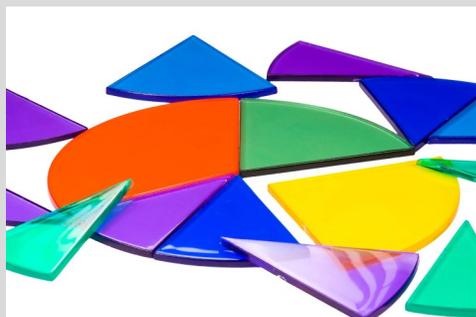


For: Middle School Teachers of Mathematics and Teachers of Algebra I



# Making Math Matter!

## Using Models and Manipulatives to Better Build Math Understandings



Featuring **TEACHERS21** Presenter  
**Marcie Abramson**

**Thursday, December 3, 2015**  
at the MSSAA Office, Franklin

**Sign-In/Registration:** 8:00 am to 8:30 am  
**Workshop:** 8:30 am to 3:00 pm  
**Fees:** Member \$195/Non-Member \$260

6 Professional Development Hours

PD Content Area: *Mathematics*

This workshop is designed for middle school teachers of mathematics and teachers of Algebra I who are committed to implementing the Massachusetts Curriculum Framework that requires specific attention to modeling in mathematics. This highly participatory workshop will provide many and varied opportunities to dig deeper into Mathematical Practice Four, which will lead to building connections between concrete models and numerical patterns and function relationships. Teachers will engage in real-world problems that allow the opportunity to see how using models and manipulatives can lead students to make sense of the math around them and to build bigger and better understandings of various skills and big ideas. Come ready to think, play, draw, and say aha!

### Participants will:

- Engage in rich activities and tasks that make use of concrete models, pictures, real-world situations, symbols and oral and written language in their solution paths.
- Use models and manipulatives to better understand why formulas work.
- Investigate and dive into tasks that allow students to represent their learning with models and manipulatives in the areas of factors, proportional reasoning, operations with integers, solving equations, polynomials, and factoring quadratics.
- Bring back great strategies to their classroom so that their students can say "I recognize math in my everyday life and I can use the math I know to solve problems."

**Marcie Abramson's** passion for teaching mathematics is contagious and has made her an increasingly sought-after consultant and presenter. A full-time teacher of seventh and eighth grade mathematics, Marcie is also a Middle School Mathematics Curriculum Coordinator and a clinical professor at Brandeis University, teaching a course in Methods in Elementary School Mathematics. She served on Middle School Accrediting Committees and chaired the town-wide Middle School Math Review Committee. Marcie's publications include *Painless Math Word Problems* (Barron's 2010, 2001) and *Mathematics-Exploring Your World* (Silver Burdett and Ginn, 1990). She is the co-author of *Math Extra-The Sum Times* (DLM Teaching Resources, 1988), *Amazing Facts and Real Problems: Decks 1 and II* (Creative Publications, 1988) and *Trivia Math: A Problem a Day* (Creative Publications, 1986).

[Register for this workshop online](#)

[Click here for MSSAA workshop policies](#)

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