



Math Empowers⁴



Grade Four

Middletown Township Public Schools

May/June 2016



Creating Math Talk Communities

Teachers are challenged to engage their students in meaningful math talk that allows them to construct viable arguments and critique others' reasoning. When students engage in meaningful math talk, they are able to increase their conceptual understanding and deepen their content knowledge. There are five strategies that are helpful in supporting the development of more meaningful math talk:

1. Discuss why math talk is important.
2. Teach students how to listen and respond.
3. Introduce sentence stems.
4. Contrast explanation versus justification.
5. Give an example.

For more information, read the attached article.

THE FINAL COUNTDOWN!

There are so many options for math class beyond the book! Here are some end of year ideas to consider working into your math class. Ignite mathematical thinking in the last weeks of school!

- ◆ "Getting Ready for Grade 5" (Planning Guide)
- ◆ Critical Area Projects (Think Central)
- ◆ INVESTIGATIONS games and activities
- ◆ Problem of the Month or MARS tasks (Cybrary)
- ◆ Revisit the BEST of the BEST online interactives from the [resource document](#).

Some Ideas for 4.MD.A Measurement

- ◆ Have students investigate measurement through the activities in the Money, Miles, and Large Numbers unit of Investigations.

*** I: Money, Miles, and Large Numbers**
OPTIONAL
 Investigation 1 – All Sessions (p.2-29)
 Investigation 2 – Sessions 1, 2, 3 (p.30-40)
 Investigation 3 – All Sessions (p.46-57)

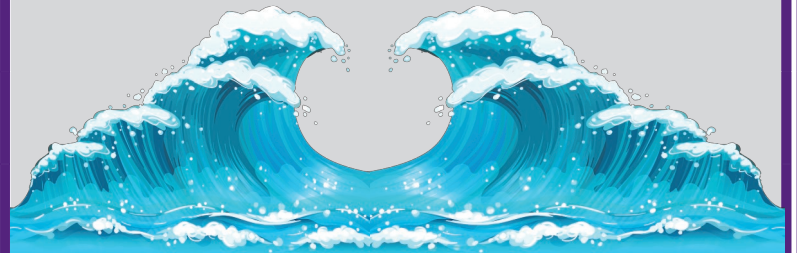
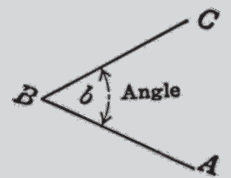
- ◆ Give students opportunities to experience counting money and making change using manipulatives.

Some Ideas for 4.MD.C

Angles

- ◆ Give students practice measuring angles—whole number measurements only—with a protractor by having them measure numerous angles that have been drawn for them—include angles opening to the left, to the right, up, down, and diagonally.
- ◆ Have students draw angles given a whole number degree measurement.
- ◆ Have students indicate whether the angles measured or drawn are acute, obtuse, or right angles.
- ◆ Have students solve real world problems using strategies such as draw a diagram.
- ◆ Click and try one of these games/links:

- [Angle Types](#)
- [Alien Angles](#)
- [Measure the Angle](#)
- [Banana Hunt](#)
- [Measuring Angles](#)
- [Helicopter Shootdown](#)
- [Roboidz](#)
- [UFO Attack](#)



SUGGESTED SUMMER READING LIST

The 5-Minute Teacher - Mark Barnes



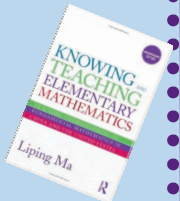
Now I Get It: Strategies for Building Confident and Competent Mathematicians, K-6 - Susan O'Connell



KNOWING and TEACHING Elementary Mathematics - Lipping Ma



Beyond the Facts & Flashcards: Exploring Math with Your Kids - Jan Mokros



Hope you have a MATH-TASTIC rest of the school year!