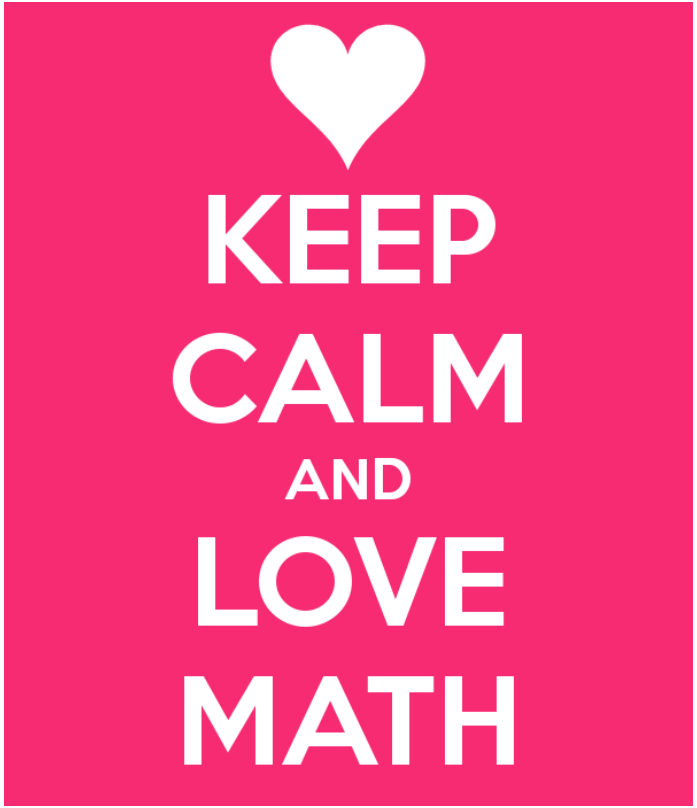
372K Parent Workshop

November 8, 2019

Presenters: Arielle Teicher & Beth Huff

Agenda

- Opening Activity
- Number Sense Activity
- enVision Overview
- Word Problem Strategies
- Games & Resources
- Q & A



“Many parents hated mathematics in school, but they still argue for traditional teaching because they think it just had to be the way -- that the unpleasant teaching they experienced is due to the unpleasant nature of mathematics.”

-*Boaler:* Mathematical Mindsets

enVision Overview

Problem Based Learning

Daily Math Structure

Students are actively involved in problem solving as they start with the Solve and Share

Next is the visual learning piece which introduces different strategies and reinforces past work to make math connections.

Then small guided group work and individual work. This is where the differentiation occurs.

Typically end with a game and coming back together to recap the learning.

Solve & Share Example

At the pet store, Sam bought a hamster that cost $10. He also bought 5 mice at $4 each. How much did Sam spend in all? Write to explain the math you used to solve this problem.

Show your work in 2 different ways

Word Problem Strategies

3-Reads Math Protocol for Word Problems

- Reading the problem/situation 3 timers
  - First read - goal is to comprehend the text.
    - Doesn’t involve numbers or the question itself
      - Teacher/parent asks: How would you describe the situation in your own words? What do you think is the context of the story?
  - Second read - goal is to comprehend the mathematical structure of the problem.
    - Introduces numbers
    - Does not pose any question
      - Child can make a list of possible questions
      - Make observations about the quantities
  - Third Read - goal is to list all possible mathematical questions
    - Questions are laid out
    - Children can discuss different ways of thinking
    - Can create diagrams or models to analyze questions that are posed

enVision 1st Grade

1st Read

Jan has some tickets. She gives some tickets to her friends.

- How would you describe this in your own words?
- What is the purpose/context of this story?

2nd Read

Jan has 10 tickets.
She gives 2 tickets
to her friends.

- List some possible questions
- Notice/Wonder
- Observations about quantities

3rd Read

Jan has 10 tickets. She gives 2 tickets to her friends. How many tickets does Jan have left?

- Create diagrams or models to show thinking

enVision 5th Grade

1st Read

Ashley is stacking boxes on a shelf. The bottom box measures inches long, inches wide, and inches high. The top box is a cube.

- How would you describe this in your own words?
- What is the purpose/context of this story?

2nd Read

Ashley is stacking two boxes on a shelf. The bottom box measures 6 inches long, 5 inches wide, and 5 inches high. The top box is a cube with one edge measuring 4 inches.

- List some possible questions
- Notice/Wonder
- Observations about quantities

3rd Read

Ashley is stacking two boxes on a shelf. The bottom box measures 6 inches long, 5 inches wide, and 5 inches high. The top box is a cube with one edge measuring 4 inches. What is the volume of this stack? Explain.

- Create diagrams or models to show thinking.

How to help your child explain their thinking

- Draw a picture
- Use manipulatives at home
- If they can write their process but can’t explain WHY they did it, follow up with “...because”
- Act it out
- Work backwards: Start with the last detail and work backwards until you get to the beginning of the problem.

Resources

“Board” Games To Play As A Family

Tenzie (preK-up)

Tiny Polka Dots (prek-3)

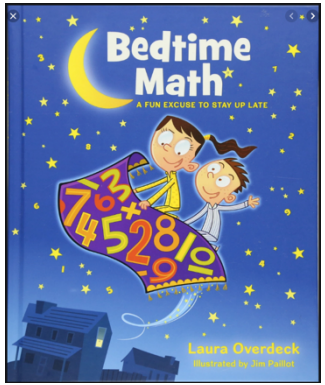
Blokus (K- up)

Shut the Box (grade 1 and up)

Zeus on the Loose (grade 2 and up)

Prime Climb (grade 3 and up)

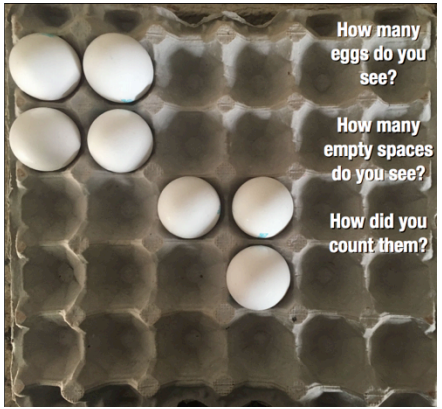
At Home Resources

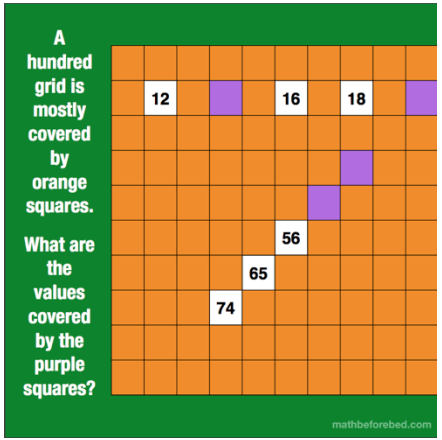


- Bedtime Math
  - Books
  - Website
  - App
    - All have nightly problems at 3 different levels. It can be done with more than one child.

At Home Resources

- Math Before Bed
  - Can get a free e-book sent to you with 180 tasks for 180 days





Book and Facebook Group

Adding Parents To
The Equation