



# SCSD Mathematics Update 2023-2024

Board of Education Meeting - March 12, 2024

*A focus on student engagement in the mathematics classroom!*

**Angelica Babino, Director of Mathematics**



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners

## *Kindergarten - Math Balance Scales with Mrs. Boccio*



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners

*Kindergarten -  
Measuring the same  
item with various  
nonstandard units  
with Mrs. Cusati*



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners



*Kindergarten - Measuring the same item with various nonstandard units - more practice...*



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners

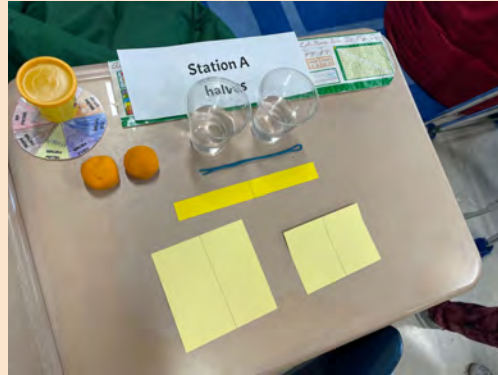


*Mrs. Johnson's first graders working on part-part whole relationships by utilizing an addition game*



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners

*Mrs. Batterberry's third grade students worked in cooperative groups to create a display of various wholes partitioned into specified fractional units*



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners

Mrs. Walker's grade 4 students at Tackan learn multiplication using a deck of playing cards!





# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners



*Mrs. Frankel's fifth grade students at Smithtown Elementary using color coded disks provides hands-on practice for developing number sense.*



# Creative and Innovative ways to make math instruction engaging and enjoyable for young learners



Mrs. Koch & Mr. Cusati with 5th grade students at St. James working on First in Math

# collaboration



**Puzzled to Pieces**

**QUESTIONS**

$(8 - 5 + 7) \div (10 \times (4 - 3)^9)$	1
$(8 \div (3 + 5 - 4)) \times (7 - 2^2)$	6
$(6^2 \div (7 - 4)^2) \times 9 + 2$	38
$8 \times (3 + 9) \div 2^2 - 10 + 6$	20
$5^3 \times ((3 + 6 - 9) \div 2)^2$	0
$9 + 3^2 - 2 \times (6 \div (10 \div 5))$	30

**ANSWERS**

1
6
38
20
0
30

**COLLECT YOUR PIECES**


A, B, C, D, E, F

**NO PUZZLE**

**BUILD IT**

J	C	S	K
E	J	F	H
L	G	A	D

**DIRECTIONS**  
Answer the questions below in any order! If you are correct, you will receive puzzle pieces. If you are incorrect, your answer will turn red. Once you collect **ALL TWENTY** puzzle pieces, you may start to build your puzzle. To build the puzzle, choose which piece you want to appear in the grid where it says "BUILD IT", selecting the corresponding letter. You may choose to build the puzzle however you like. In contrast, if the puzzle is put together "correctly," the "BUILD IT" section will turn green! After completing all of the questions, if you do not want to build the puzzle, you may click the "NO PUZZLE" button in the bottom process to proceed.



**Mrs. Skartsiaris and Mr. Collaku's Grade 6 students at Great Hollow earn puzzle pieces by answering correctly!**



# collaboration

For the Gram



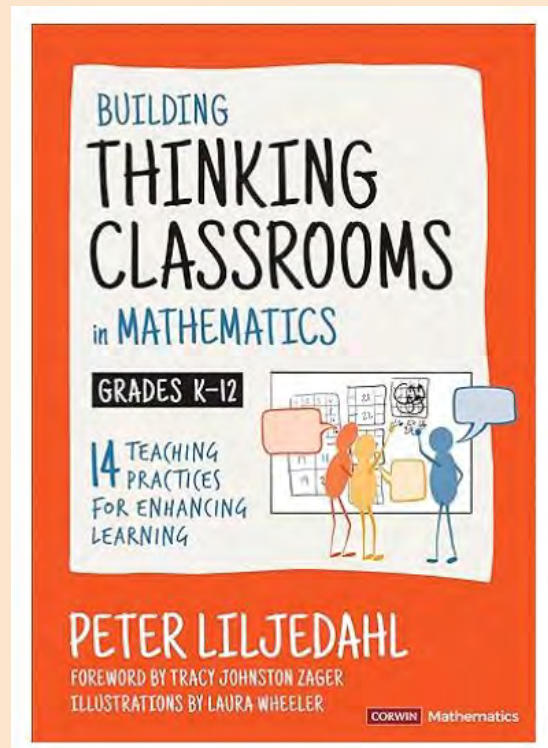
*Mrs. Roberts' 7th grade class at Great Hollow Middle School created Instagram posts to display their understanding of translating two step inequalities*



