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(T a l k i n g L e a f)

South Dakota Council Teachers of Mathematics Newsletter

Fall 2023-2024

Wahpe Woyaka pi

Mark's Thoughts	*2-3*
A Word from Stephanie	*4*
PAEMST Update	*5*
6-8 Highlights	*6-7*
Tips for Teachers	*7*
SD StemEd Conference Info	*8*

Calendar Reminders

Conference Speaker Proposal Deadline	*Oct. 15*
Joint Conference Early Bird Registration Deadline	*Dec. 15*
Joint Conference Pre-Registration Deadline	*Jan. 15*
2025 SD StemEd Conference	*Feb. 6-8*

Presidential Ponderings

Did everyone's summer fly by as fast as mine did? Wow, I can't believe it, but classes are starting already by the time you read this letter. I hate to sound like a stuck record but we are accepting speaker forms for the joint conference already. Now is the time to get the bug in your administration's ear about needing off the first weekend in February. This coming year we have Howie Hua and April Strom lined up for speakers. It promises to be another great conference. Speaker proposal forms are now available here.

The deadline for speaker proposals is October 31, 2024, but if you are like me and wait until the last minute, you will forget! Early Bird Pre-Registration {till Dec 15} for the conference is also online and is offered at the best/lowest rate. Pre-Registration {from Dec 16 to Jan 15} is $50 higher but it's also $50 less expensive than on-site registration. Become a member & register early for the best rate. Even speakers must register.

As you begin the hustle and chaos of starting a new school year, I wish you all the best. I know many of our universities also have math contests and other rewarding enrichment exercises for your students. After all, why should only the athletes get to ride in the school busses! Here is to seeing you all again soon. Don't be afraid to reach out if you have any questions or if I can assist with anything.

Sincerely,

Dan Van Peursem

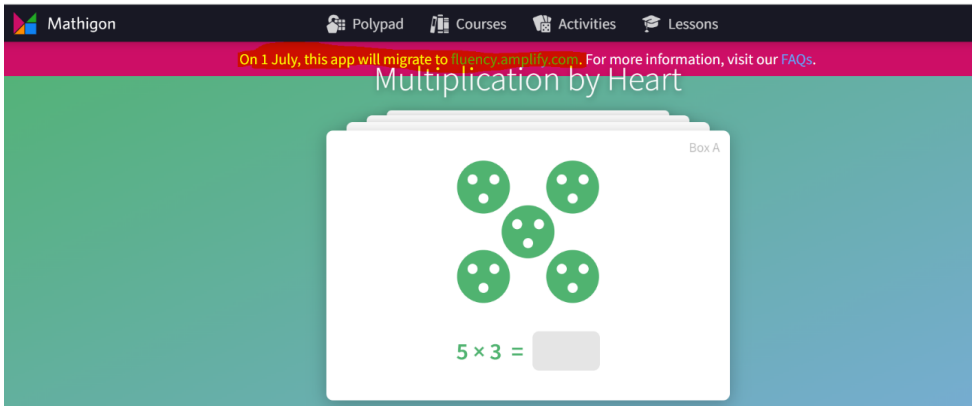
President-SDCTM
Dan.VanPeursem@usd.edu

Mark's Thoughts - Mathigon Update

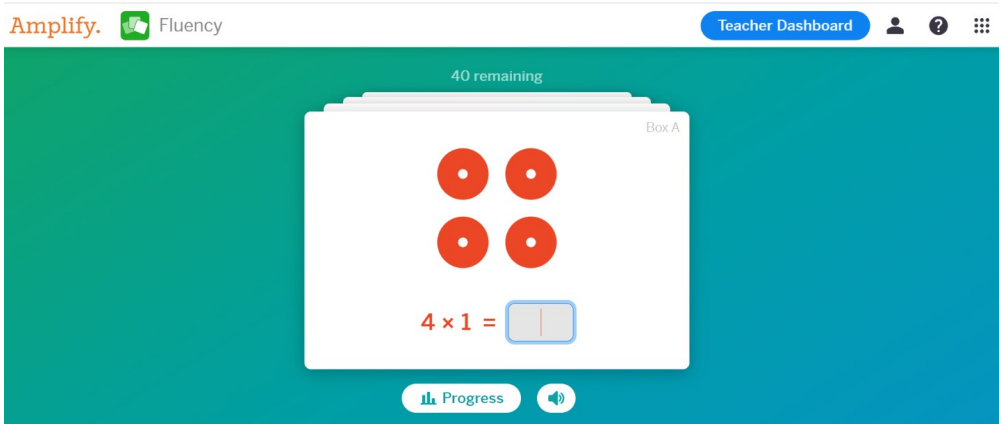
Greetings!

