math, Science, Engineering and Art!</b></p> <p align="center">Introduce students to the fascinating world of architecture using Iggy Peck, Architect. Join us to learn about geometry and build structures out of everyday materials.</p> <p align="center">Jennifer Meadows, Tennessee Tech University jrmeadows@tntech.edu Meghan Clemons</p>	<p align="center">K-2</p> <p align="center">Geometry/Measurement , STEM, Real World Applications</p>
209	<p align="center"><b>Managing Math Block for Elementary Students</b></p> <p align="center">This session will look at manageable methods to organize an elementary math block and make math FUN!</p> <p align="center">Kiersten Wyatt, Kenrose Elementary School Kiersten.wyatt@wcs.edu</p>	<p align="center">K-2</p> <p align="center">General Activities, Teacher of Teachers</p>
105	<p align="center"><b>Geometry Share Session</b></p> <p align="center">Everyone will need to bring at least one (hopefully more) geometry projects that you do with your class and be willing to share with the group these projects. If you have a rubric for the project, please bring it.</p> <p align="center">Pamela Heintzman, Goodpasture Christian High School pheintzman@goodpasture.org</p>	<p align="center">Middle, High</p> <p align="center">Geometry/Measurement</p>
106	<p align="center"><b>Taking Math Online</b></p> <p align="center">Using Google forms for Homework, creating online tests with Schoology and Using other iPad apps for How to Videos</p> <p align="center">Lauren Miller, H G Hill Middle School lauren.miller@mnps.org</p>	<p align="center">Middle, High</p> <p align="center">General Activities, Real World Applications</p>
108	<p align="center"><b>The Art of Questioning</b></p> <p align="center">Asking quality questions plays a central role in promoting discourse and stimulating mathematical thinking among student. This session will help you to better assess your current state of question posing and offer insights on how to make your questioning techniques even more effective.</p> <p align="center">Sister Cecilia Anne Wanner, Middle Tennessee State University sjw3u@mtmail.mtsu.edu</p>	<p align="center">K-12, College, Pre- Service, General</p> <p align="center">Mathematical Processes, General Activities, Teacher of Teachers</p>
203	<p align="center"><b>Grading Math Skills, not English Skills</b></p> <p align="center">This session will discuss strategies and resources that help English Learners find success in a math class without compromising standards or rigor.</p> <p align="center">Clark Ramey, Centennial High School clarkr@wcs.edu</p>	<p align="center">Middle, High</p> <p align="center">General Activities</p>
206	<p align="center"><b>ALEKS – A Formative and Summative Game-Changer</b></p> <p align="center">Looking for a deeper dive into how to both remediate and advance students simultaneously? This is it!</p> <p align="center">Monica Laird, Fairview High School monicalaird@hotmail.com</p>	<p align="center">Middle, High</p> <p align="center">Algebra, Special Education, Testing/Review Strategies, Technology</p>

