Welcome to the new MCTM e-Newsletter!

MI Math Community
June 2020

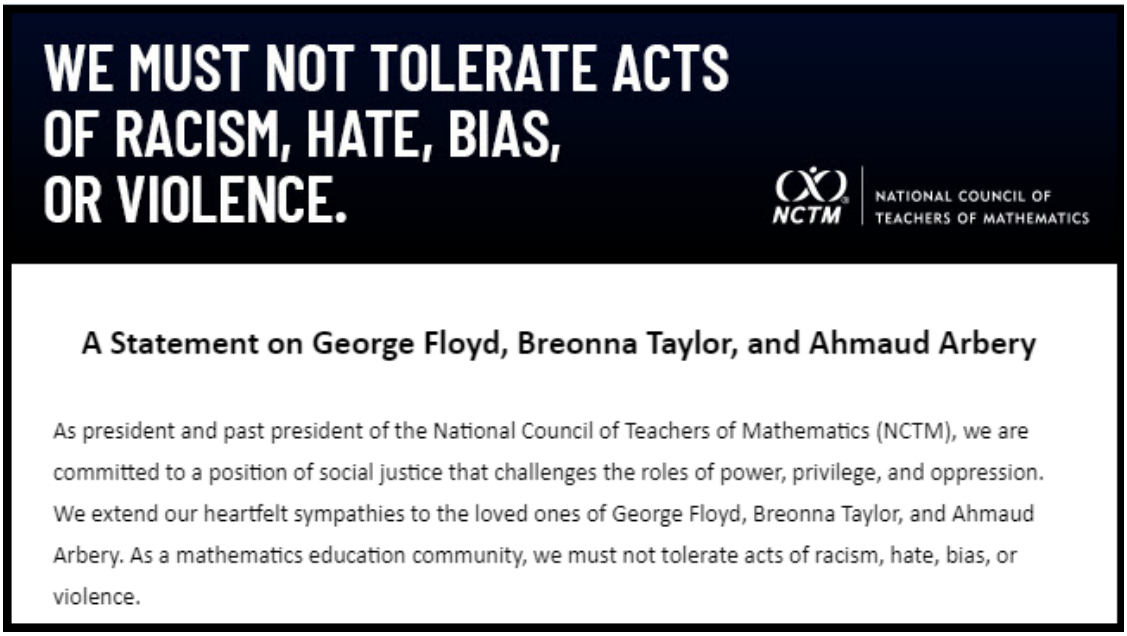
Michigan Council of Teachers of Mathematics

Best viewed on a desktop or go HERE to see as webpage.

In this issue*:

***if your email 'clips' long message, you will have to click "view entire message" to see all of the newsletter. We have lots to share with you!**

Please click on the image or button below the image to read the full statement posted on June 1, 2020 "A Statement on George Floyd, Breonna Taylor, and Ahmaud Arbery" by NCTM President Trena L. Wilkerson and Past-President Robert Q. Berry III.



Full NCTM Statement

Resources for Inclusive Practices

You may be finding yourself overwhelmed, confused and uncertain regarding the human rights and political issues surrounding the death of George Floyd. This has sparked many educators to explore their relationship with racism, implicit bias and pedagogical practices. These are meaningful endeavors and the purpose of this post is to provide a few resources that may help you more effectively and deeply explore these relationships. As teachers, coaches and math leaders we owe it to our students to continue to learn and grow about inclusive practices that honor each individual's strengths. Please join me and many others from MCTM by engaging with the following resources.

Justice in June (Structured Learning)

Code Switch (Podcast)

TeachingWorks (Position & Website) TeachingWorks is an organization of teachers, teacher educators, researchers and administrators based out of the University of Michigan. These practices have been embedded in the professional teaching practices set forth by Michigan Department of Education in teacher preparation programs.

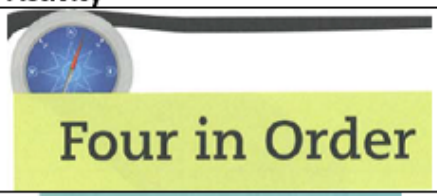
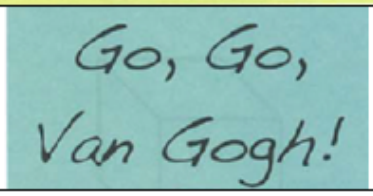
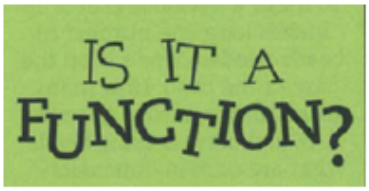
We Want to do More than Survive by Bettina L. Love (Book)

Thank you for joining our network of concerned educators.

