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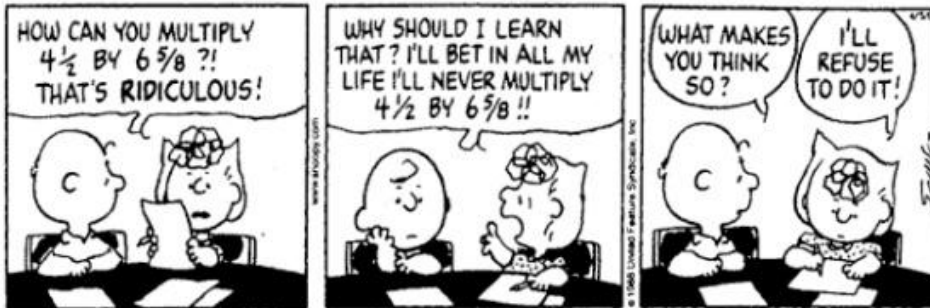
Summer, 2017

DAY 4

- PLEASE SIGN IN
- No assigned Seating

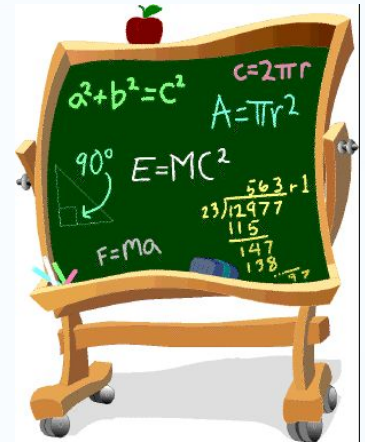


PEANUTS Classics By Charles M. Schulz



Agenda

- Feedback from yesterday
- Place Value and fractions
- Progressions (30 minutes)
- Lunch
- Writing Probes
- Closure - Homework and Next steps





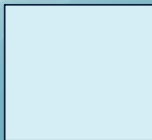
Important things we've learned

1. Loved Nix the Tricks!!! *****
2. Nix the Tricks offers a fix!!
3. Tricks contribute to mile wide inch deep
4. Sometimes we do things unintentionally that covers up the math
5. Working within different bases is manageable and.....kind of fun. 8-)
6. Using different bases deepens your understanding of place value in base 10
7. Relationships between bases. In base 12 - B is like 9 in base 10
8. Interesting fractions misconceptions I had never talked about
9. Importance of number line with adding fractions
10. Base twelve isn't the shizz! 8-)
11. A fraction with a denominator with a power of ten is called a "decimal fraction."
12. Just how uncomfortable learning can be when it's something foreign to you.
13. I have a greater appreciation for base 10
14. Base 12 made me empathize with my kiddos
15. The amount of math content required of K-5 teachers is extraordinary!
16. Naming the whole is essential *****
17. Base 12 multiplication table has patterns analogous to base 10
18. Don't rob students of opportunities to develop math thinking by teaching tricks for answer getting.



Things that squared with our thinking!

1. Sometimes we unintentionally do things to cover up the math. (Math tricks)
2. The Center for Algebraic Thinking has some good formative assessments.
3. Communication is important - we need to make sure we are clear with our students.
4. Elementary students don't need to simplify fractions.
5. Multiplication is about scaling.
6. Understanding student thinking.
7. Counting in different bases is confusing.
8. The connection between the area model and the number line was very interesting.
9. Nix the Tricks!
10. Base ten is really the best! Still not convinced about base 12.
11. Knowing the math content across the grade levels is important!
12. Liked the camping activity!



What is still circling?

1. Other than programming are other bases used in real life?
2. Is there a way to document the student outcomes we have created on posters so it is easier for us to see the progression?
3. We don't need to simplify anymore??
4. Still wondering how simplifying fractions is just "convenient."
5. I feel like we are still missing the "address" piece.
6. The struggle with being a slower process person in a fast processing group.
7. What are ways of thinking?
8. The amount of knowledge required to be a quality math teacher at lower levels is something I am gaining a much greater appreciation for.
9. When will this information going to become more universal?
10. Counting strategies with different bases.
11. On the CBA, can a student be a 4 (using the standard algorithm) and not understand the math associated with it?
12. Are fractions difficult? or is a result of how they are taught?
13. How did ancient number systems that didn't have a zero talk about it?
14. How to present experiences with number lines and fraction bars - keeping in mind what Scott discussed.



Monday Share Sign up

Please sign up at the back table if you are willing to share



CBA Fractions

PROGRESSIONS

1. Count off by 100_2 to create new groups (1, 10, 11, 100)
2. Share your ah ha moments with your group - be sure to explain ideas at your grade level if it applies to you
3. Be prepared to share out your ideas with the whole group



Lunch



**DID YOU REMEMBER TO
SIGN IN FOR THE
AFTERNOON
SESSION????**

Writing Time....

NOTE: You will have all afternoon today and all afternoon tomorrow to write

Options:

1. Continue work with the Stats/Prob probes
2. Begin brainstorming ideas for probes (look at standards to determine areas of focus, decide how you are going to split up into teams, etc.)
 - a. K - 5 teams will work with 3 domains (Number and Operations in base 10, Operations and Algebraic thinking, Fractions)
 - b. 6 - 8 teams will work with 4 domains (The Number System, Expressions & Equations, Functions and Ratio and Proportional....)
 - c. 9 - 12 teams will work with 3 domains (Number & Quantity, Algebra and Functions)

Homework

For Friday: Jigsaw Reading

1. **K - 5 teachers:** Read Progression document “ K - 5 Counting and Cardinality and Operations and Algebraic Thinking”
2. **6 -8 teachers:** Split into 2 groups
 - a. Group A: Read Progression document “6-8 Expressions and Equations”
 - b. Group B: Read Progression document “Ratio and Proportional Relationships”
3. **9 - 12 teachers:** Split into 2 groups
 - a. Group A: Read Progression document “Algebra”
 - b. Group B. Read Progression document “Functions”

Feedback Forms



WRITING

Progressions - WOT List



1. 10 minutes in your team
2. Whole group share out.