Summer is upon us and I hope you've found time to relax and enjoy the warm weather that comes with the season. Summer is also the time that many ed-tech companies roll out updates in preparation for the upcoming school year.

Mathigon (which is owned by Amplify) is no different. In the January 2023 issue of this newsletter, I highlighted one of my favorite activities for multiplication fluency called Multiplication by Heart. I've shown this resource to several people over the past 18 months, and many have reported student success thanks to the resource. As you can see below, as of July 1, Multiplication by Heart was relocated to fluency.amplify.com.



Once inside the new site, you will find that Amplify put Multiplication by Heart on steroids over the summer. In addition to the old version of Multiplication by Heart, there is now fluency resources for addition, subtraction, and division as well.



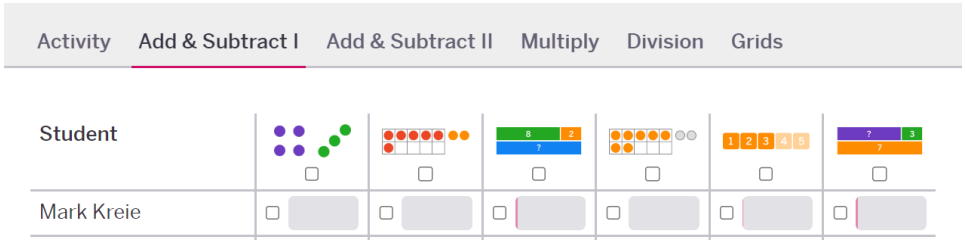
Each operation has its own subset of various tools to help develop fluency.

(Continued page 3)

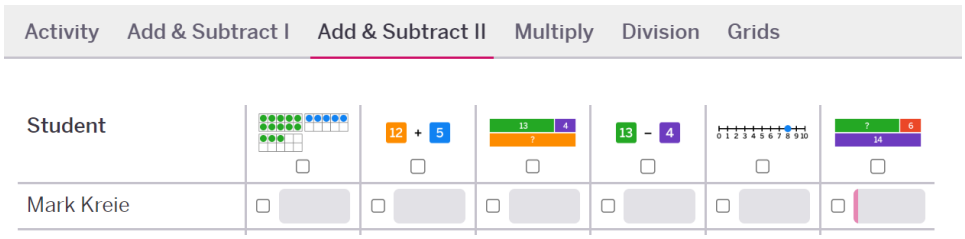
"Summer is the time that many ed-tech companies roll out updates..."

Mark's Thoughts (*continued*)

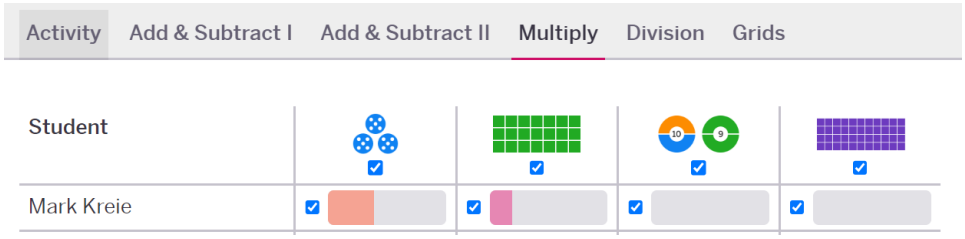
Add & Subtract is divided into two parts. Add & Subtract I includes counting dots, ten frames, number stripes, and counting down for subtraction.