Marcus Deja, MCTM Recording Secretary

Adventures with Mathematics (AwM) Activities

An MCTM initiative created a series of books called Adventures with Mathematics, designed for students as summer activities. Over the next several months, we will be highlighting several of these valuable resources and offering them free of charge on the Publications page of the MCTM website.

Grade Level	Activity	Description
Climbing from Grade 4 to Grade 5		By Stephen Blair and Carla Tayeh, this is a fraction ordering game for two players, complete with cards to cut out and gameboards.
Climbing from Grade 7 to Grade 8		By Trevor Rice, this fun card game addresses measurement and geometry skills.
Climbing from Algebra I and Geometry		By Charlene Beckmann, this game helps students distinguish between relations that are functions and those that are not using data, graphs, and scenarios.

Access to FREE AwM Activities

Follow up: MCTM Book Study #25 *Math that Matters How I Use What I Learned to Help Accomplish My Goals*

"This year, I have tried to structure my classroom around students being responsible for and gaining a sense of ownership around their education. I feel like I started the year off strong, but by November I was burnt out. I was spending all my time giving students individualized instructions on how to fix their work which was restricting their thinking and development of mathematics. After participating in the book study for *Math that Matters: Targeted Assessment and Feedback for Grades 3-8* I have learned new strategies to accomplish my goals."

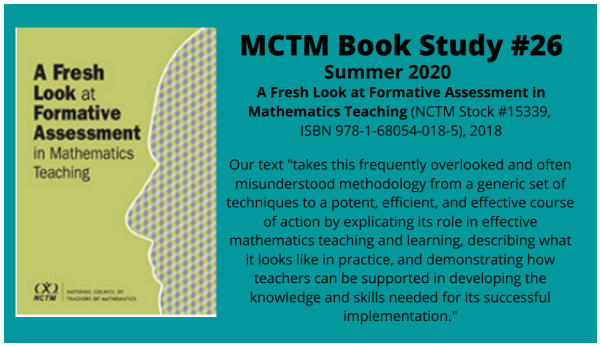
To read more of **Julie Nicholls' (**Advanced Technology Academy, Dearborn) reflection on the spring book study, click the link below. Thank you Julie for joining the book study sharing your thoughts with *MI Math Community*.

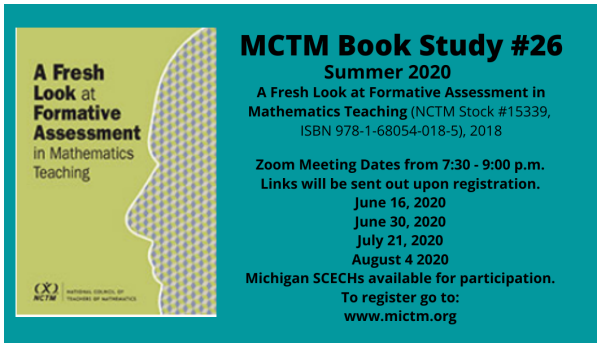
How I Used What I Learned

MCTM Book Study #26: Summer 2020

Book studies are a great way to connect with fellow educators from the comfort of your own home, build your PLN (Personal Learning Network), learn something new, and model being the life-long learner we want out students to be. Join us this summer! Check out the MCTM website to register!

Anne Marie Nichol-Turner, NCTM Representative & Book Study Co-ordinator (nicoll@aaps.k12.mi.us)





How NOT to Start Math in the Fall -- 2020 Version + How TO Start Math in the Fall

On his website, **Thinking Mathematically**, Mark Chubb reflects on Stacey Alger's article "How Not to Start Math Class in the Fall" as it particularly applies to the upcoming school year in his May 21, 2020 post. He discusses "what we should value and how we can help start the year off on a positive note what we should value and how we can help start the year off on a positive note." The graphic (used in his post) summarizes his thoughts on whether the decisions made about this upcoming fall will be based on filling gaps or creating a community of learners. He also offers some concrete suggestions – for more click on the link.

Thanks to MCTM **Jane DeVota** who drew our attention to this valuable resource.

