

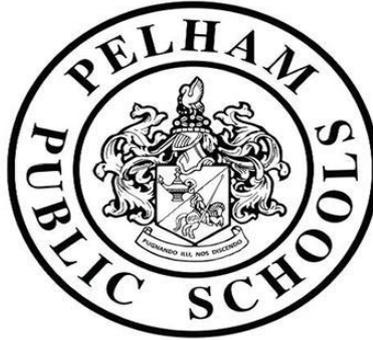
Elementary Curriculum Information Night

October 25, 2021

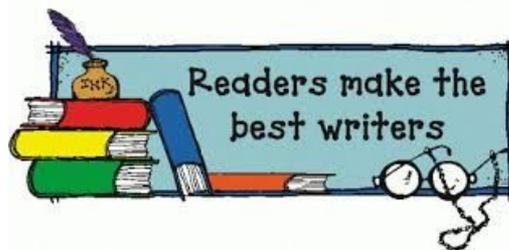
Dr. Maria Thompson, Director of Humanities (K-12)

Dr. Tom Callahan, Director of Mathematics and Science (K-12)

Mrs. Beth Finkelstein, Mathematics Professional Developer (K-5)



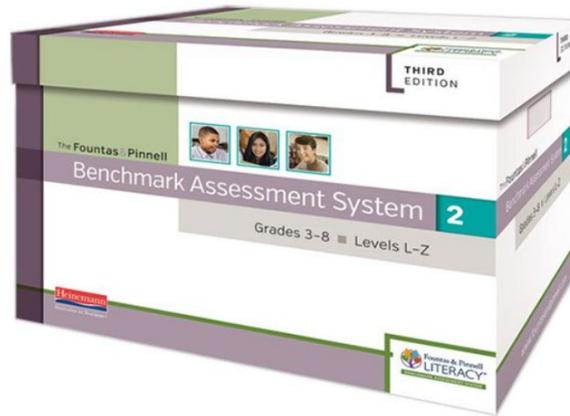
K-5 English Language Arts



Dr. Maria Thompson, Director of Humanities, K-12

How do we get to know our Readers and Writers?

aimsweb
PLUS 






by Renaissance®

 newsela

How are the Pelham Schools
guiding students to navigate
challenging texts, read widely
and write powerfully?

Pelham's Curriculum

- We are a Teachers College Reading and Writing Project District (K-5).
- Students move through the units of study around a certain genre (fiction, nonfiction, narrative, opinion). A unit of study ends with a celebration.
- Students learn how to revise and edit.
- Our goal is to have children read and write as much as possible, and for all children to learn to LOVE to read and write!

Essentials of a Workshop Model

Workshop teachers keep in mind a set of bottom lines for their instruction. These often include:

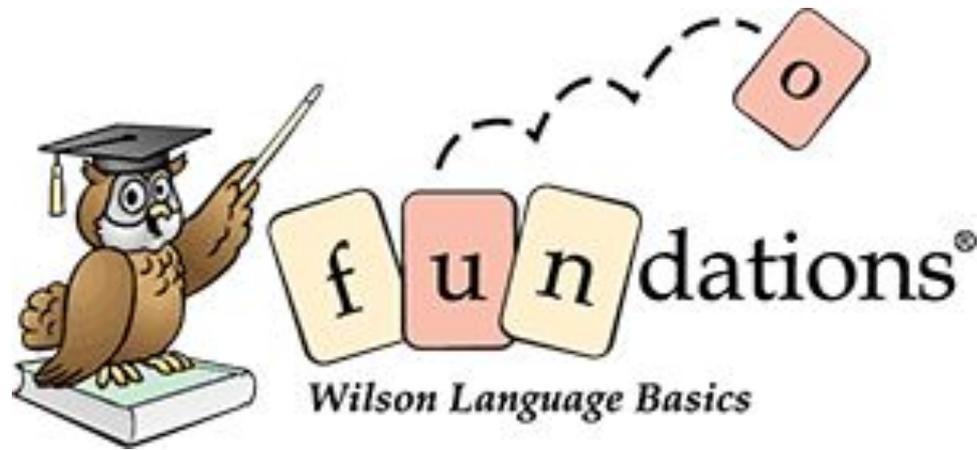
- 1) Time set aside for reading and writing
- 2) Individualized support
- 3) Exposure and access to texts
- 4) Student Choice
- 5) Authentic Opportunities
- 6) Mentor Texts and models
- 7) Parents as audience and partners



Workshop Framework

- Explicit Instruction: Mini lesson
- Opportunities for feedback
- Independent Reading and Writing Time
- Share





Students in grades K-2 receive a systematic program in critical foundational skills, emphasizing:

- Phonemic awareness
- Phonics/ word study
- High frequency word study
- Reading fluency
- Vocabulary
- Comprehension strategies
- Handwriting
- Spelling

How You Can Support Your Child's Growth as a Reader?

