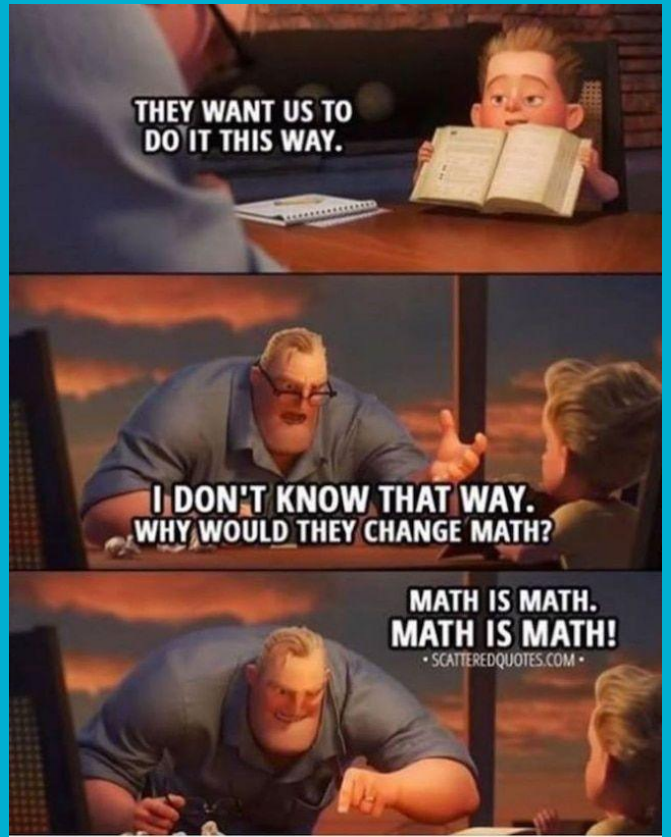
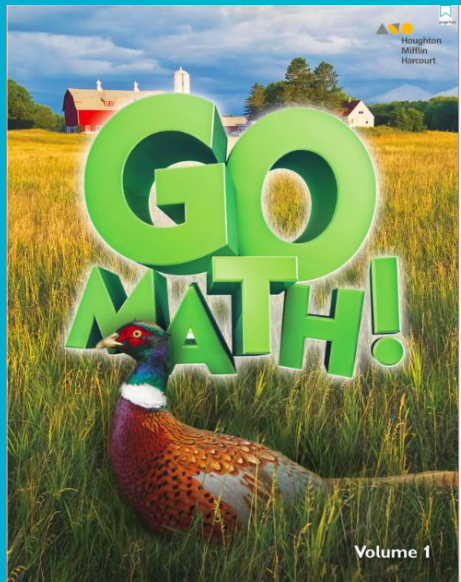
Math Curriculum Night
Hillside Elementary School





Peter Bongiovanni

11/11/21

5E Lesson Design

- **Engage:** Essential Question, Making Connections, Engaging Activity
- **Explore:** Model & Draw, Unlock the Problem, Math Talk
- **Explain:** Share & Show with MathBoards, Math Talk, Quick Check
- **Elaborate:** Real World Problems, *Math on the Spot* Video Tutor, Go Deeper, Think Smarter, Mathematical Practice
- **Evaluate:** Summarize, Essential Question, Math Journal

Integrate Standards for Mathematical Practice: **problem solving**, abstract reasoning, constructing arguments, modeling, using tools strategically, attending to precision, identifying & using structure, expressing regularity in repeated reasoning

Home - School Letters for Each Chapter

- Introduction
- Examples of how the content will be taught
- An activity that can support content
- Vocabulary integrated into daily lessons
  - Grade 3
  - Grade 4
  - Grade 5

- Tips for helping at home... You are a math person!

Some Tips Highlighted

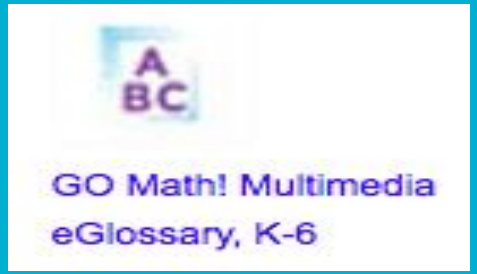
- Teacher/Student Role Play
- Prompt students to explain their thinking
- Assess reasonableness of an answer
- Growth Mindset
  - ~~I am not a math person~~

Think Central

- Student Accounts (Yogi Berra yberra27@mpsdnj.us 02292009)
- www.clever.com/in/montclair
- Clever > Think Central > Dashboard (Things to Do, **My Library**, My Scores)

Think Central

My Library



Resources

- Student Edition (mirrors the content in the workbooks)
- Interactive Student Edition (same content, but uses different examples)
- Math on the Spot Videos Tutorial (provides step-by-step instructions & explanations of key math concepts for select problems)
- Animated Math Models
- eGlossary (important for math vocabulary and incorporating terms into detailed explanations)

A Strong Foundation

- Basic facts (all 4 operations)
- MobyMax (Fact Fluency).... index cards also work
- The power of visual aids!
  - Multiplication by Heart
  - Math Flips
- Mastery is important to maximize time problem-solving
- In each lesson, problem-solving questions will be tagged as...

One of the 8 Practices

Math Processes and Practices 3 **Make Arguments** Leslie and Paul both solve the multiplication problem 5.5×4.6. Leslie says the answer is 25.30. Paul says the answer is 25.3. Whose answer is correct? Explain your reasoning.

- Well developed explanations include essential vocabulary (i.e. factors, mentions of place values)

Multiple Steps & Operations

GO DEEPER On an average day, a garden snail can travel about 0.05 mile. The snail travels 0.2 times as far as the average distance on Day 1. It travels 0.6 times as far as the average distance on Day 2. How far does it travel in two days?

- Organization is key
- The value of a model!

Average Day

2/10=1/5 6/10=3/5

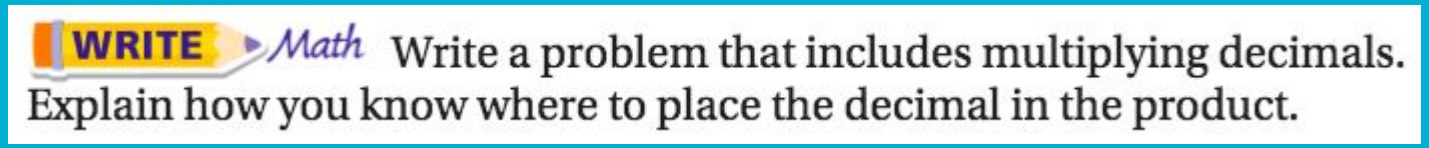
Multiple Steps

THINK SMARTER A zoo is planning a new building for the penguin exhibit. First, they made a model that was 1.3 meters tall. Then, they made a more detailed model that was 1.5 times as tall as the first model. The building will be 2.5 times as tall as the height of the detailed model. What will be the height of the building?

Model	1.3	
Detailed	1.3	0.65
Building	1.95	
	1.95	
	½ of 1.95?	

- Organization is key
- The value of a model!

Explanations



- Well developed explanations include essential vocabulary (i.e. estimate, factors, product, mentions of place values)