



K-5 Mathematics

Parent Evening

October 13, 2015

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Agenda

- ★ An overview of our Math Curriculum, Philosophy, Classroom Instruction and Resources
- ★ Classroom Lessons Session 1
- ★ Classroom Lessons Session 2
- ★ Q&A with Administrators (Auditorium)

Mathematics Curriculum Review Process

Where We Were, Where We Are

Cyclical Review process

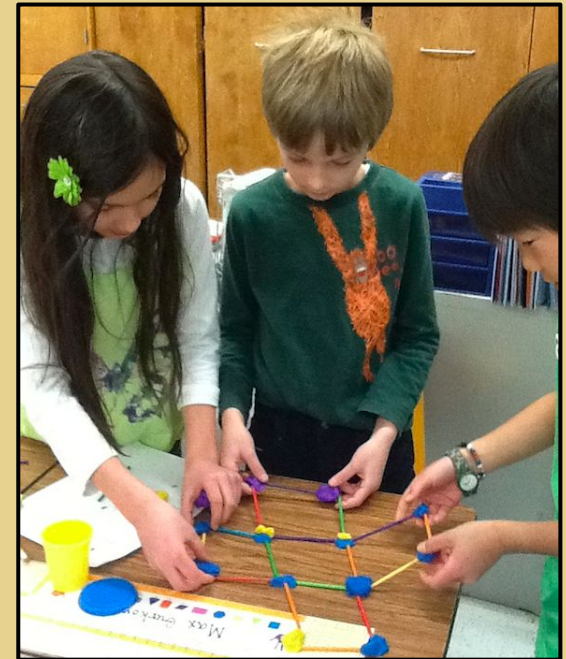
- ★ continual adjustments to the curriculum or current program
- ★ ensures the integrity of subjects, grades, and standards is preserved

Math Curriculum Committee Process

- ★ Assembled a Math leadership team
- ★ Review of current research
- ★ Review our current program
- ★ Lab sites to explore best practices
- ★ Set goals and adopted a vision statement
- ★ Identification of Math resources
- ★ Site visits
- ★ Evaluation of resources (rubric developed from our vision statement)
- ★ Purchased Everyday Math 4 (K-5)

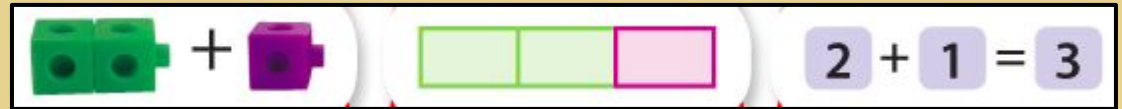
Our Math Curriculum

- ★ Units of study focused on a math concept
- ★ Concepts are revisited
- ★ Exposure vs. mastery
- ★ Ample time for skill practice
- ★ Real life application
- ★ Problem solving/critical thinking
- ★ Multiple paths to a correct answer
- ★ Focus on process and concept development