- Choice
- Nudge Your Child to Read throughout the day
- Think Outside the Book
- Celebrate Series Books
- Read Aloud



How You Can Support Your Child's Growth as a Writer?



- Ask what your child is writing about
- Ask to see your child's writing (grade 3 and up may begin writing in a writer's notebook)
- Give children an opportunity to rehearse their story aloud to you. Say, "tell that story or how will that essay go, what are the main points?"
- Save most of the editing for the teacher...focus on the writing ideas with your child.
- Celebrate "published" writing. Getting compliments from an audience is inspiring to your writers

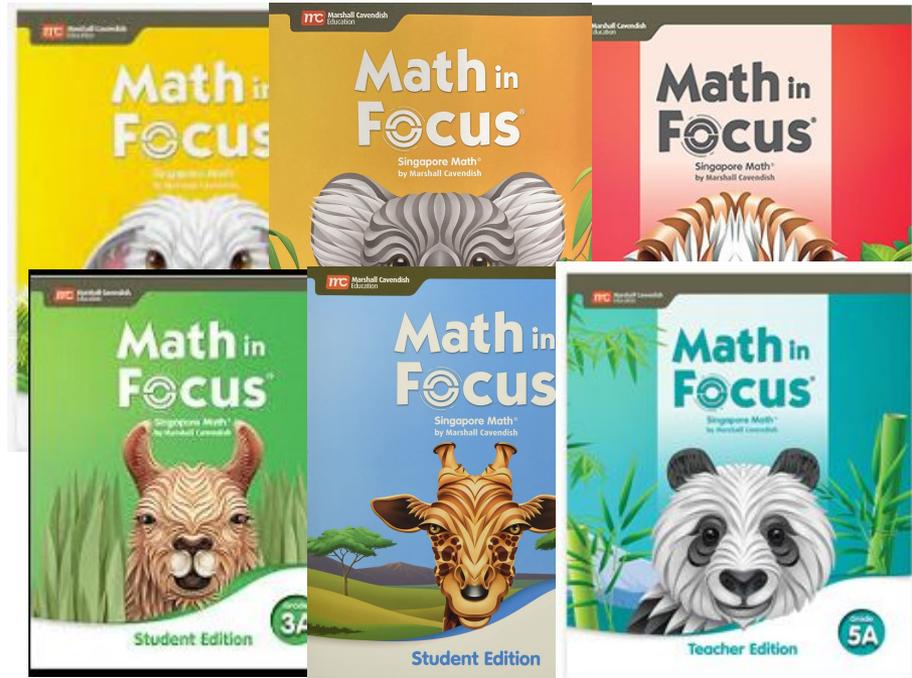
Pelham Mathematics

Dr. Tom Callahan, K-12 Director of Math and Science
Beth Finkelstein, Mathematics Professional Developer (K-5)



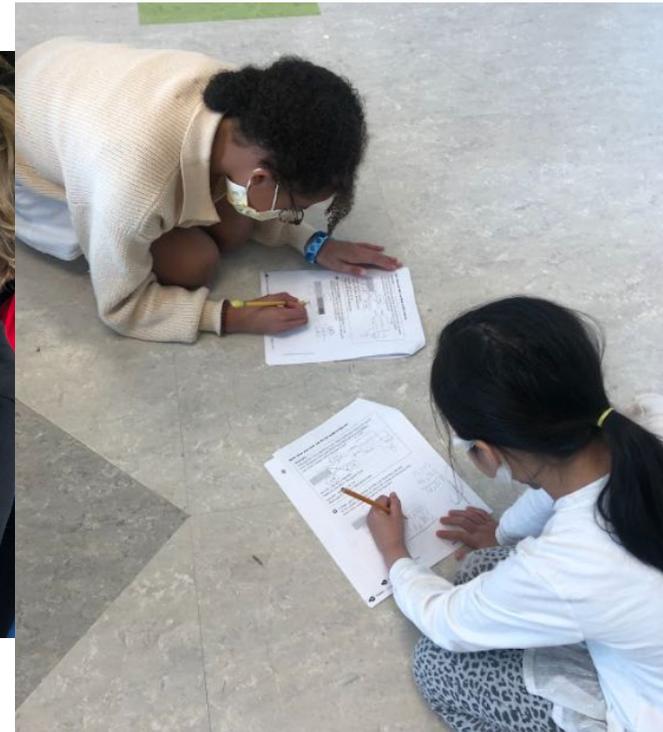
"Just a darn minute! — Yesterday
you said that X equals **two!**"

