K-5 Math Night

November 2, 2016

7-8PM

Agenda

Agenda:

7PM- Enter cafeteria

7:05-7:20- Opening remarks from Kim Tew, Amanda Matticks and Jillian Vaz

7:25- Walk to 4th grade hallway

7:30- Breakout sessions to explore Math Tools/Models and K-5 Problem Solving and Perseverance

Continued...

7:35- Participants engage in first activity

7:45- Participants switch to the second activity

7:55- Wrap up the activities and end the night

8:00- Thank you for joining us!

Tonight's Purpose

-I can actively listen to an overview of the content, practices, and skills that my child is working on.

-I can experience the content, practices, and skills that are emphasized in my child's math class.

- I can discover meaningful math activities to implement at home with my child.

K-5 Math Content Standard Strands

Operations and Algebraic Thinking

- Represent and Solve Problems
- Properties of Operations

Numbers and Operations

- Understand Place Value, Counting, and Cardinality
- Number and Operations: Base Ten and Fractions

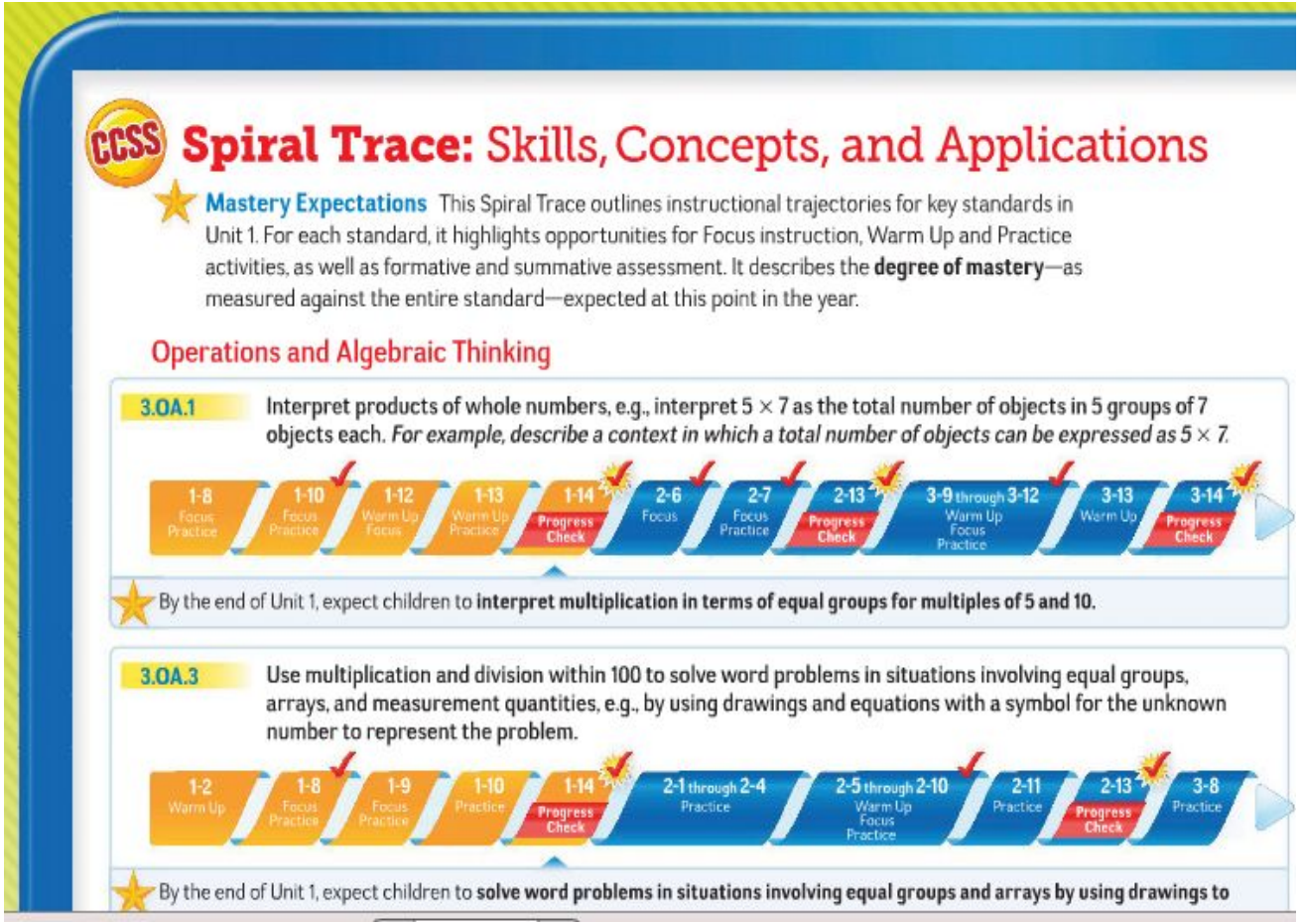
Measurement and Data

- Solve Problems Involving Measurement
- Represent and Interpret Data

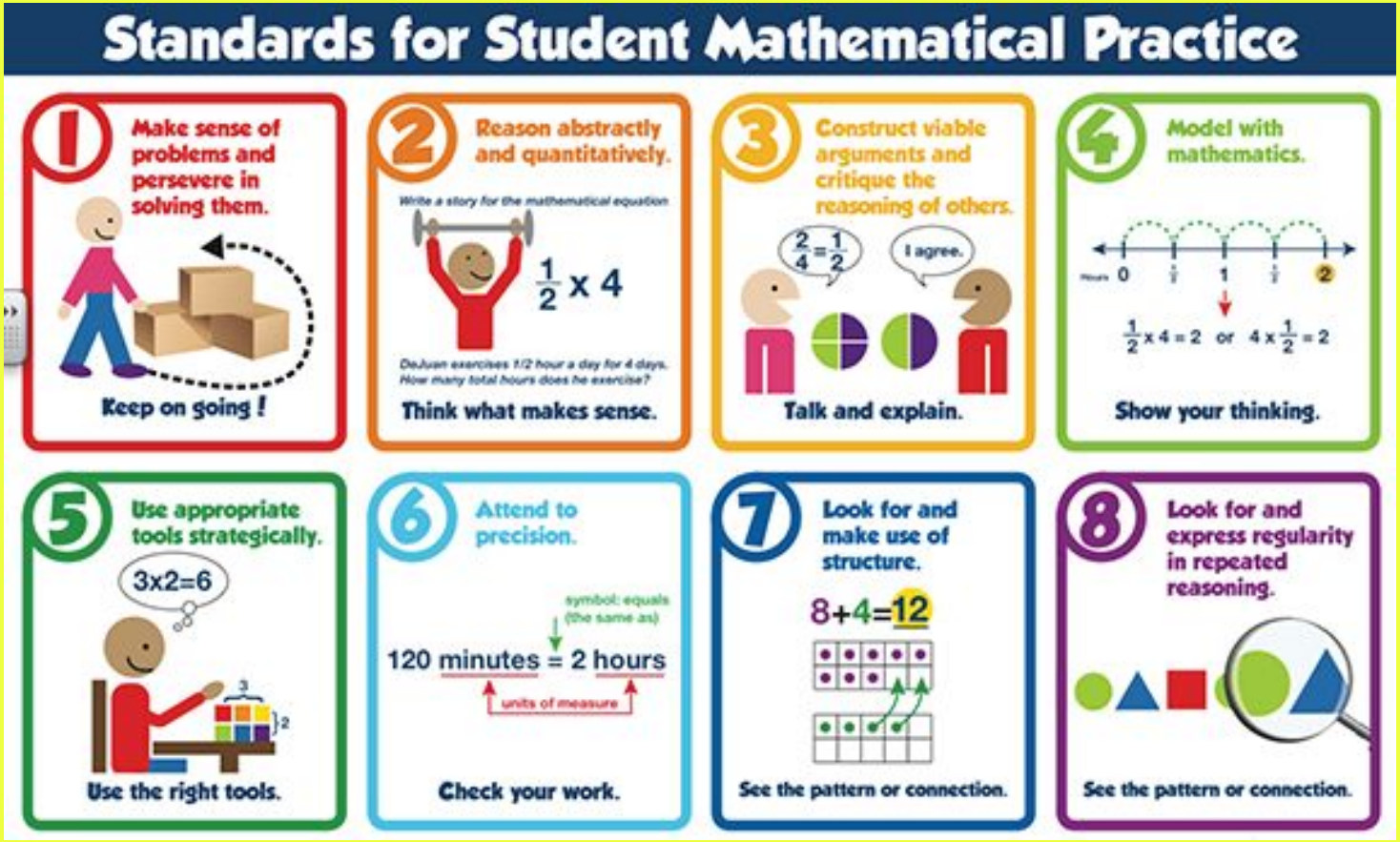
Geometry

- Reason with Shapes and Their Attributes

Content and Skill Spiral



The Eight Mathematical Practices



The Mathematical Practices

Make Sense of Problems and Persevere in Solving them

Reason Abstractly and Quantitatively

Construct Arguments and Critique the Reasoning of Others

Model with Mathematics

The Mathematical Practices