	Gap Driven	Student Driven
Goal	• Find and fill gaps in students' math learning • Mastering discrete topics	• Build community that is able to learn with and from each other • Building connections between previous concepts and new concepts
Focus	• Base-line or diagnostic tests • Paper-and-pencil or multiple choice tasks/tests • Attempt to determine groupings based on data	• Investigating, problem solving, development of reasoning skills • Teachers noticing student thinking, asking students probing questions, facilitating conversations
Teacher Beliefs	• Gaps need to be filled before we can learn new things • Differentiated Instruction means giving different students different assignments based on readiness	• Students can all learn new concepts with the right shared experiences • Differentiated Instruction means providing open tasks that are accessible to all, notice students' thinking, then building conversations that facilitate important mathematics connections

Thinking Mathematically website

MCTM Blog “Rumbling with Vulnerability”

In our latest blog post, **Andrew Smith** (Kent ISD) tackles the topic of "Rumbling with Vulnerability" through an examination of our previous authors Holly Vostad and Kelly Compher, both teachers he worked alongside at Godwin Heights Public Schools. He claims, "Although they varied in years of service, grade levels taught and major/minor areas of study, what emerged as common themes in both classrooms were an eagerness to professionally learn and a willingness to be vulnerable."Click here to check out this blog post and more!

We value our members' voices. If you or someone you know have experience you'd like to share, reach out to us at membership@mictm.org.

Kelli Vansetters, MCTM Membership Chair Byron Center Public Schools

June Blog Post

Part II Building Conceptual Understanding

Building Conceptual Understanding...
Part II

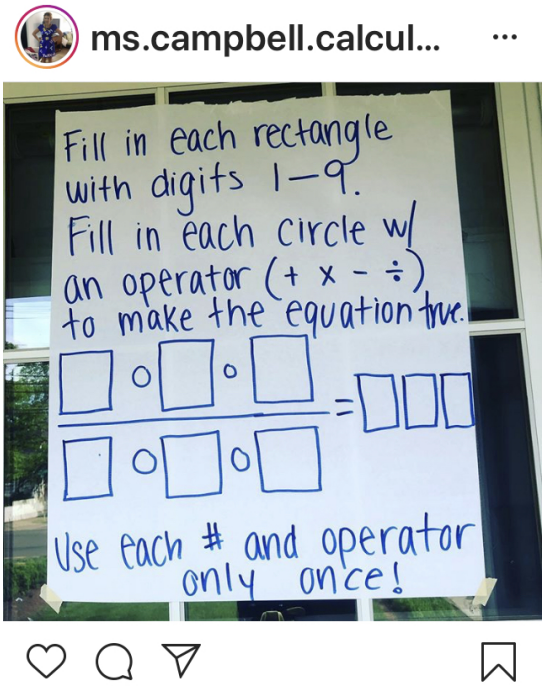
Kevin Dykema broadens his discussion on using manipulatives to build understanding to other grades:

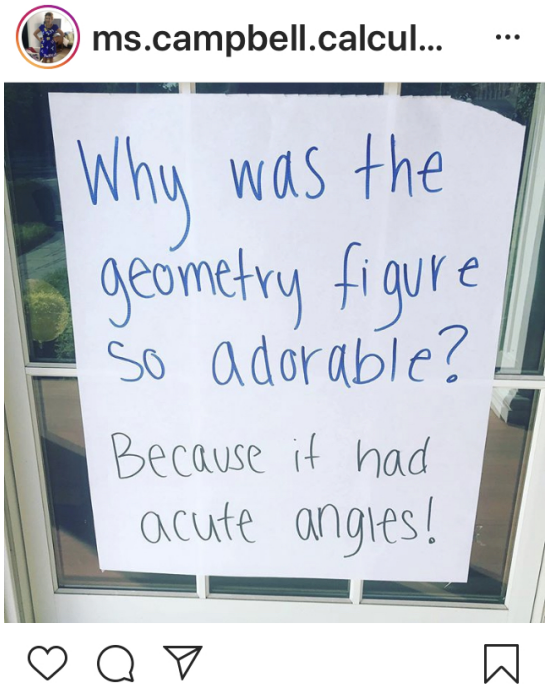
"Last month we looked at building conceptual understanding of multiplying two 2-digit numbers through using manipulatives. This month, we’ll look at what could come before to build up to this concept as well as how this can be applied to higher grades, again using manipulatives."

Head on over to our website by clicking on the button to read the entire article!

