Bridging Practices Among CT Mathematics Educators
MSP Grant – Summer Workshop

June 23, 2014

WELCOME!!

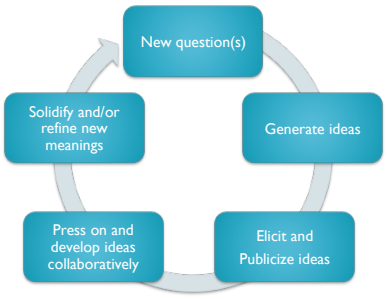
Please look at the hanging chart for your table number.

PEDAGOGY: DAY 1

GOALS:

- Introduce a general model for organizing classroom discussions focused on mathematical reasoning
- Introduce a specific routine experientially– Talk Frame – that is an example of this model

One model: A pedagogy of mathematical reasoning



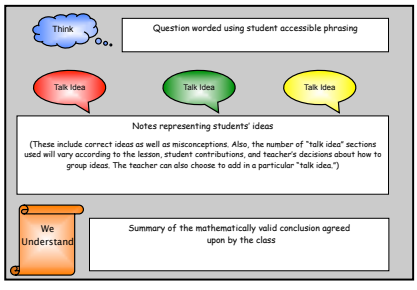
A Problem Solving Task- Purposes

- Provide a common math-teaching-and-learning experience for reflection and discussion
- Opportunity to discuss tasks and task implementation
- Exposure to/discussion of some teaching strategies
- Opportunities to see how others think
- To learn more math (connections); engage in *productive struggle*
- For fun! ☺

Problem Solving- working together

Ground Rules

- You have the **right** to be share your thinking, the **right** to be listened to; you have an **obligation** to explain to others



Exploring Shape Games: Geometry with Imi and Zani, by M. K. Gavin, T. M. Casa, S. H. Chapin, and L. J. Sheffield. Copyright © 2012, by Kendall Hunt Publishing Company

Talk Frame- other comments

- Allows for generation of ideas; bringing them to public space; discussion, further development; and summarizing (or starting the cycle again)
- Flexible routine
- *Choice of task has a large impact on type of mathematics elicited*

Some resources

TALK FRAME

- Casa, T. M. (2013). Capturing Thinking on the Talk Frame. *Teaching Children Mathematics, 19*(8).
- Williams, M. M. & T. M. Casa (2012). Connecting Class Talk with Individual Student Writing. *Teaching Children Mathematics*. 314-321.

5-PRACTICES ROUTINE

- Smith, M.S., E. K. Hughes, R.A. Engle, & M. K. Stein. (2009) Orchestrating discussions. *Mathematics Teaching in the Middle School* 14(9). 549-556.
- Smith, M. S., & M. K. Stein (2011). *5 Practices for Orchestrating Productive Mathematics Discussions*. Reston, VA: National Council of Teachers of Mathematics.