



December 2018

Muir Lesson Study News!

Math Talk Moves in Mr. Tamsky's Class!

Congrats to the 4/5 Cross Site Lesson Study Team!

Our 5th grade teachers engaged in a cross site lesson study team with teachers at Hillcrest Elementary. They planned a unit and public lesson with the Muir Research Theory of Action at the forefront. They planned and reflected about how to get our scholars engaged in mathematical discourse around one of the toughest math topics: Long Division! A few key learnings from the team: **First, wait time is key!** Give students at least 8 seconds of wait time before interjecting or calling on a student. **Second, question frames for students provide access!** Mr. Joe and Ms Carter created high level question frames for students and glued them on their notebooks. They also used these same questions to push students thinking and model the kind of questions they wanted students to begin to ask each other. We saw a huge increase in student to student questioning. **Finally, students need to speak up!** The team pushed their students to consider what role they played in the discussion. Students decided, yes-it is important for me to speak loud enough for everyone to hear my important ideas!

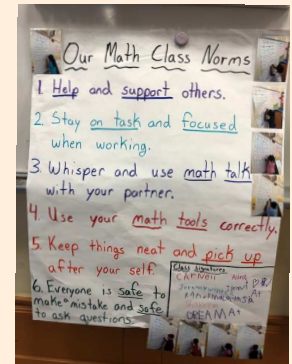
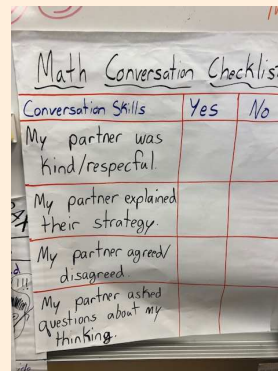
Please consider trying out one of the three strategies the team found success in!

What convinced you that was the right answer?	Can you explain your idea, step by step?
How can you prove that?	What do others think about what he/she said?
What does _____ represent in the problem?	_____ is similar to _____'s strategy because _____.

5th grade question frames glued to each students math notebook

Around Muir

The K/1 team is working on setting up classroom math discussion norms and working towards Step 2 of Productive Talk: **Students orienting to the thinking of other's**. Think: "Hey kid, did you catch that great idea?" Seems easy, unless you're 5! Check out some anchor charts they've been using as they develop this key listening skill with their scholars.



If you are interested in seeing some of their scholars in action, [check out this link!](#)

Our 2nd Grade Team is working on using students ideas and strategies to make student thinking visible during their problem solving lessons! They anticipate what students will do and are interested in the different kinds of questions that will help to support students' ability to explain their thinking and reasoning. Check out Ms. Alley' student created board work and their learning reflections!