Pelham Mathematics

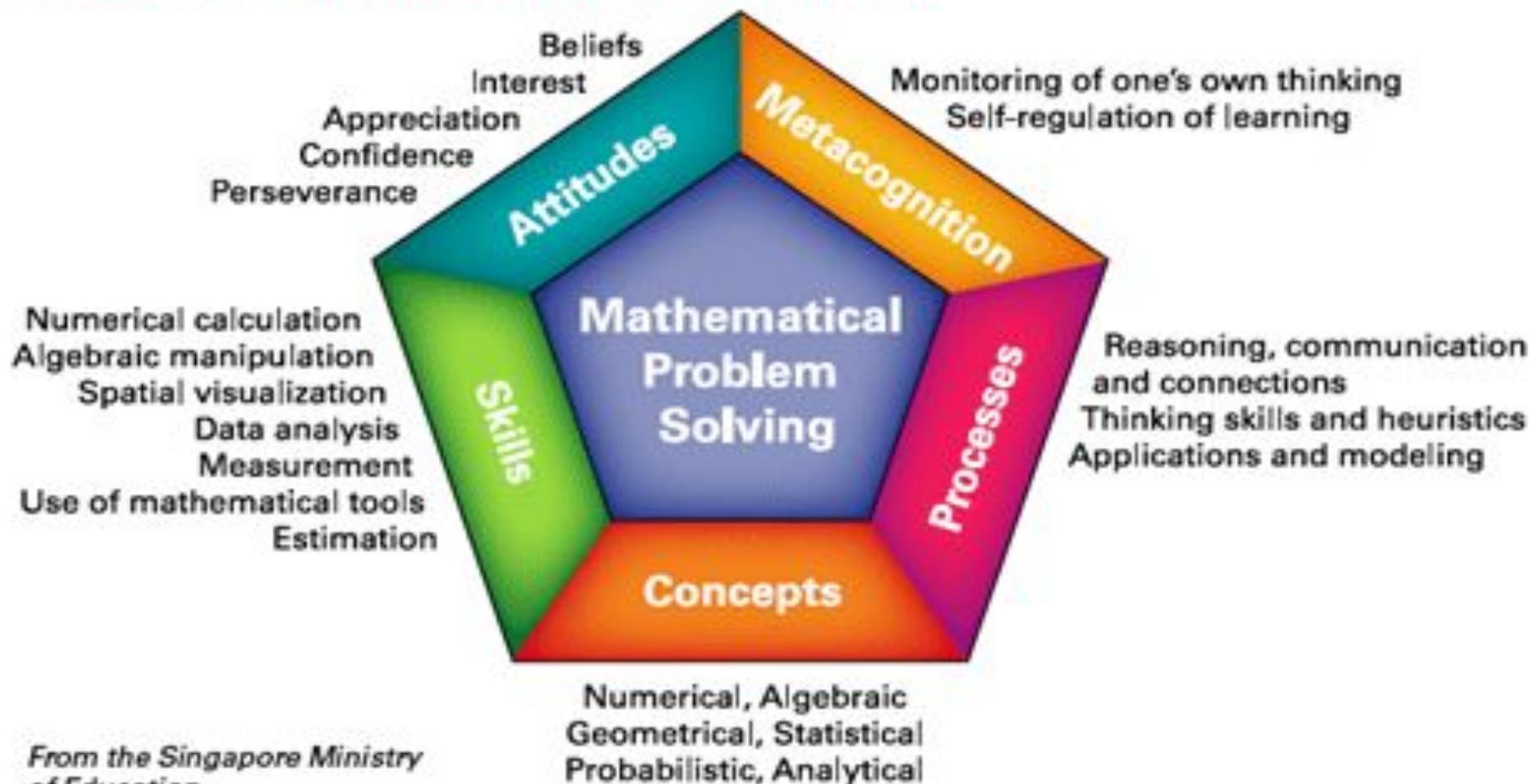


- Grades K-5 use *Math in Focus* 2020, a Singapore Math Program
- Follows NYS NextGen Standards

Getting to Know our Math Learners



Singapore's Mathematics Framework



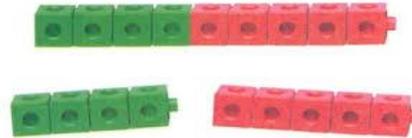
From the Singapore Ministry of Education

K-1

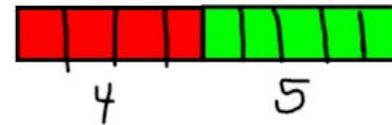
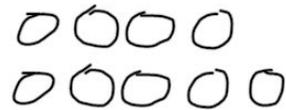
Concrete Pictorial Abstract (CPA)

$$4 + 5$$

Concrete
(manipulatives)



Pictorial
(drawing)



Abstract
(algorithm)

