# Peirce Math News

Connecting our thinking around teaching and learning math school-wide.

# **CONGRATULATIONS!**

Congratulations on another school year in the books. Enjoy your vacation. It is well deserved!

# RESEARCH LESSONS and REFLECTIONS from SEMESTER 2

#### 2nd Grade: Length Measurement with Standard Units

The 2nd grade team planned a lesson in which students learned an authentic reason for using a standard unit, the centimeter. In the post-lesson discussion, we reflected on the importance of "tension" in a lesson to compel the class to understand something new.



#### 1st Grade: Addition with Regrouping

Teachers from K and 1st planned a lesson on addition. The goal was to help ALL students develop a concrete understanding of regrouping. We talked about the importance of students having regular opportunities to set up numbers with their block kits in kindergarten, so they can successfully use blocks to model calculations later on in K and 1st.



#### 3rd Grade: Area

Teachers from 3rd and 4th planned a lesson on finding the area of a composite shape. Our goal was to help all students access a difficult problem. We reflected that the supports we planned might have taken away chances for each student to approach the problem on their own first. We also realized that sometimes the most simple, concrete solutions (tiling, in this case) can be the most powerful to help the class understand a new concept.

#### 5th Grade: Dividing by a Fraction

Mr. Lerner researched, planned, and taught a lesson on dividing by fractions. Some thoughts: 1) It's really hard to understand what it means to divide by a fraction. A whole lesson could be spent on one scenario and understanding why division would be necessary; 2) visuals in this lesson helped students concretely understand the situation; 3) it's best to avoid talk of "multiplying by the reciprocal" and instead focus on how multiplication and division were used in the calculation

# MATH TALKS and CLASS DISCUSSIONS

In January, Ms. Kerkstra and Ms. Harris presented a PD session on math talks--short mental math routines that help students develop number sense and calculation strategies. Mr. Lerner presented on the topic of class discussions in math, looking at a lesson facilitated two different ways by two different teachers. We reflected on the "5 Practices for Orchestrating Productive Mathematics Discussions" (NCTM): *anticipating, monitoring, selecting, sequencing,* and *connecting.* 

#### SPRING CONFERENCE

Many staff attended the Chicago Lesson Study Conference. We saw a 2nd grade lesson on numbers beyond 1,000 and a 7th grade lesson on combining like terms. The experience was very energizing!

- It was exciting to see how the teachers chose to sequence the ideas of the students during the lessons.
- We want to develop our *bansho*, carefully planning the ideas from the lesson to be written on the board.
- We learned about re-engagement lessons, in which student misconceptions are revisited and clarified after a formative assessment reveals some confusion.
- We talked about choosing one shared theme to focus on for next year, such as student note-taking, or encouraging precision in mathematical language.



# ST MATH



Taking into account students who moved beyond grade level, average syllabus progress this year at Peirce was 83%. How was your experience with ST Math? Which puzzles were the biggest roadblocks for the class? Next year, consider making a plan to help students move past these hurdles -- perhaps a whole-group lesson up front or a graphic organizer or manipulatives prepared ahead of time.

# MATHAPALOOZA and LOOKING AHEAD

Congratulations to the 6th grade team on Mathapalooza and ending the year with a bang! Looking ahead, if you have something you want to keep developing as part of your instructional practice, or something you are proud of that you want to share with others, or an idea for math-related practices at Peirce -- please share as we head into next year. Enjoy your summer!