**Session 5 (1:00-1:50)**

Room	Session	Audience and Topics
101	<p align="center"><b>Number Sense with Place Value Lessons</b></p> <p>The basics of number sense with unique place value lessons involving movement, multiplication, decimals, and games. Handouts and book recommendations.</p> <p align="center">Wendy Comer, Crockett Elementary School wendyc@wcs.edu</p>	<p>K-5, Pre-Service, General Number and Operation, General Activities, Teacher of Teachers, Real-World Applications</p>
102	<p align="center"><b>Mathematical Mindset – Book Study</b></p> <p>Join us for an online book study of Jo Boaler’s Mathematical Mindsets: Unleashing Students’ Potential through Creative Math, Inspiring Messages, and Innovative Teaching.</p> <p align="center">Lois Coles, Brentwood Middle School loisc@wcs.edu</p>	<p>Middle, High Professional Development</p>
107	<p align="center"><b>TI-84 as a Tool for Teaching Mathematics—Basics &amp; Beyond</b></p> <p>Beyond computation &amp; graphing—we will use images, piecewise functions, graph databases, APPS, and programs to support student understanding and concept development.</p> <p align="center">Ruth Casey, Teachers Teaching with Technology rcaseyky@gmail.com</p>	<p>Middle, High Algebra</p>
108	<p align="center"><b>Free-Response Questions: Student Self-Assessment</b></p> <p>This session will focus on changing the conversation in Statistics from an argument about scores to students reflecting on their own mastery of the topic.</p> <p align="center">Lisa Elliott, West Creek High School lisa.elliott@cmcss.net</p>	<p>High Data Analysis, Statistics, and Probability, Math Practice Standards (especially #3)</p>
201	<p align="center"><b>Managing the High School Math Classroom: Brainstorming Session</b></p> <p>Join us at this session to be presented with successful math classroom management tools from the speaker as well as to offer up your own ideas!</p> <p align="center">Samantha Fletcher, Dekalb County High School samanthafletcher@dekalbschools.net</p>	<p>Middle, High, Pre- Service General Activities, Classroom Management</p>
202	<p align="center"><b>Algebra 2 Ideas for an Awesome Scheduled Observation</b></p> <p>Three Algebra 2 ideas for first semester lessons that engage students and make content personally meaningful and relevant to them. Get those TEAM rubric 5’s!</p> <p align="center">Patti Castle, Franklin High School patriciac1@wcs.edu</p>	<p>High Algebra, Rigor, Real- World Applications</p>
206	<p align="center"><b>Math Technology – Are you up to date?</b></p> <p>Are you interested in finding out about new technology you could be using in your classroom? Hear how three teachers ranging from upper elementary to high school are integrating technology in their mathematics classrooms. Please bring your computers, if possible.</p> <p align="center">Lindsey Spathelf, West Creek Middle School Kelsey Hill, McEwen High School Alissa Rather, Liberty Elementary School</p>	<p>3-12, College, Pre- Service STEM, General Activities, Testing/Review Strategies, Rigor, Project Based Learning</p>
106	<p align="center"><b>This is a double session from 1:00-2:50</b></p> <p align="center"><b>Using Desmos Activity Builder to Increase Engagement and Feedback</b></p> <p>Explore readymade Desmos Activity Builders that support conceptual understanding. Learn to create Desmos Activity Builders and how to use them to increase student engagement and enhance teacher feedback.</p> <p>Please bring your laptop and a digital copy of a card sort or other resource you plan to use in your classroom soon, if possible!</p> <p align="center">Christina Ploeckelman, Susan Shaffer and Kimberly Dennis, Richview Middle School christina.ploeckelman@cmcss.net susan.shaffer@cmcss.net</p>	<p>3-12 Number and Operation, Algebra, Geometry/Measurement, Data Analysis, Statistics and Probability, Mathematical Processes, General Activities, Testing/Review Strategies</p>

**Session 6 (2:00-2:50)**

<b>Room</b>	<b>Session</b>	<b>Audience and Topics</b>
101	<p align="center"><b>Number Sense with Place Value Lessons</b></p> <p>The basics of number sense with unique place value lessons involving movement, multiplication, decimals, and games. Handouts and book recommendations.</p> <p align="center">Wendy Comer, Crockett Elementary School wendyc@wcs.edu</p>	K-5, Pre-Service, General Number and Operation, General Activities, Teacher of Teachers, Real-World Applications
107	<p align="center"><b>TI-84 as a Tool for Teaching Mathematics—Basics &amp; Beyond</b></p> <p>Beyond computation &amp; graphing—we will use images, piecewise functions, graph databases, APPS, and programs to support student understanding and concept development.</p> <p align="center">Ruth Casey, Teachers Teaching with Technology rcaseyky@gmail.com</p>	Middle, High Algebra
108	<p align="center"><b>Free-Response Questions: Student Self-Assessment</b></p> <p>This session will focus on changing the conversation in Statistics from an argument about scores to students reflecting on their own mastery of the topic.</p> <p align="center">Lisa Elliott, West Creek High School lisa.elliott@cmcss.net</p>	High Data Analysis, Statistics, and Probability, Math Practice Standards (especially #3)
201	<p align="center"><b>Managing the High School Math Classroom: Brainstorming Session</b></p> <p>Join us at this session to be presented with successful math classroom management tools from the speaker as well as to offer up your own ideas!</p> <p align="center">Samantha Fletcher, Dekalb County High School samanthafletcher@dekalbschools.net</p>	Middle, High, Pre-Service General Activities, Classroom Management
202	<p align="center"><b>Algebra 2 Ideas for an Awesome Scheduled Observation</b></p> <p>Three Algebra 2 ideas for first semester lessons that engage students and make content personally meaningful and relevant to them. Get those TEAM rubric 5's!</p> <p align="center">Patti Castle, Franklin High School patriciac1@wcs.edu</p>	High Algebra, Rigor, Real-World Applications
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# Professional Development Credit Signature Sheet

Name: \_\_\_\_\_

I attended the following sessions at the 2019 Middle Tennessee Mathematics Teachers Conference “Math for All Seasons” at Pope John Paul II High School in Hendersonville, TN on February 23<sup>rd</sup>, 2019. Each session was approximately one hour long.

<b>Session Time</b>	<b>Session Title</b>	<b>Presenter Signature</b>
8am		
9am		
10am		
11am		
1pm		
2pm		

Total Hours of PD Credit: \_\_\_\_\_