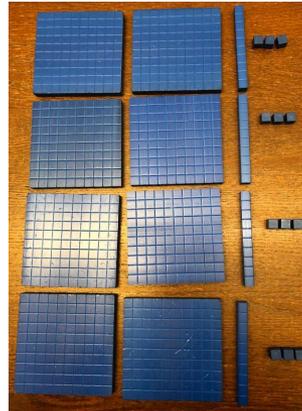
$$4 + 5 = 9$$



Concrete Pictorial Abstract (CPA)

$$213 \times 4$$

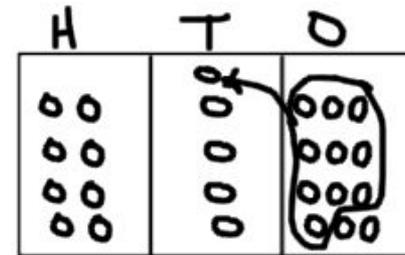
Concrete
(manipulatives)



Pictorial
(drawing)

| | | | |
|---|-----|----|----|
| | 200 | 10 | 3 |
| 4 | 800 | 40 | 12 |

$800 + 40 + 12 = 852$

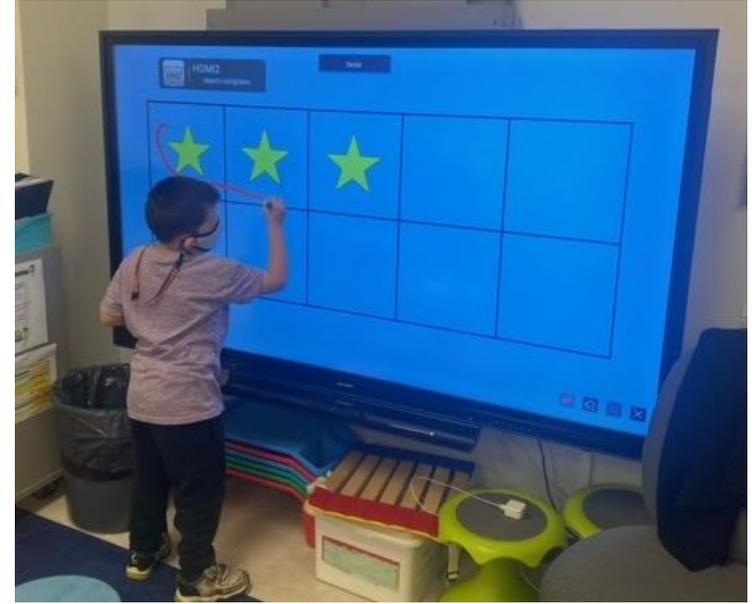
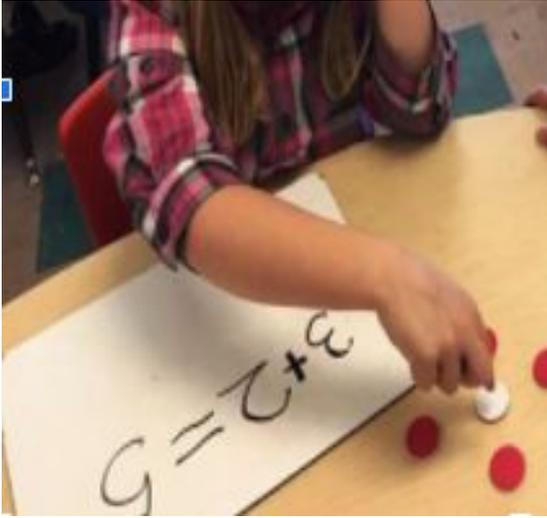


Abstract
(algorithm)

