Notes 2 Nerds

January 25, 2023

Math collaborative

Teacher Development and Consulting

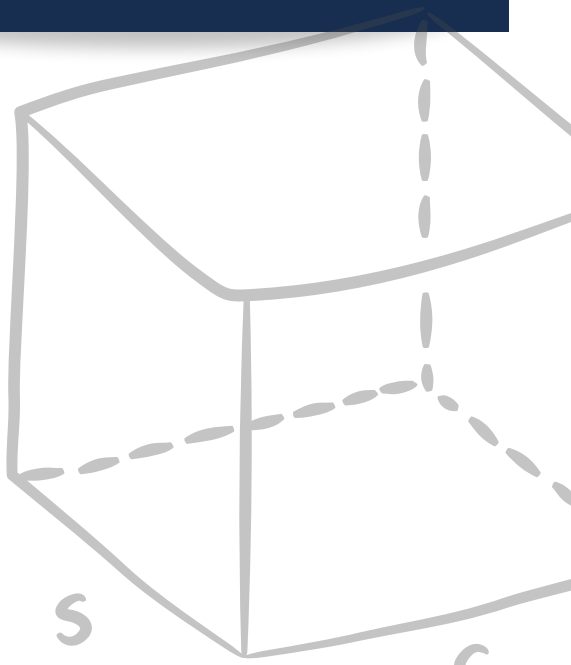
In This Issue:

Upcoming Events:

- 2nd Annual CCTM Conference: February 22, 2023

Save-the-Date:

- Professional Development: Grades 6-8 and 9-12, February 28, 2023
- Professional Development: Grades K-2, March 1, 2023
- Professional Development: Grades 3-5, March 2, 2023
- Math Master's 2023 Competition



You are asking - we are answering!... (click here to give us your feedback):

Saturday Professional Development Survey

Follow Us:

Director's Notes

"Cartoons and Classrooms"

I received this meme this morning. It reminded me of my recent conversation with a teacher.

This teacher let me know that she was having the worst year ever! As the conversation continued, she questioned why she was still teaching despite the difficulties and lack of appreciation. But, like any self-respecting Wile E. Coyote, she persisted in the face of falling rocks, unexpected cliffs, and the dreaded anvil!

It's not as if she doesn't have the opportunity, talent, and motivation to move on from the classroom. Yet, she returns. *Why?* Her situation is not unlike the coyote that is driven to chase the Roadrunner. The teacher eventually answered her own question in a warm, broken-hearted sort of way that only a teacher can. "*I love those little heathens*."

I find it interesting that in the cartoon there is always some unforeseen obstacle outside of Wile E. Coyote's control that leads to failure. I imagine that - to a certain degree - the same thing happens to a teacher in the classroom. So, how do we mitigate these events?

Often, I identify with Wile E. Coyote when things happen that confound my well-laid plans. If I own the part of his character that *all too often* finds defeat in the near-grasp of victory, I should also own his persistence and determination to continue in the face of adversity.

I understand the angst and frustration of this teacher. Yet, in the same breath, I admire her persistence and devotion to teaching. As a society, do we rely on the goodwill of lovable coyotes too much? There is more that could and should be done to make the work of teachers less like that of Wile E. Coyote.

Meep Meep!
Lots of questions but working on the solutions each day.

Happy Maths,

Pete

Professional Learning and Cool Teacher Stuff

Elementary Grades:

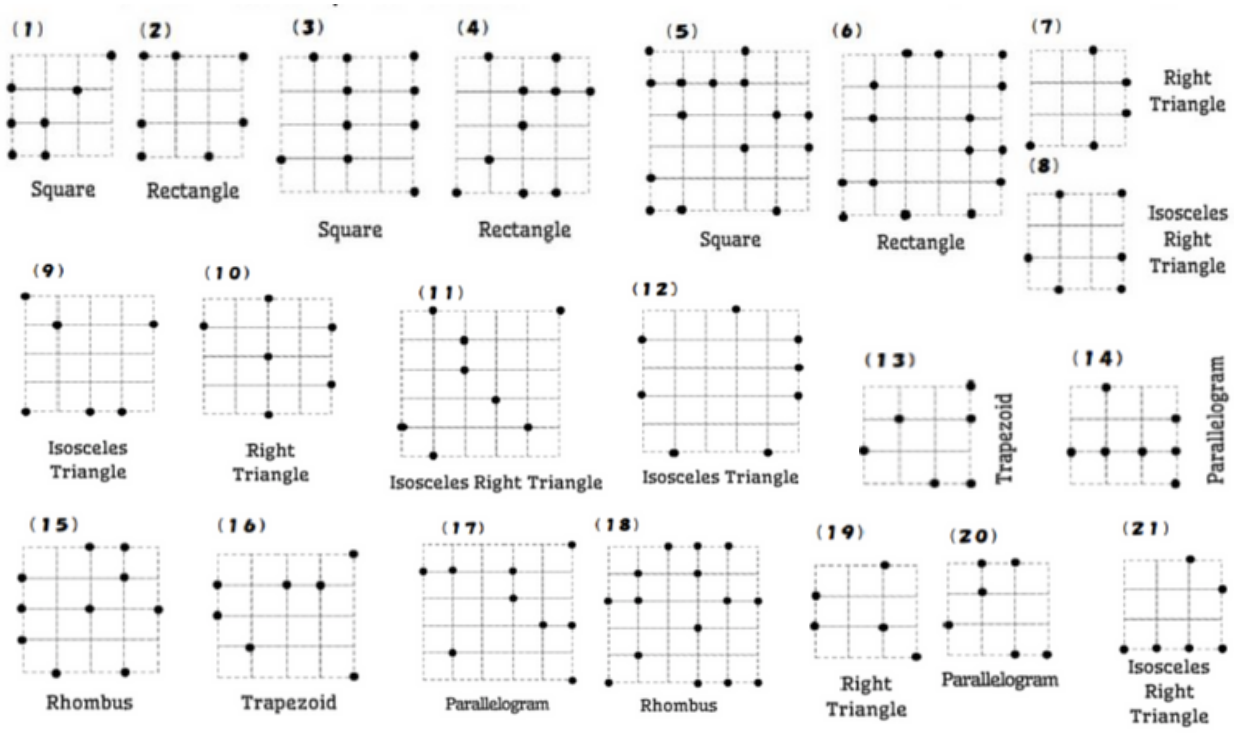
Zukei Puzzles

"All squares are rectangles but not all rectangles are squares." To truly understand this statement, you need to know the attributes of a square AND a rectangle. Helping students explore and identify attributes, and then apply that understanding to give a figure its most specific name is the foundation of their study of geometry. Zukei puzzles do just that!

How to solve these puzzles:
This sophisticated “connect-the-dots” puzzle is made up of several dots on a grid. To solve the puzzle, you want to connect some of the dots to form the named shape. The one rule is that the dots must lie on the shape’s vertices.

As I was working through these puzzles, some of the shapes literally jumped off the page at me. Others – not so much! I had to resort to what I knew about the attributes of a shape. Shapes with right angles had me looking for three dots in the shape of an “L,” and parallel lines needed two pairs of dots that were equidistant from each other. It was fun to think about how I could apply my understanding of the attributes to the dots and then “see” the named shape.

Here’s another hint: Try turning the paper and changing the orientation! Amazing how much that helps, too! I hope you have as much fun looking at and solving these as I did. These puzzles are the brainchild of Japanese puzzle master, Naoki Inaba. The problem for many of us is that we don’t read Japanese. Thank you to Sarah Carter. She used google translator to determine the shape clue for each puzzle.)



Professional Learning and Cool Teacher Stuff

'Laugh Out Loud' 😂 For all Grades:

Social media can produce a variety of reactions in us – laughter, dismay, anger, wonder, etc. One of my personal favorite reactions to posts I read is, "Wow! I can use that in a math lesson!" What follows below are several memes and my ponderings on possible ways to incorporate these amusing signs in your classroom:

Don't you immediately think about math when you see pies? What are the denominators of these pies--twelfths for the pumpkin and sevenths for the pizza, right?
If your students have this misconception, use these images to challenge their understanding. The denominator of a fraction partitions, or splits, into *equal* parts.
So, what can we say about the denominators of each pie? Someone has a good sense of humor but bad fraction reasoning!

It's not Laugh-Out-Loud butter!

It's mispriced Land O' Lakes, instead. What's going on with the cost? It is one heck of a bargain! Stock up now! As math teachers we should ask ourselves, "What's the function of a decimal point anyway?" It identifies the *units* position.

In our money system, the decimal identifies the dollar as the units position.

Take $1.50, for example. The decimal "looks to the left" to identify the units position - the dollar. The "5" is of that unit of $1 has a value of fifty cents.

In the case of LOL Butter, the units position is one penny, so any number to the right of the decimal are fractions of a penny. By using a decimal point and a ¢ symbol, the price is a fraction of a penny - actually, of a penny!
I say round the cost to a penny and buy a case of butter for mere pennies (pun intended!) Math matters!