Use Appropriate Tools Strategically

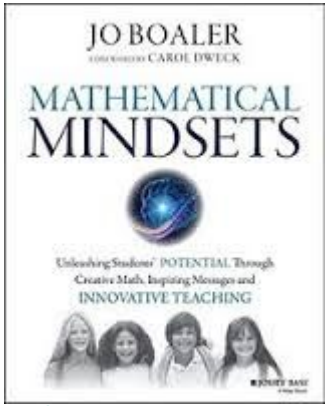
Attend to Precision

Look for and Express Regularity in Repeated Reasoning

Look for and Make use of Structure

Advice from Professor Jo Boaler - Author of Mathematical Mindsets

Adapted from youcubed.org



1. Encourage children to play math puzzles and games. This encourages children to enjoy math and develop number sense, which are both critically important.
2. Stay encouraging while children are problem solving. For example: If your child multiplies 3 by 4 and gets 7, say – Oh I see what you are thinking, you are using what you know about addition to add 3 and 4, when we multiply we have 4 groups of 3…

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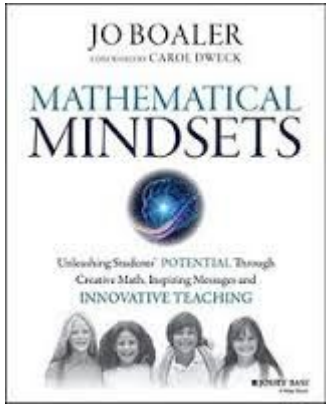

3. Never share with your children the idea that you were bad at math at school or you dislike it – especially if you are a mother. Researchers found that as soon as mothers shared that idea with their daughters, their daughter's achievement went down.

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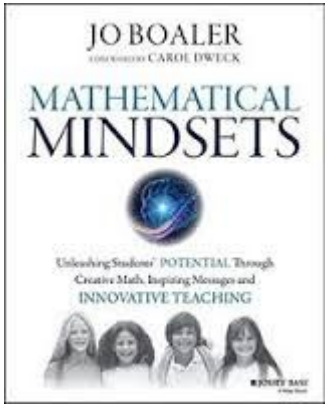

4. Encourage number sense. What separates high and low achievers is number sense – having an idea of the size of numbers and being able to separate and combine numbers flexibly. For example, when working out 29 + 56, if you take one from the 56 and make it 30 + 55, it is much easier to work out. The flexibility to work with numbers in this way is what is called number sense and it is very important.