Instagram + Math = Fun

MCTM member **Dayna Britton** drew our attention to the Instagram account **ms.campbell.calculates**. During remote learning, Ms. Campbell posts a math puzzle and a joke on large paper outside of her house and shares to Instgram. The next day she also posts answers. When contacted, Ms. Campbell says she teachers high school Algebra I and Advanced Geometry in Westfield New Jersey -- the same district she graduated from in 2006. See samples below:





MDE Summer Learning Resources

"*Supporting Summer Learning, Pandemic or Not* provides a framework for local leaders and teachers to plan and implement summer learning programs and opportunities for all students and their families. It is designed to be a companion document to the Learning at a Distance Guidance document release by the Michigan Department of Education (MDD) in April. The content reflects research-based best practices for summer learning aimed at mitigating potential learning loss. The document includes one major academic section to address literacy and mathematics at the elementary, middle, and high school levels."

Supporting Summer Learning Document

Learning at a Distance Guidance Document

Region 3

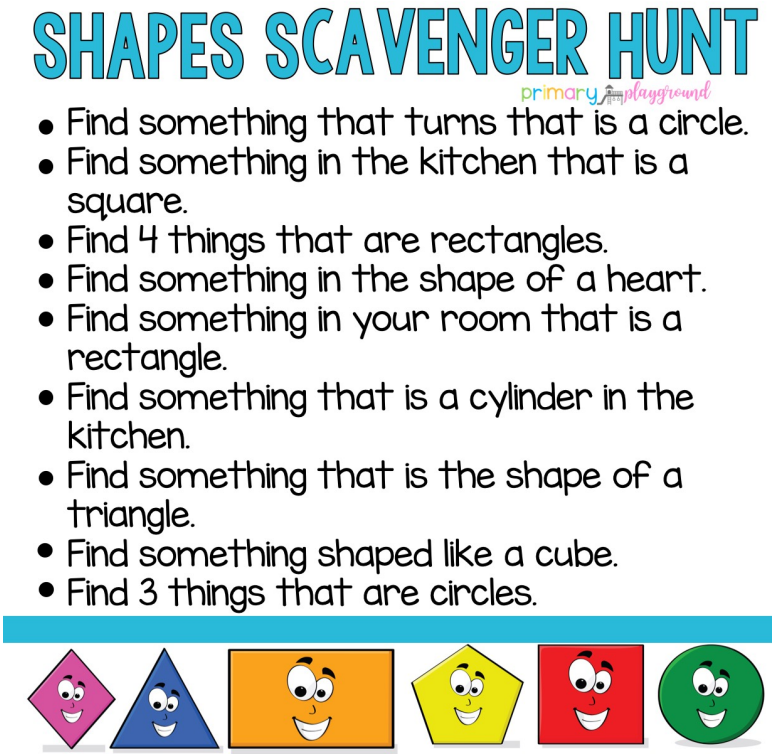
Michelle Chase has been an elementary educator for almost 30 years, with the majority of that time being in the South Redford School District. Like many elementary educators, Michelle started her career with a strong focus on early literacy. However, as the mother of mathematical thinkers, Michelle became aware that she needed to expand her knowledge about the best practices for teaching and learning math for the benefit of both her children and students. Since that time, Michelle has helped to coordinate math professional development for other elementary educators. This learning has led to more creativity, problem solving and risk-taking during math instruction. Last year, Michelle spearheaded an elementary math adoption committee. The team reviewed professional literature on math best practices to serve as a guide for the program selection. Michelle became a member of the MCTM as a way to support her ongoing learning to find the best ways to help students become mathematicians

Kristi Hanby has over 20 years of experience working as a mathematics educator in Michigan. Her roots in a more rural portion of the state, she moved to the Ann Arbor area in 2007 and took a job as a math consultant at an ISD, which opened up many opportunities to grow and learn professionally. She now works at Wayne RESA and supports teachers and administrators to implement and support best practice in elementary and middle school classrooms. She enjoys her role because it is always changing and can be a new challenge everyday, providing opportunities to make resources and provide learning that help teachers make sense of and utilize effective teaching practices in mathematics classrooms. While she can be found sitting in meetings, supporting curriculum planning, or leading professional learning, her favorite part of the job is still going into classrooms to work with students which she does both as a Math Recovery Interventionist and to model lessons for teachers.