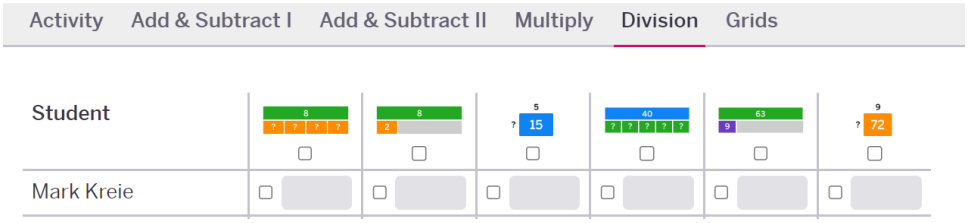
Add & Subtract II expands the ten frames to larger numbers, adds number tiles, larger number stripes, and a number line.



Multiply has the dot arrangements, rectangular arrays, and prime factor circles.



Division has number strips and area models.



I invite you to explore the free resource and hope you find it helpful. For more information, including tips to get started, visit Fluency.Amplify.com.

If you have any other questions about how to get started, please feel free to reach out to me. Have a great school year!

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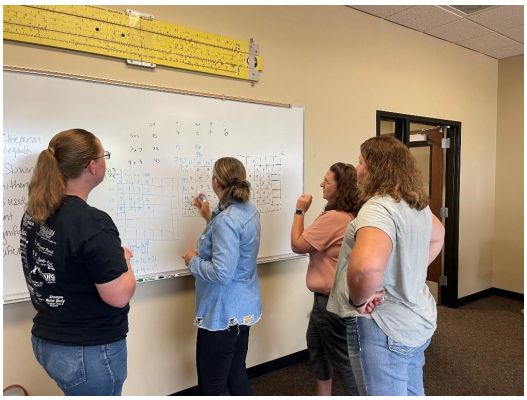
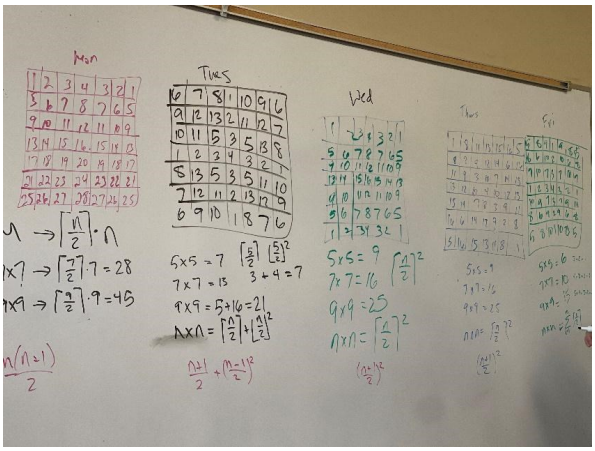
A Word from Stephanie



I had the honor of facilitating this year's SDCTM Summer Symposium in July! Words cannot express my gratitude to both the SDCTM for inviting me to facilitate and to those teachers who were able to attend and participate.

"Having a hook around a piece of art work when looking for patterns in math may allow for our student to make better connections..."

One of the tasks teachers engaged in during the day was the Attractive Tablecloth task from the nrich math site. Prior to starting the task, we had a notice and wonder conversation about the Dignity of Earth and Sky statue in Chamberlin. Having a hook around a piece of art work, when looking for patterns in math, may allow for our students to make better connections to mathematics, observe more pattens in the mathematics, and to better see themselves as mathematicians. During the math task, teachers followed the Building Thinking Classroom practice of working on non-permanent vertical spaces while thinking through the patterns from the Attractive Tablecloth task for each day of the week and how these could be written into general expressions. (see pictures!)



Thank you to all who could join me for this year's SDCTM Summer Symposium - for sharing your education journey, engaging in math tasks and discussing the value of students' math identity as it applies to finding joy in learning mathematics! I shared in the symposium that I truly believe in the power of intentional networking and am grateful for everyone who continues to be in and join my math educator family.

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SDCTM Public Relations / Social Media

Presidential Award for Excellence in Mathematics and Science Teaching

The Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) is the highest recognition that a kindergarten through 12th-grade mathematics or science teacher may receive for outstanding teaching in the United States. Since 1983, more than 5,200 teachers have been recognized for their contributions to mathematics and science education. Awardees serve as models for their colleagues, inspiration to their communities, and leaders in the improvement of mathematics and science education.