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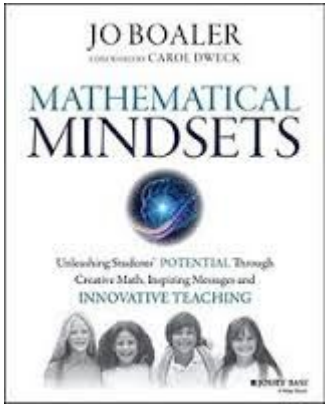

5. Perhaps most important of all – encourage a "growth mindset" let students know that they have unlimited math potential and that being good at math is all about working hard. When children have a growth mindset, they do well with challenges and do better in school overall. When they tell you something is hard for them, or they have made a mistake, tell them: "That's wonderful, your brain is growing!"

Math Tools and Models

K-5

- You will have the opportunity to experience different math activities for you to implement at home with your child.
- You will be able to choose and manipulate appropriate tools and models to solve a mathematical task
- Examples will be grouped by K-1, 2-3, and 4-5

Problem Solving & Perseverance

K-5

- Examples will be grouped by K-2 and 3-5.
- You will have the opportunity to experience an open ended response along with ways to persevere and reflect on your work.

Resources

- Advice from Jo Boaler:

https://bhi61nm2cr3mkdgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2016/03/Parent-Night-Handout-vF-1.pdf

- New Jersey Student Learning Standards

http://www.state.nj.us/education/cccs/

- Standards for Mathematical Practices

http://www.corestandards.org/Math/Practice/

Breakout Sessions

Room # (4th grade hallway)	Last Names
E-4 (Berkey)	A, B, C, D
E-6 (Cucinotti)	E, F, G, H
E-7 (Castronovo)	I, J, K, L
E-9 (Wilson)	M, N, O, P
E-10 (Zaffarese)	Q, R, S
E-11 (Dilts)	T, U, V
E-12 (Biondi)	W, X, Y, Z