Versability of Math at Home: Lower El

"On March 13, educators all over Michigan began scrambling to put together material that could be adapted for home learning. In many cases, that included worksheets upon worksheets! I remember feeling worried that many of my young students who preferred visual and tangible methods of learning would struggle. After brainstorming and planning for weeks ahead, I discovered that the math tools I used in my classroom could easily be substituted by common household items and math concepts could be manipulated to fit into learning at home. In this article, I outline math learning ideas for 1st grade students."
Hajra Khatri, Rainbow Elementary, Clintondale Community Schools

Example activity below and link to full article!



Versability of Math at Home Full Article

Resources for Middle School Teachers

Here are a few interesting things for middle school (and other) teachers that have come to my attention or inbox recently.

The authors of **Connected Mathematics Project** have added Covid-19 resources to the website, and continue to add to the site. There is material for both teachers and families.

As we think about math activities for summer, most of which require little screen time, Figure This is once again being looked at. The challenges were designed for use by families, at home, and the supplies needed are general household items.

Users of **Illustrative Mathematics** are curating a list of resources that is not reviewed by Illustrative Mathematics, but the first few things I have looked at on the list are really promising. Material on the list is for both middle school and high school.

Desmos has collected a set of live and pre-recorded webinars for teachers, and have some great ideas for using Desmos with distance learning.

Ann Marie Nichol-Turner, MCTM Middle School Vice President

Things that make you go hmmmmm.....

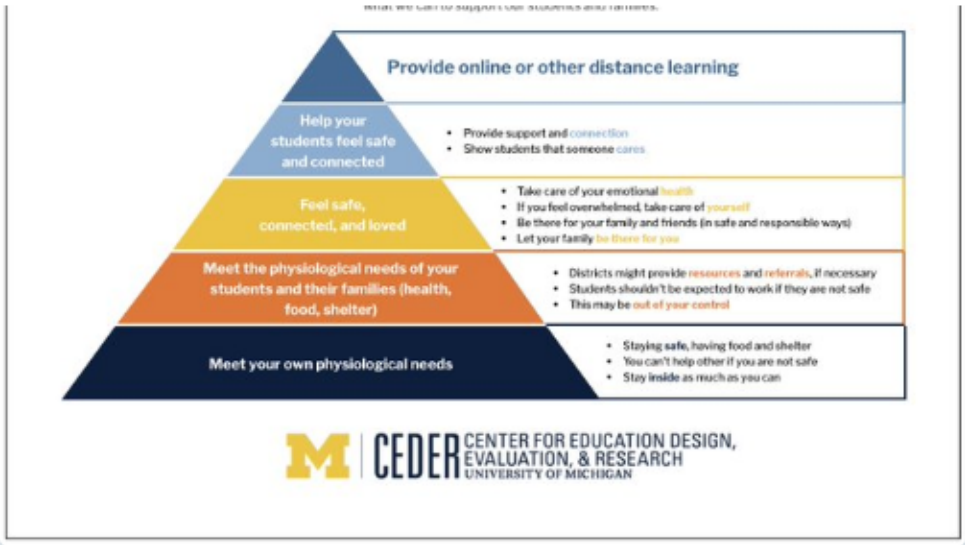
Professor Barclay
@AlbertBarclay69

Percentages are reversible. 8% of 25 is the same as 25% of 8 and one of them is much easier to do in your head.

This **Twitter** post was brought to our attention -- which leads us to ask: Is it true? Can you find a counter example? Is it always true? Can you prove this? How could this help students? How could this hinder students? Let's chat! @michiganmath #mctm

Michigan Council of Teachers of Mathematics @michigan... · May 17
We are here to support Michigan teachers! #MCTM