Presidential awardees receive a citation signed by the President of the United States, a trip to Washington DC to attend a series of recognition events and professional development opportunities and a $10,000 award from the National Science Foundation. We are eagerly awaiting an announcement from the White House recognizing outstanding mathematics and science teachers from previous cycles!

Anyone--principals, teachers, parents, students, or members of the general public--may nominate a teacher by completing the nomination form available on the PAEMST website. For more information, please visit www.paemst.org. The nomination window will be open this Fall to recognize 7th-12th grade mathematics and science teachers.

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"Since 1983, ore than 5,200 teachers have been recognized for the contributions…."

SDCTM Social Media Presence

You can follow SDCTM on the following social media platforms:

Instagram: SDCTM_Math

Facebook: South Dakota Teachers of Mathematics

X (Twitter): @SouthDakotaCTM

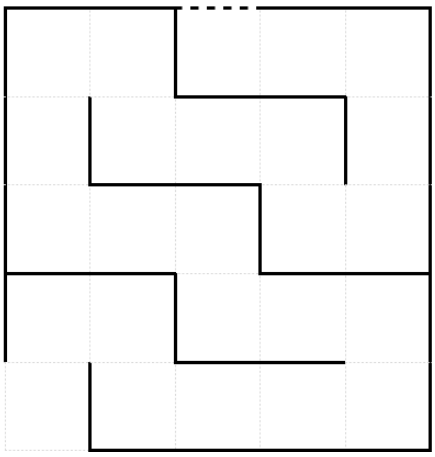
6-8 Highlights

Summer is almost over! Are you ready to go back to the classroom? I am guessing that most of you, like me, are looking forward to meeting your students, but are probably not ready to give up summer quite yet. If you haven't planned out your first few lessons yet, here are some of my favorites.

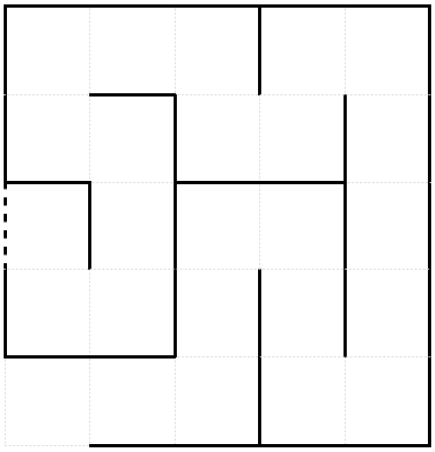
It's not hard; it's just new: On the first day of school, I have instructions on the board for students to seat themselves in alphabetical order by first name without talking. This teaches students a few rules for my classroom- mainly that I will expect them to come in each day and follow any directions on the board without talking. What I love about this activity is that students think it is easy because they have been sitting alphabetically their whole life, but then they realize it is by first name and they have to retrain their brain. After everyone is sitting correctly, I asked them if it was hard. Of course, they say yes. Then I ask why putting things in alphabetical order is hard. They know each other's names, and they know the alphabet, so why is it hard? They then decide that it isn't difficult, just new. If I have them, do it every day, it will get easier. Then I point out where math fits in- most of the things I will ask them to do this year will seem hard, but they aren't difficult - just new. We will practice every day until it no longer seems difficult.

Mistakes move us forward: My other favorite task for the first day is the invisible maze. On my floor, I tape off a 5x5 grid with two openings - a start and a finish. Students get in a line at the start opening and take turns attempting to find the path to the finish opening. The "walls" of the maze are invisible, so you don't know which way is safe. If a student attempts to walk through an invisible wall, I make a buzzer noise and it's the next student's turn. The students standing in line are not allowed to talk or signal. In fact, if anyone talks or attempts to help the student in the maze, their turn is over. Their only job is to pay attention to where the person currently in the grid is stepping. To close the activity we discuss that it is valued to make mistakes. You will never make it through the maze if you don't make a move.

MAZE A



MAZE B



However, we have to learn from our mistakes AND the mistakes of others. When a classmate asks a question in class- PAY ATTENTION! We all have the same goal in the end, so their question can help you too. I usually only require one student to make it out, but you could require all of them to make it through if you have enough time- for added difficulty, the entire group must start over each time someone walks through a wall, so each student has to remember how to get through even if they already made it out. I included two versions of the maze I use so you can play twice or have two teams competing against each other.