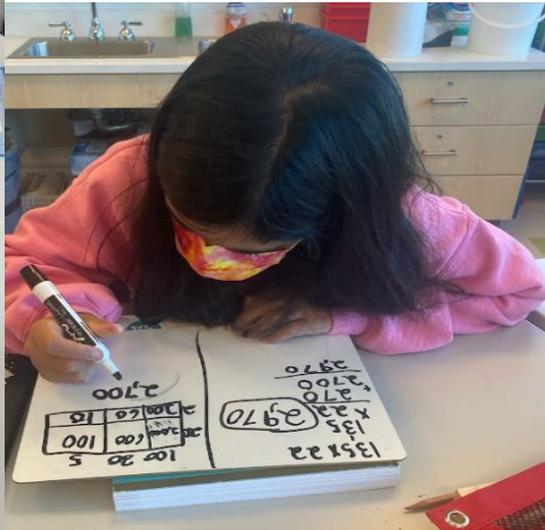
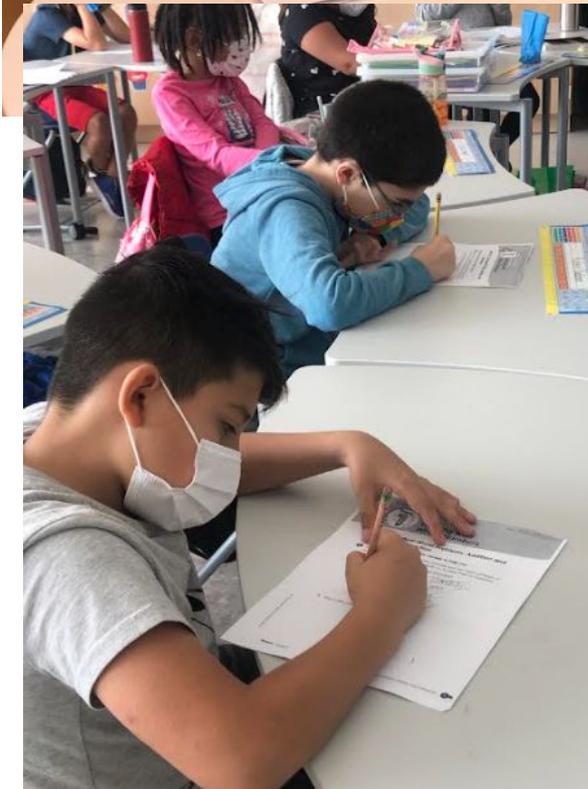
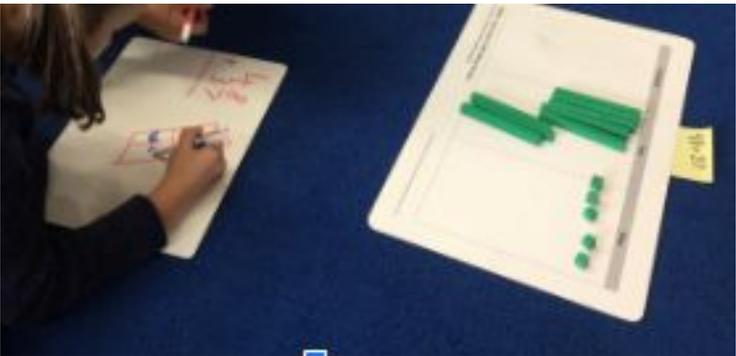
$$\begin{array}{r}
 213 \\
 \times 4 \\
 \hline
 12 \leftarrow (4 \times 3) \\
 40 \leftarrow (4 \times 10) \\
 + 800 \leftarrow (4 \times 200) \\
 \hline
 852
 \end{array}$$

$$\begin{array}{r}
 1 \\
 213 \\
 \times 4 \\
 \hline
 852
 \end{array}$$

What does math look like in the K-2 classroom today?



What does math look like in the 3-5 classroom today?



Think about this problem:

$$259 + 37$$

259 + 37

Adding by Place Value

200

$$50 + 30 = 80$$

$$9 + 7 = 16$$

$$200 + 80 + 16 = 296$$

Compensation

(making friendly numbers)

$$259 + 1 = 260$$

$$37 - 1 = 36$$

$$260 + 36 = 296$$

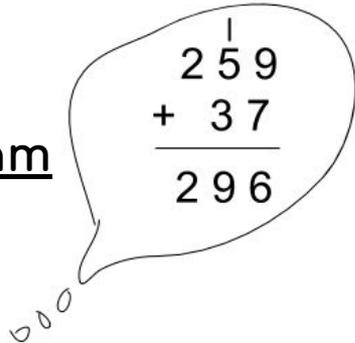
Incremental Adding

$$259 + 30 = 289$$

$$289 + 7 = 296$$

Standard Algorithm

(sky writing)


$$\begin{array}{r} 259 \\ + 37 \\ \hline 296 \end{array}$$

Developing Number Sense at Home

Play games: Card games, dice games, board games

Wonder about numbers:

"How many more would I need to get from 3 to 10?...from 58 to 100?"

"How much bigger is 27 than 14?...327 than 214?" "How do you know?"

When your child is working on homework:

Don't just tell him/her how to solve a problem, pose questions instead: *What is something you know about the problem? What do you notice about the numbers? Can you draw a model? Is there an example in your math book you can look at?*

When working on story problems:

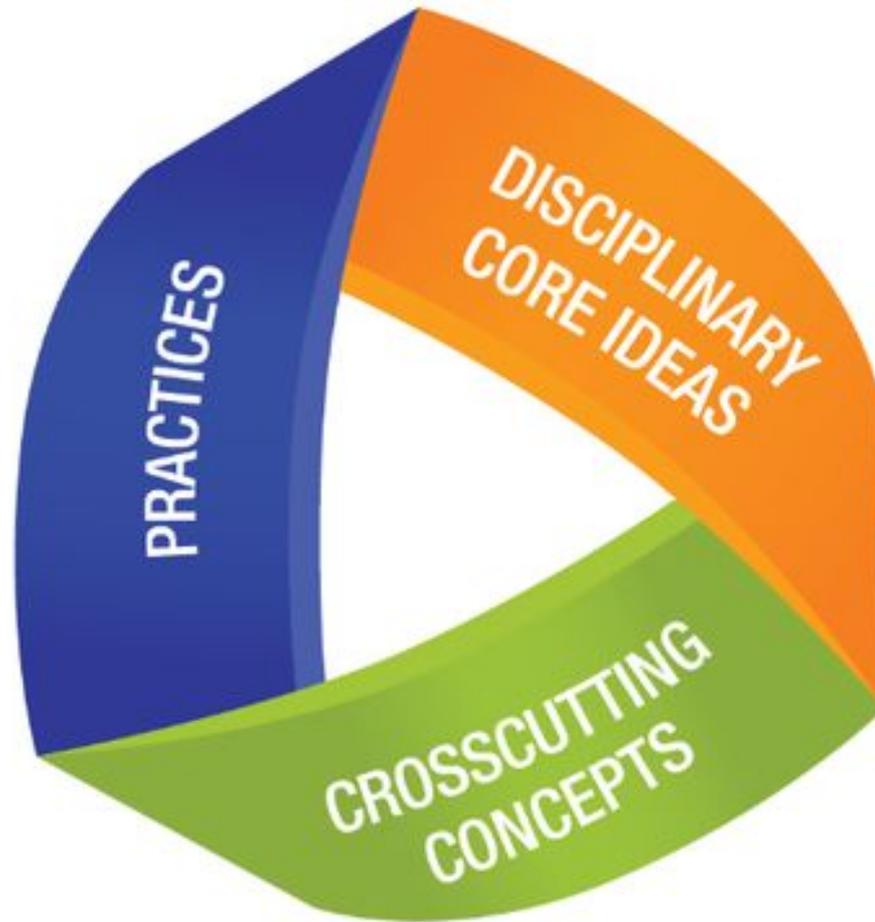
- First read the problem aloud without the numbers.
- Ask: *Can you tell us what is happening in this story? What do we know about what is going on? What don't we know? What are we trying to figure out?*
- Read the problem again with the numbers.
Can you draw a picture/model of what is happening? Can you think of an equation to match your picture?

Convey your enthusiasm toward math..even when there is a struggle (even if you have to fake it). *"Oooh...this is a good one! Let's think what we know about the problem. Let's think of a good tool to use? What should we start with?"*

K-5 Science

**The Next Generation Science Standards and
New York State Science and Learning Standards**

Old vs. New Standards



Disciplinary Core Ideas (DCIs)

Major Concepts in the following disciplines:

Earth and Space Science (ESS)

Life Science (LS)

Physical Science (PS)

Engineering and Technology (ETS)

Science and Engineering Practices

Asking questions and defining problems

Developing and using models

Planning and carrying out investigations

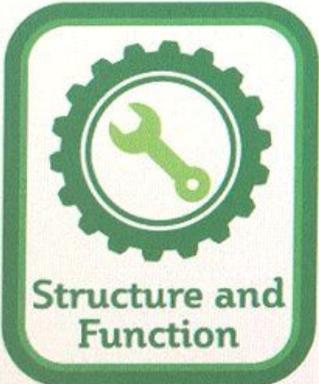
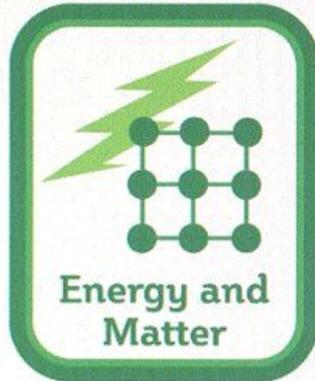
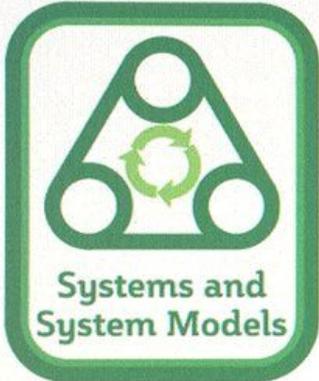
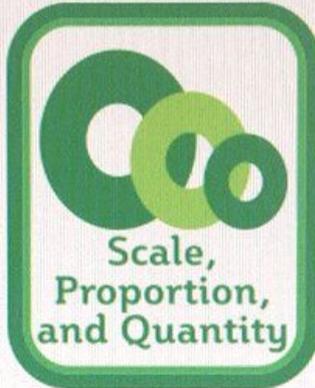
Analyzing and interpreting data