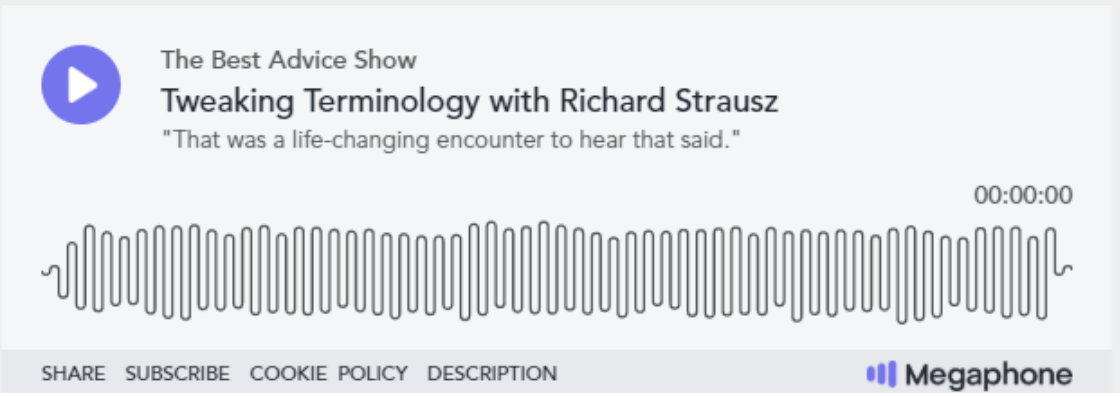
Nell K. Duke @nellkduke · May 16
Teacher Hierarchy of Needs graphic from @UMichEducation Center for Education Design, Evaluation, & Research (soe.umich.edu/covid19-resour...)



MI Teacher Featured on Podcast

An retired MCTM member and past MI Math Community contributor was featured on the podcast "The Best Advice Show" :

"Years ago, veteran math teacher **Richard Strausz** attended a conference that changed the way he taught for the rest of his life. *One seemingly tiny tip really stuck with him*. Want to hear it?" Click on the image below!



MOMATH
NATIONAL MUSEUM OF MATHEMATICS

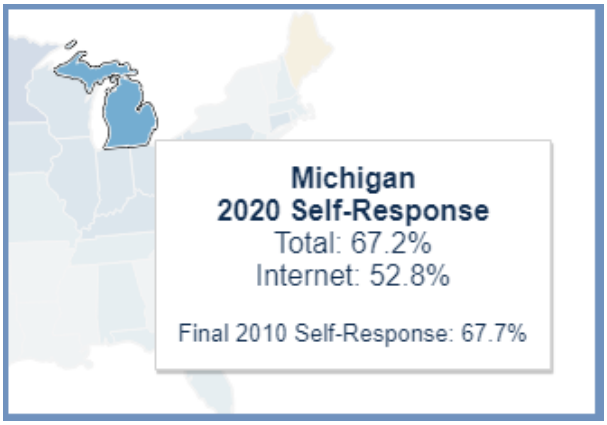
Did you know that there's an ENTIRE museum devoted to mathematics?? Yes! The National Museum of Mathematics is in New York City. It is an incredible place and is currently offering online programs that include virtual field trips and weekly mathematical puzzles from MoMath's puzzle master, Dr. Peter Winkler. Check it out!

MOMATH website

Update: Census Maps and Data with K-12 Students

Michigan census report rates have risen in the last month. An updated image is below. The United Stated 2020 Census has opportunities for teachers to use data in their Statistics in Schools initiative. Click HERE for an interactive map to share with students about response rates by state, county, city, town, congressional district, and tribal area. Wouldn't this be a great opportunity for a "What do you notice? and What do you wonder?" instructional routine?

Teachers can also access the website at the link below for lesson ideas and plans to use K-12 and sign up to get emails with further and future information.



US Census Bureau Statistics in Schools Webpage

Interactive Census Map

Editor's Extra:

This is the fourth issue of the renewed MCTM e-newsletter. Thank you to members who have contacted me with suggestions of material to include and to those who have written full articles for you to read. (Keep it coming! Email below.) Thank you to the MCTM Board of Directors for their contributions and support.

This has been an extremely difficult few months for everyone in so many ways, and we at MCTM hope that *MI Math Community* has been helpful to you during this time. As educators, it is essential to have a community of support. Thank YOU for all of the work you have been doing on behalf of your students this spring. Thank YOU for showing students good models of life-long learning. Thank YOU for caring about the well-being of your students, your fellow teachers, and your community.

MI Math Community will take a break and there will not be a July issue, but will be back in August.

Christine Kincaid Dewey, MCTM Publications Director/ MI Math Community Editor

Welcome to **MI Math Community**! One of MCTM's renewed initiatives is a monthly e-newsletter to share information about mathematics, mathematics education, and the happenings of MCTM.

Have an idea or topic you'd like to see included? Have a short article to submit for publication consideration? Want to give feedback? Please email MCTM Publications Director and MI Math Community Editor **Christine Kincaid Dewey** at Publication@mictm.org . Look for the e-newsletter to develop and grow over time based on member input.

Please share this newsletter will ALL of your educator colleagues! We want to spread the good news!