Continued page 7

"Anyone--principals, teachers, parents, students, or members of the general public--may nominate a teacher ..."

6-8 Highlights (*continued)*

Helping not Doing: 100 Numbers to Get Students Talking from Sara VanDerWerf is a great task to show students what teamwork looks like. Students look for the numbers 1-100 on a sheet of paper and eventually find a shortcut or pattern to see if they can find all 100 in the time specified. She has great closure discussions on what collaboration looks like and how to carry it forward. Another lesson to pull from this activity is to show students what it looks like to help, not do. Each student has to mark the number themselves. You can help them find the number, but one person can't jut take over and circle them all. When in a team, everyone needs to participate; when helping a friend, he/she still needs to do the work. The rest of the year I will ask students, "Are you helping or doing?" to remind students that doing work for someone else is not actually helping them.

If you get a chance to try one of these activities or have any questions, just shoot me an email!

Allison Schmitz
SDCTM Middle School Liaison
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Tips for Teachers

One of the frustrations that we all deal with is students missing class. I sometimes get overwhelmed trying to keep track of who is making up what test or quiz, when, and where (in my room or with another teacher in a study hall). Add in the kids that are taking advantage of any retake opportunities that you may allow and the list can go on and on. One of the "life hacks" that I stole from a colleague is to use address labels. I print a page of address labels like the one shown below. Instead of me having to write the information down, I hand a label to a student when we discuss the makeup. They complete the information and then I can stick it to the relevant test/quiz document and see that it gets to whomever will be proctoring the test/quiz!

Name _____	Name _____	Name _____
What _____	What _____	What _____
When/Where _____	When/Where _____	When/Where _____

Sheila McQuade
SDCTM Past President
SMcQuade@sOGKnights.org

"One of the "life hacks" that I stole from a colleague is to use address labels."

SD STEM Ed Conference Info

Mark your calendars for the SD STEM Ed Conference - February 6-8, 2025 It's never too early to submit your Speaker Proposal form. The 33rd Annual SDCTM / SDSTA Professional Development Conference will be held in Huron. It starts with a Thursday night sharing sessions, continues with Friday & Saturday sessions, and has a Friday night banquet with a featured speaker. There will be a few featured speakers, but some of the best sessions are presented by South Dakota's best (that's you)! If you have presented before, thank you. I hope that you will consider presenting again. If you have not presented before, please consider it this year. Let others benefit from your ideas and experience. If you're hesitant about going it alone, you can present with partner(s). Presenting your lesson can be a fun and rewarding experience! The Speaker Proposal form is online here and can be found online until October 31, 2024.

You could wait until later to submit a proposal, but why wait until the last minute? If you remember a lesson that you taught this year or an activity that you did, write up a presentation to share with your fellow teachers. You have the link so I'd suggest you do it now as I'd really like to see what you have in mind. If you have problems or questions, feel free to contact me at James@SDSTA.org

We are looking for STEM activities at all levels. Each session will last about 50 minutes. Submit as many sessions as you want, but you may not get acceptance of all. Both workshop or presentation styles are welcomed. Presenters must be registered participants or exhibiting at the conference. Proposals are due by October 31, 2024. You will receive confirmation of acceptance by December 1. Nearly all conference rooms have cables (projectors) with multiple ends that connect to the screens in the room, but not every type of cable connection is necessarily available. Presenters are welcome to bring their own devices. All other materials or technology is the responsibility of the presenter.

From the February 2024 conference, we awarded two free conference registrations at the membership rate. The first goes to Whitney Fischer from the drawing of conference surveys. The second goes to Darwin Daugaard from the drawing of speakers. Congrats to both of you! Did you want to reflect a little more on last years conference? Then go here where you can see thumbnails of pictures taken during the conference. You can see various award winners, vendors/exhibitors, speakers, and a lot of participants enjoying a variety of sessions. Can you find yourself in the many pictures? Hope to see you there!!!

James Stearns
SD STEM Ed Program Coordinator

SD STEM Ed

"It is never too early to submit your Speaker Proposal form. "

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www.sdctm.org

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