Using mathematics and computational thinking

Constructing explanations and designing solutions

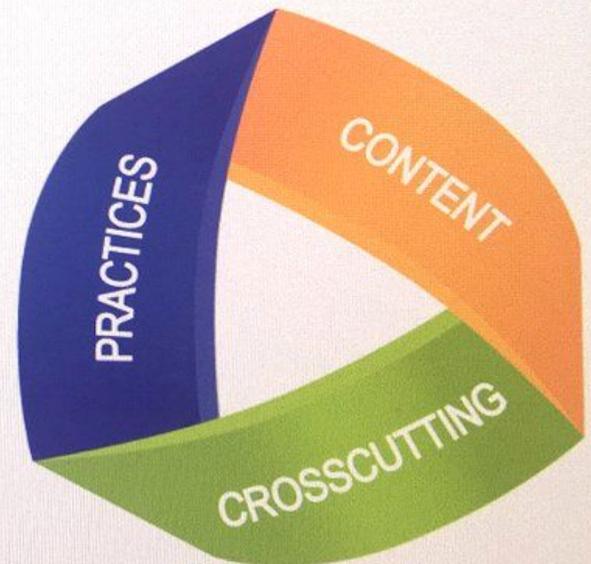
Engaging in argument from evidence

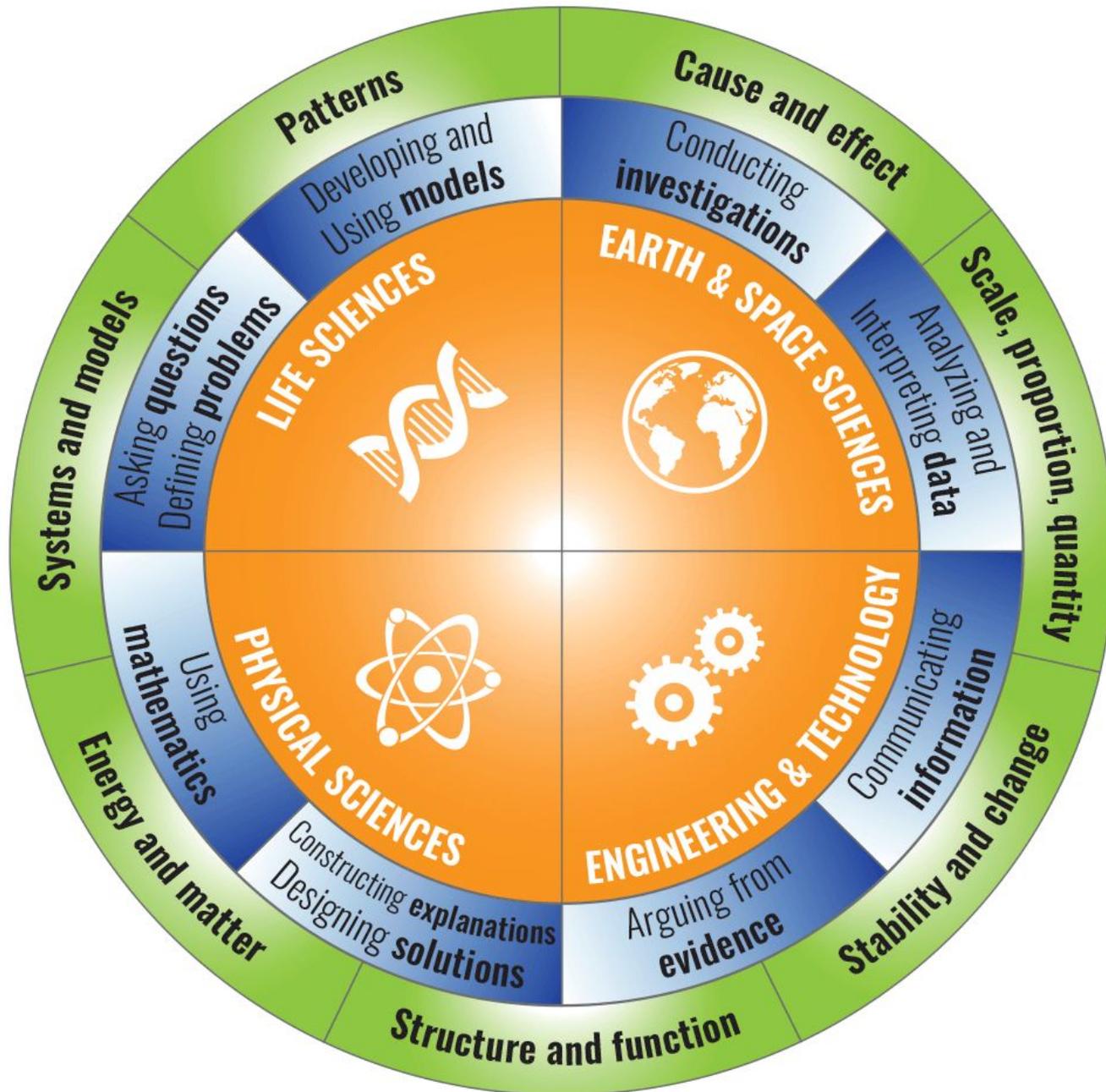
Obtaining, evaluating, and communicating information