A great visual pun! When your students take the square root of a number, do they link this numbers-and-operations procedure with geometry? Do they know the square root of a number is the length of the side of a square with that area? Do they realize if they square the square root value they will have the area of that square?

Click on the links below to Register Today!

February Professional Development Opportunities*

GRADES 6-8: FEBRUARY 28, 2023
TEACHING THROUGH TASKS

GRADES 9-12: FEBRUARY 28, 2023
ALGEBRA TEACHING THROUGH TASKS
(A LOOK AT THE NEW CURRICULUM)

GRADES K-2: MARCH 1, 2023
ACTIVE LEARNING

GRADES 3-5: MARCH 2, 2023
ACTIVE THINKER PROBLEM SOLVING

*No cost for CSU Students, Calvary Christian School, Muscogee County School District, Russell County School District, St. Anne Pacelli, and Delta Kappa Gamma Members

The Math Masters Competition

Needs You!

HEY!!

We are talking to you, Master Teachers!

Sign up to volunteer Saturday, March 11, 2023

Click on the link to get started:

Volunteer Registration

Math collaborative

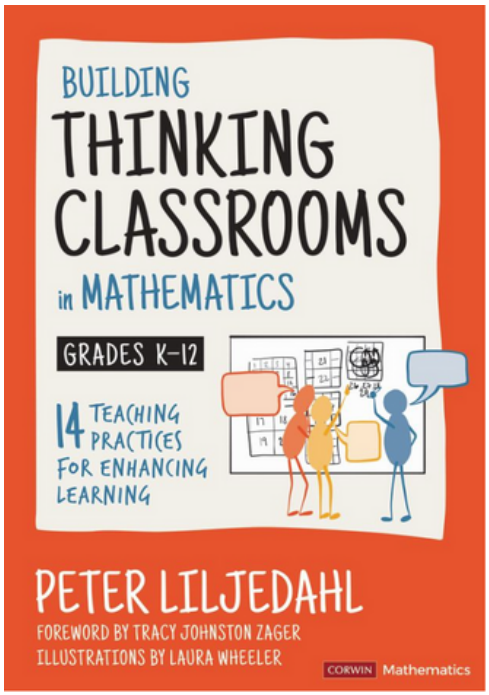
Join Us

BUILDING THINKING CLASSROOMS COHORT

- Are the things you are doing in class not connecting with students?
- Would you like to engage your students more deeply?
- Are you ready for a change that works?
  (I know you have heard this before.)

So, kick the tires and see if the promise fits.
It costs nothing but your willingness to participate.
We meet about once a month, after school, at Frank Brown Hall. We develop and share lessons for teaching your subject. We are looking to grow our Building Thinking Classroom Cohort with High School and Middle School teachers.

Resource Link



If you are interested,
contact Peter Anderson:
anderson_peter2@columbusstate.edu

'Make It Count!' WANTS YOUR SCHOOL

What is it?

The 'Make It Count' Project (MIC) aims to improve math fluency in second graders by building a foundation for sustained growth in mathematics. The partnership between Partners in Education and the Mathematics Collaborative (CRMC) @ Columbus State University pairs schools with volunteers who will visit second-grade classrooms to provide engaging and fun activities designed to build math fluency.

Interested?

Here is What You Need:

- Volunteers (CRMC and PIE will help recruit)
- Supervised space
- 'Make It Count' kit
- Identify students to participate
- School Point-of-Contact

Partners in EDUCATION

MAKE IT COUNT!

Call for Volunteers!

You will need to:

- Attend one training session;
- Be available for one-hour each week at the designated time;
- Commit to being available from the first of November 2022 until the end of March 2023 (18 school weeks.)

Interested?

Contact the Mathematics Collaborative:

www.columbusstate.edu/crmc
email: crmc@columbusstate.edu or
phone: 706-565-1475

2ND ANNUAL CCTM CONFERENCE

2023

DR. LYA SNELL

GUEST SPEAKER

Dr. Lya Snell serves as the Georgia Department of Education's Mathematics Program Manager, where she works to ensure that all students have access to high-quality mathematics programming throughout Georgia.

FEBRUARY 22, 2023

CSU'S FRANK BROWN HALL

5:30 - 8:30 PM ET

SCAN HERE TO REGISTER!

WE NEED PRESENTERS!

SCAN HERE TO SUBMIT A PROPOSAL!

TOPIC:

THE NEW MATH STANDARDS

AND YOU!

FOR MORE INFORMATION, CONTACT:

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BARBER.CAROLYN.A@MUSCOGEE.K12.GA.US

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