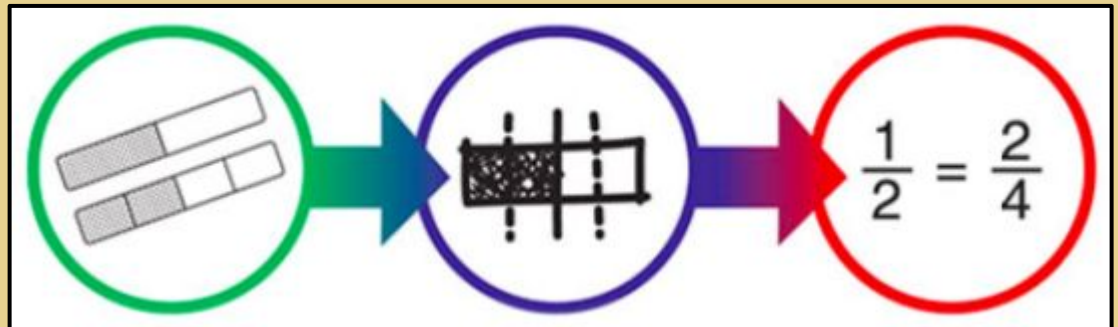


Stages for Learning Math

1. Concrete



2. Pictorial



3. Abstract

Mathematically Proficient Students

- ★ Think about the meaning of a problem and look for entry points to its solution.
- ★ Analyze relationships between numbers and concepts.
- ★ Plan for a solution rather than simply jumping into a solution attempt.
- ★ Monitor and evaluate their progress. Change course if necessary.
- ★ Interpret tables and graphs (younger students).
- ★ Graph data and search for regularity or trends (older students).
- ★ Use concrete objects or pictures to help conceptualize and solve a problem.
- ★ Check their answers to problems using a different method
- ★ Can understand the approaches of others to solving problems

What Does Math Instruction Look Like in Elementary School?

- ★ Collaborative learning in partners and small groups
- ★ Discussion and sharing of strategies and ideas
- ★ Game play to reinforce facts and concepts



- ★ Lots of manipulatives
 - ★ Differentiation built into daily lessons
 - ★ Concrete modeling as a way to abstract understanding
- ★ Lots of enthusiastic children who enjoy math!

A Typical Lesson

- ★ Mental Math Warm Up
- ★ Math Message
- ★ Focus of the Lesson
 - Group/Partner Activities
 - Independent Practice
 - Fact Fluency Practice
- ★ Closure Activity
 - Formative Assessments
 - Exit Tickets
 - Sharing of Problem Solving Strategies



Open Response Lessons

- ★ 1–2 day lessons in each unit provide students with opportunities to solve non-routine problems, justify their solutions, and compare strategies
- ★ Solve problems that involve more than one possible strategy or solution
- ★ Children defend their reasoning and critique the reasoning of their peers
- ★ Assessments provide information about students' performance on longer, more complex problems and emphasize the mathematical practices

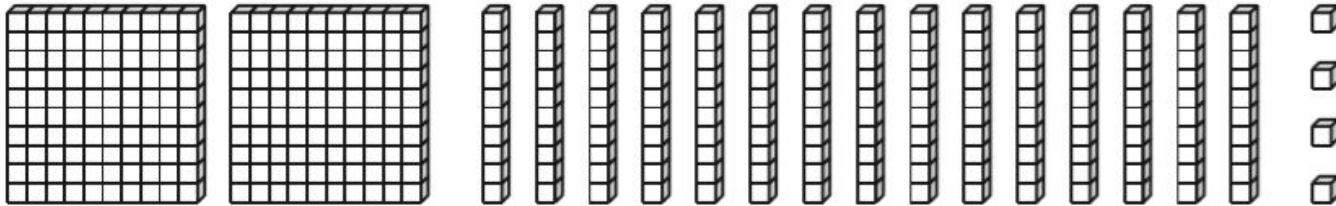
Open Response Lessons

Base-10 Block Representations

Lesson 4-6

NAME _____

DATE _____



Camilo believes the number represented by the blocks is 2,154.
Susan believes it is 354.

- ① Who is correct? _____
- ② Explain how you decided on your answer. You may include drawings.

Everyday Math 4

- ★ A resource to support our Curriculum
- ★ Aligned to our philosophy about teaching Math
- ★ Opportunities for differentiation
- ★ Skills are revisited
- ★ Games allow for skill practice
- ★ Allows for the stages of learning math (manipulatives)
- ★ Digital Component

Assisting Your Child At Home

- ★ Have a designated space for math homework:
 - Include math manipulatives such as: coins, beans, rulers, white boards and dry erase (fosters perseverance)
- ★ HW will be independent practice of skills taught in school that day.
- ★ Assistance should be limited- Homework should never be a battle!
- ★ Write a note or email the teacher if you had questions about the homework or if it was too difficult for your child.
- ★ Have conversations that revolve around math.