

### T<sup>3</sup>: Teachers Teaching Teachers

PCTM Professional Development Day for K-12 Classroom Teachers In Partnership with EPCTM and ATMOPAV

**Date:** Saturday, Sep 24, 2022 **Location:** PaTTAN East 333 Technology Drive Malvern, PA 19355

7:30 - 8:15 AM	<b>Registration and Continental Breakfast</b>			
8:15 - 8:50 AM	<b>Opening Session: Welcome &amp; Formative Assessment Techniques for beginning of class</b>			
<b>Sessions &amp; Location</b>	<b>Elm</b>	<b>Cypress</b>	<b>Balsam</b>	<b>Magnolia</b>
<b>Sessions 1</b>  9:00 - 9:50 AM	<b>TI Robotics: Map my way to recess</b>  Lauren Carr  Have students code their way through school (and math class) using pencil and paper first THEN recreate those same codes using TI TECHNOLOGY. Have groups throw some obstacles into the mix and see if you can get to Recess on time!  Middle School	<b>Activities that Maximize Student Understanding and Retention</b>  Shannon Wenger/Kelly Brent  These activities involve the WHOLE CLASS and require students to think and engage. The activities are ones that can be used for many mathematics concepts but the presentation uses topics spanning from middle school through Calculus. The activities are tried and true, used by the presenters for years with great success.  High School	<b>STEM Activities for Pennies</b>  Barb Krause  Middle School	<b>Building Mathematical Mindsets with Low Floor-High Ceiling Tasks</b>  Hilary Heffner and Karise Mace  In this session, participants will explore low floor-high ceiling tasks that can be used to develop students' mathematical mindsets. Participants will leave this session with ideas and resources to use in their classrooms.  Elementary
<b>Sessions 2</b>  10:00 - 10:50 AM	<b>TI Robotics: From 5 to fifth grade, fun with codes</b>  Lauren Carr  Explore the basics of coding using everyday items from around your home and classrooms, which can then be connected to more challenging problem solving skills. Adaptable from Kindergarten through fifth grade, look at new approaches to introducing STEM and robotics commands while still having meaningful lessons.  Elementary	<b>Encourage Classroom Conversations with Desmos Activity Builder</b>  Bob Lochel  In this session, participants will take part in a Desmos digital activity through the eyes of a student. Then, we will peel back the curtain and discuss how teacher moves using the Desmos classroom tools can encourage inquiry and conversation, and cause student ownership in the learning of mathematical ideas. Finally, a tour of Desmos resources will leave you with ideas to try in your classroom and resources for further investigation.  MS/HS	<b>Designing Breakout Activities for the Math Classroom</b>  Shannon Wenger/Kelly Brent  This session focuses on how to plan your own breakout activities tailored to the content and students of your classroom. We will also share various puzzles that can be used when creating your own activities as well as other helpful resources.  High School	<b>Using Math Centers and Formative Assessment to Build Mathematical Thinking in Primary Grades</b>  Beth Stump and Karise Mace  In this session, participants will learn how two teachers partnered to create weekly math centers to grow students' mathematical thinking in the primary grades. Session leaders will guide the participants in activities they can use in their classrooms and share monitoring tools that participants can use to inform development of their own math centers.  Elementary

<b>Sessions 3</b> 11:00 - 11:50 AM	<b>TI Robotics: Authentic Assessments and Adaptable Activities</b>  Lauren Carr  Introduce station style robotic activities using the TI Rovers to your students. Engage in creative problem solving sessions, incorporate healthy competition, and don't be afraid to make mistakes! Have your students turn those Mistakes into new codes with new directions!  High School	<b>Spotlight on Strategies</b>  Barb Krause  Middle School	<b>Teaching Geometry Concepts with Patty Paper</b>  Marian Avery  Make Geometry come alive with the use of "Patty Paper" investigating concepts such as parallel lines, perpendicular lines, segment bisector, perpendicular bisector of a segment, perpendicular bisector conjecture, angle bisector, centroid, circumcenter, incenter, and more. The patty paper becomes the student notebook as they work through geometric concepts in a visual-tactile way while using a discovery discourse.  General	<b>Spot It, A Twist on Attaining Addition and Subtraction Fact Fluency</b>  Pat Peffley  Spot It anchors basic addition and subtraction facts in concrete activities and games that help students discover fundamental patterns and properties. Color-coded practice guides students to search for patterns first, then compute, promoting fluency and flexible thinking that will support math discourse.  Elementary
<b>Lunch and Discussion</b> 11:50 - 12:30 PM	<b>Lunch and Collaboration Discussions (Cafeteria)</b>			
<b>Annual Business Meetings/ Visit Vendors</b> 12:40 - 1:00 PM		<b>ATMOPAV Business Meeting</b>		<b>EPCTM Business Meeting</b>
<b>Closing Session</b> 1:10 - 2:00 PM	<b>Door Prizes Formative Assessment Techniques for end of class</b>			