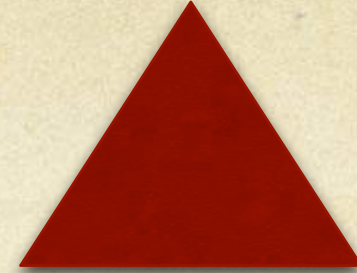


A³ – Assess, Analyze and Address

WELCOME!!!

1. Choose a cartoon piece and find people with the other pieces that complete your cartoon to determine your team.
2. Introduce – or re-introduce yourselves.
3. Be ready to share your cartoon in a creative or unusual way that involves all of your team members and has something to do with statistics and probability

Feedback



What have you learned??

1. Vocabulary is IMPORTANT
2. You can't teach SP in isolation – there are related standards
3. Inequality symbols are introduced in grade 1. (Who knew)
4. Law of Large numbers was reinforced
5. Technology brings experimental probability to life – Xcel is powerful
6. About the Monte Carlo simulation
7. We can think about box plots in different ways
8. Quality work with fractions (begun in grade 3) is a prerequisite for much of the SP work
9. Once again...how important it is to see the big picture – the whole story – across all grade levels
10. The power and problems of bias revisited.
11. Goals of the grant are clearer.....and finally.....
12. “Chris is a pretty smart guy.”

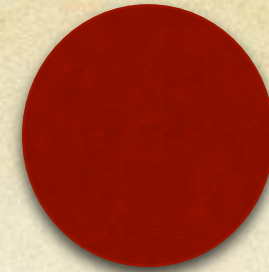
Feedback



What squared with your thinking??

1. Time spent on the progressions is time well spent
2. The questions we ask students and the tasks we provide for them are hugely important
3. Each standard builds on others
4. The power and importance of visuals and hands-on activities
5. Technology can be very useful
6. More PD on SP is needed by most teachers/districts
7. Addressing and experiencing bias is very important
8. We need to provide differentiated experiences for the benefit of all kids to grow their understanding and thinking
9. There are always limitations on collecting data