The Crosscutting Concepts

The habits of thinking of scientists when making sense of natural and human-made phenomena





Important Things to Know

- The New York State Science Assessment in Grade 4 is being phased out and replaced with a test on NYSSLS standards and Next Gen.
- The last 4th grade test will be this year
- Current 3rd graders will take a new, cumulative science test (based on these standards) in 5th grade
- The new administration will occur in the Spring of 2024
- The state promises that the new test will balance core idea assessment with the assessment of practices and crosscutting themes
- Pelham's Science 21 program is fully aligned with NextGen and the NYSSLS and will be implemented K-5 one full year before the new test is administered

The Boy Who Harnessed The Wind

Community and School Collaboration between Pelham Schools and the Junior League of Pelham

- **Movie Series**
- **Guest Lectures**
- **Career Panels**
- **Art Displays**
- **Curated Library Displays**
- **Community “Build” Events**
- **Integrated Curriculum Development**

Everyone is a mathematician and a scientist!

The Study of Social Studies

- Elementary Social Studies focuses on themes, key ideas, and concepts around self, family, local community, New York State, the nation, and ultimately the world.
- Students are introduced to the study of civics/government, economics, geography, and history.

| Grade | Content Focus |
|---------------------|---|
| Kindergarten | Self and Others |
| Grade 1 | My Family and Other Families, Now and Long Ago |
| Grade 2 | My Community and Other Communities in the United States |
| Grade 3 | Communities around the World: Learning about People and Places |
| Grade 4 | Local History and Local Government |
| Grade 5 | The United States, Canada and Latin America |

Three Dimensional Teaching and Learning

Standards

1. World History
2. US History
3. Geography
4. Economics
5. Civics Citizenship and Gov't

Key Ideas/Conceptual Understandings:

Core Disciplinary Knowledge

6 Practices (skills)

- A. Gathering, Using, and Interpreting Evidence
- B. Chronological Reasoning & Causation
- C. Comparison & Contextualization
- D. Geographic Reasoning
- E. Economics and Economics Systems
- F. Civic Participation

Standards:

Disciplinary Lens of the Social Scientist

Practice(s):

Disciplinary Behaviors, Thinking Skills, Habits of Mind

From



Facts



Breadth of Topics



Recall

From



Teacher as Disseminator



**Students Learn Facts from
Textbook**



Students Retell Interpretations

To



Concepts and Content Knowledge



Depth within Topics



Transfer and Connections

To



**Teacher as Facilitator of
Investigation**



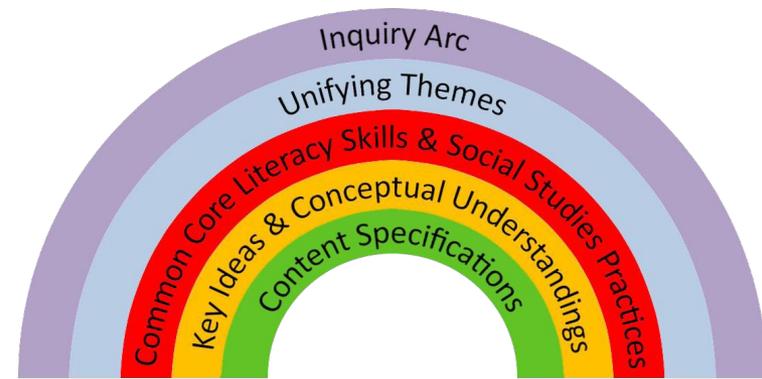
**Students Investigate the Social
Sciences Using Multiple Sources**



**Students Construct Interpretations
and Communicate Conclusions**

Social Studies Practices

1. Gathering, Using, and Interpreting Evidence
2. Chronological Reasoning and Causation
3. Comparison and Contextualization
4. Geographic Reasoning
5. Economics and Economics Systems
6. Civic Participation
 - a. Respect of self and others,
 - b. Respect of rules,
 - c. How to be a respectful listener,
 - d. How to be a critical reader of information,
 - e. How to distinguish between a fact and an opinion,
 - f. How to support your opinions with evidence and reason,
 - g. How to express yourself cogently in writing,
 - h. How to be an informed citizen



Parent Resources

- District website

Contact Information:

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