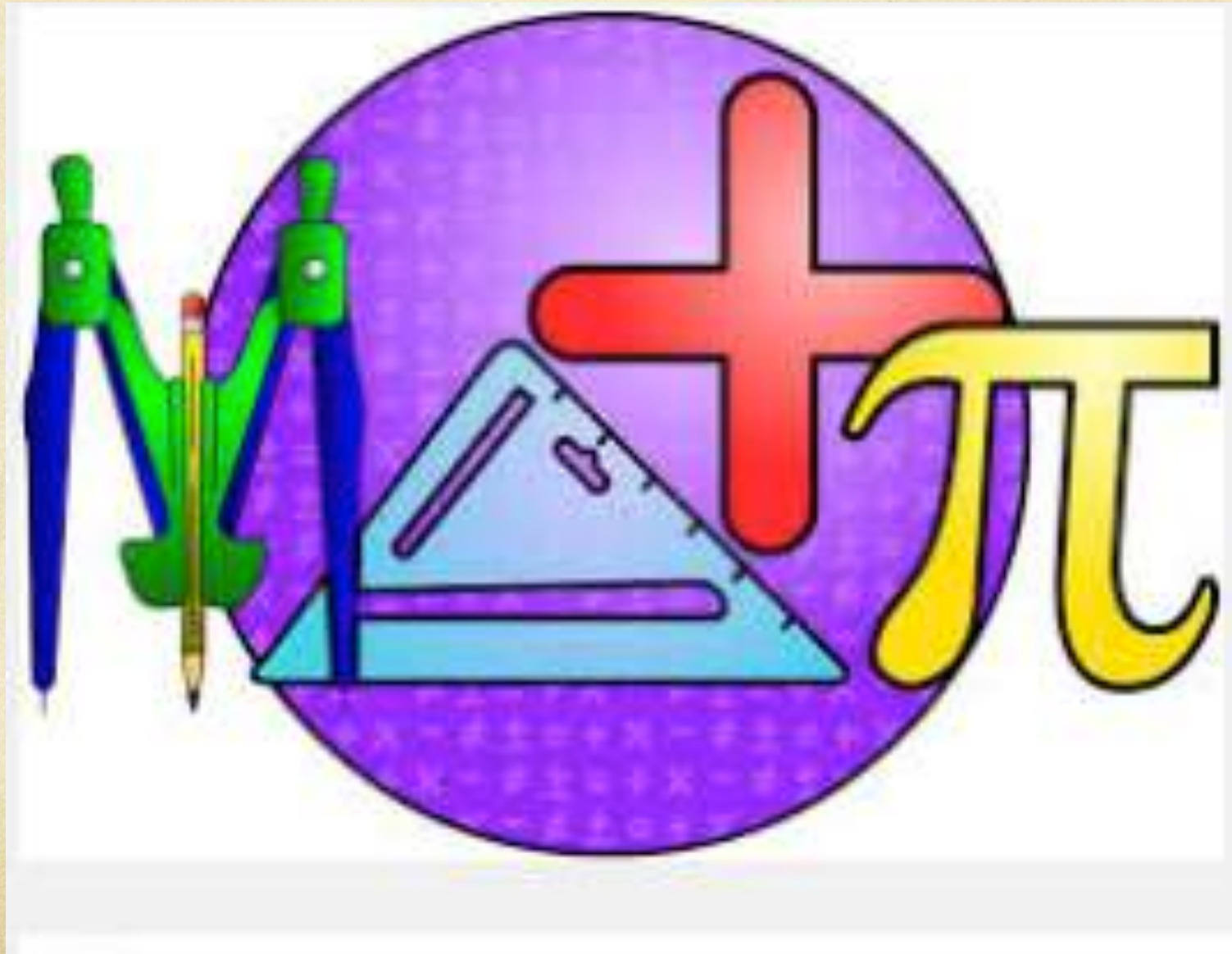
Feedback



What is still circling in your head ??

1. If the less than and greater signs are introduced in grade one, what do we expect K to use in order to compare?
2. How to become more proficient at Excel and remember what I learned today
3. How do I make a standard kid friendly without losing the depth?
4. Boxplots with means instead of medians??
5. Are they truly developmentally ready??
6. Curious about the 30 second data
7. The wait for a date problem
8. Instructional issues
 1. Math talk and student led discussion – all levels?
 2. Integrating with science, SS, etc.
 3. How to incorporate all I'm learning here into my classroom
 4. Textbooks with embedded multi-layers of connecting topics?
 5. Using our existing texts while honoring the progressions
9. Still a little foggy about how it all fits together.

Let's do some....



BREAK



Reflecting on our reading...

- Task #1
 - Share with your group the two things you chose to highlight and the one thing that you are still questioning
 - Give each person about 2 minutes to share their ideas
 - Discuss and agree on 2-3 things from your discussion you will share with the whole group, be prepared to discuss what page number your idea comes from

Reflecting on our reading....

- Task #2
 - Reflect on the statistics and probability activities you have completed so far during the content exploration time each day. Focus on how they were presented.
 - Each group will be assigned a different task to explore.
 - Decide which standards at which grade levels your task addresses. Explain how you made your choices.
 - On the paper provided:
 - List the standards – code and brief description
 - How the standard is connected to the task

CCSS

http://www.corestandards.org/wp-content/uploads/Math_Standards.pdf

Graffiti Share....

- Pass your papers counter-clockwise
- Reflect and make comments....
 - What do you agree with?
 - What are you questioning?
 - Other ideas?
- Rinse and Repeat 😊
- When you get your work back discuss any changes you might make on the feedback you received

Answer getting vs. learning mathematics

- USA:

How can I teach my kids to get the answer to this problem?

Use mathematics they already know. Easy, reliable, works with bottom half, good for classroom management.

- Japanese:

How can I use this problem to teach the mathematics of this unit?

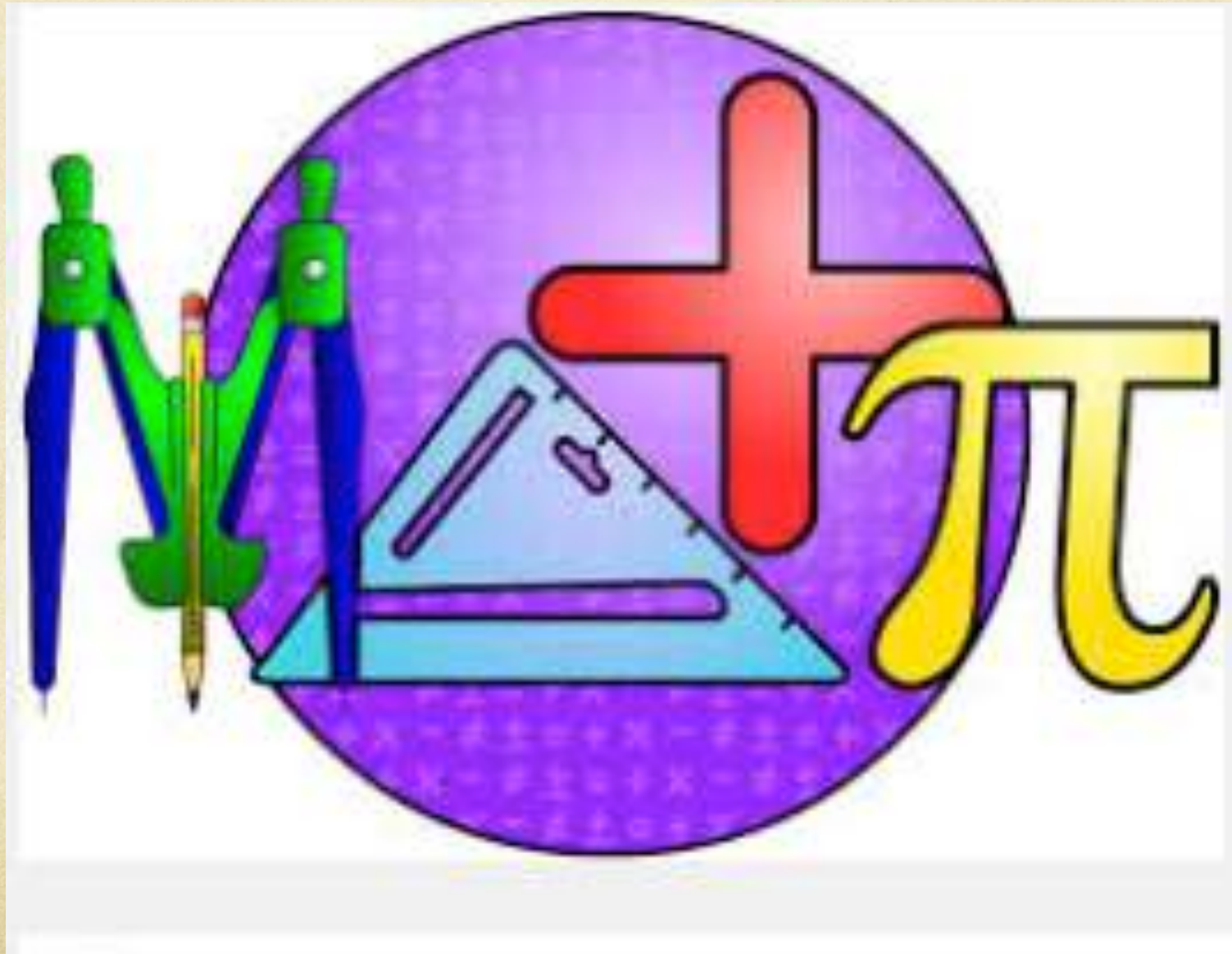
Lunch Time!

When someone says "STOP"
I never know if its In the
Name of Love,
Hammer Time, or if I am
supposed to collaberate
and listen



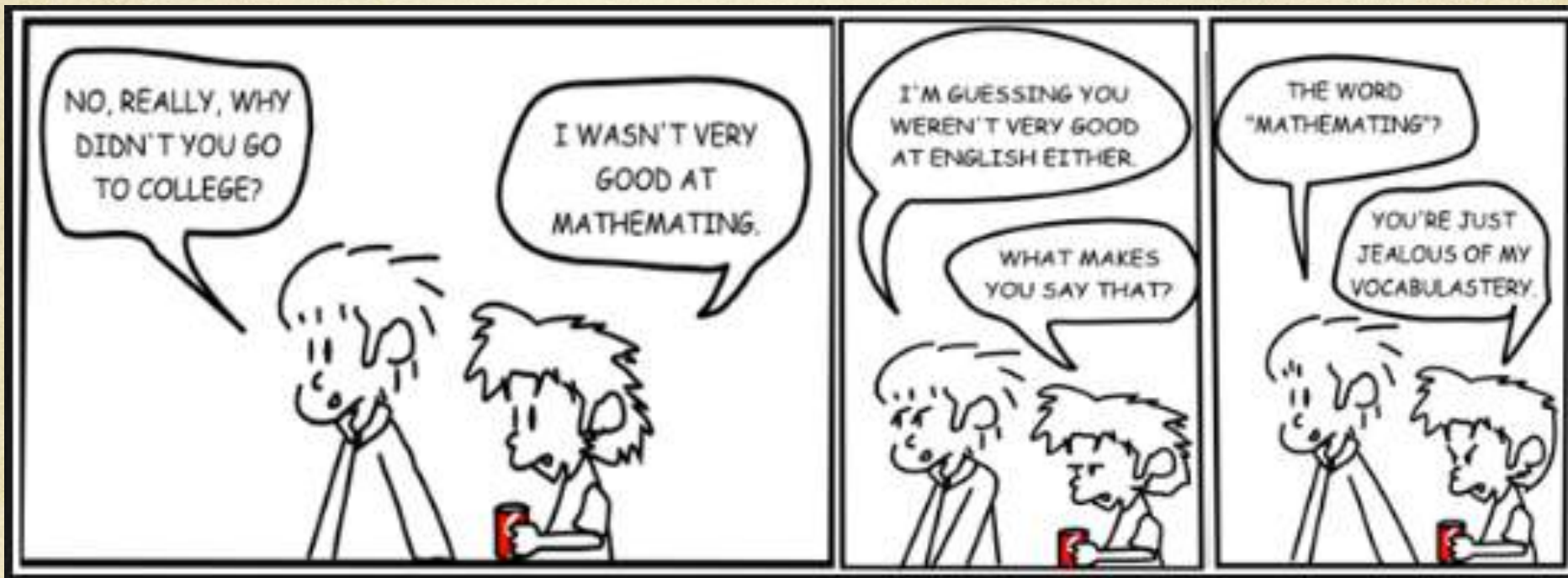
somee cards
user card

Let's do some....



BREAK - 15 minutes





Exploring the Vocabulary in the CCSS

- Each group will be assigned a grade level (K, 1, 2, 3, 4, 5, 6, 7, 8, secondary)
- Each group will receive a list of vocabulary from the CCSS for your grade level
- Find the data and measurement or statistics and probability related vocabulary and create a card for each word
- Post your words on our K-12 progression display
- What do you notice and wonder?

<http://www.graniteschools.org/mathvocabulary/vocabulary-cards/>

Wrap up..



"I'll have the math homework."