# collaboration

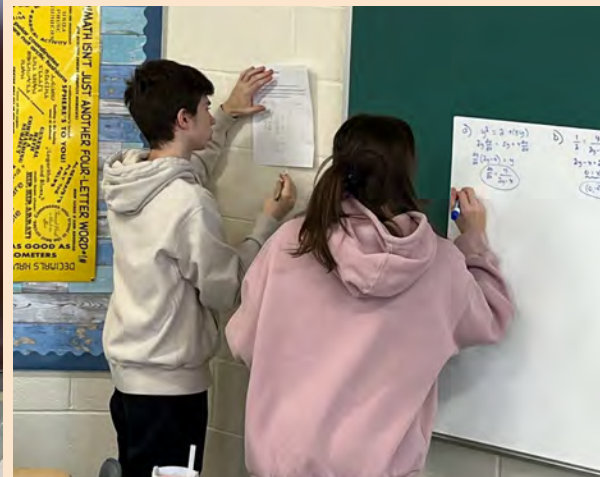
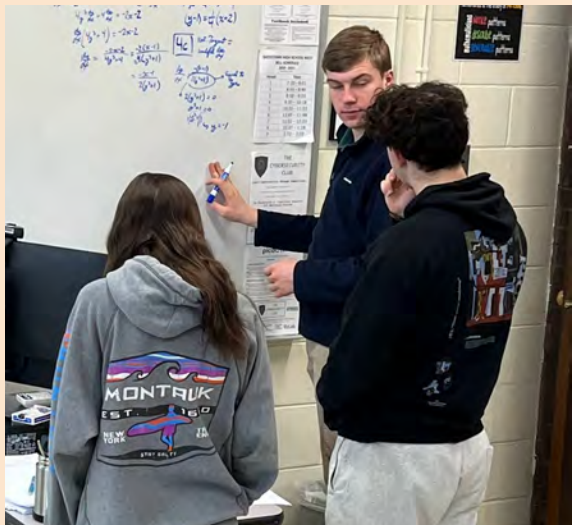


AP Calculus teachers from HSE and HSW discussed the strategies in this book and decided to incorporate a discussion building practice.



# collaboration

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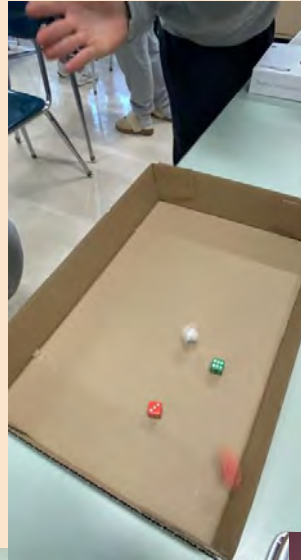
# College Statistics

College Statistics is a new course offered to Seniors through the Beacon Program at Suffolk University. In the class students cover major topics including experimental designs, inference procedures, probability and statistical significance. It's a wonderful course to introduce one of the most useful math topics around with; hands on activities and projects to see the math in action!



**Linear Regression  
Candy Grab**

**Probability  
Games**



Mrs. Kaplan's Class



**Heads or Tails?**



# What students are saying about the course!

Statistics is used in peoples everyday lives and taking the class will help educate students for the future

Statistics is useful for many aspects of life and is a fun and different type of math

Taking college stats give you a greater understanding of real world situations and at the college level.

I think someone should take college stats because they will become better prepared for college and the real world. They will also get a better understanding of math at a high level

it helps you succeed in everyday life situations, provides open interaction with classmates and develops critical thinking skills of analyzing data.

College Statistics is an easy going class, learning stats is fun and easy. But you need to stay focus to understand the class and do good.

**I like this class because it allows us to have fun and communicate openly while learning**

This class is very useful and there is no stress of an AP test as the other option is AP Stats. This course is not as rushed as AP Stats and it is a great alternative but you can still get the college credit.

I learned how to apply math into real world situations and it is a very laid back and interesting class

College statistics help to develop critical thinking skills, understand how to analyze data, and make informed decisions. Plus, it can give you a head start in college and future career if you are planning to major in something related.

**Statistics can help you succeed in other classes and in your own personal life.**

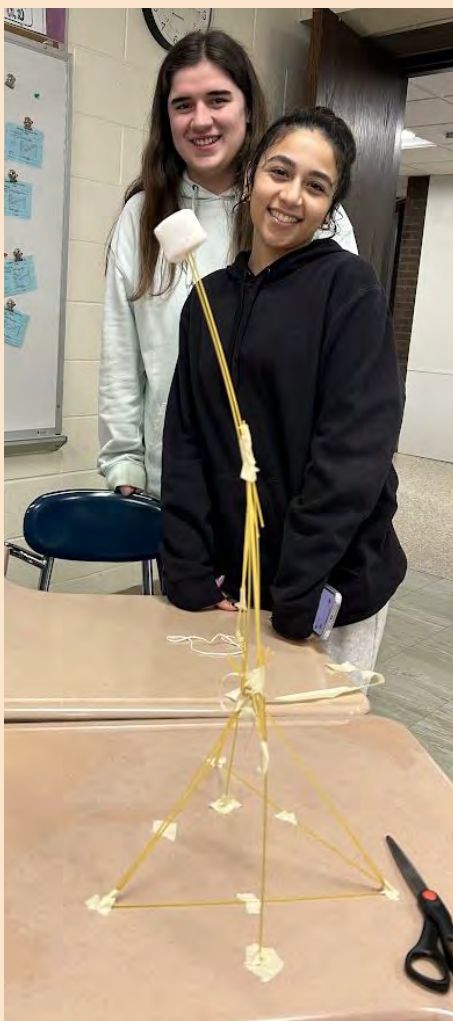
Statistics is an important thing to learn and you can apply it to everyday life. You need to put in the work to have a good grade.



Statistics helps equip you with the necessary skills regarding problem-solving, critical thinking, allowing you to contribute to data analysis and research

Statistics is a useful class to know since it applies to the real world and is needed for many career paths like psychology





# College Calculus

**TEDEd**  
Educator  
Talks

## Marshmallow Challenge

### Materials:

- 20 sticks of spaghetti
- 1 yard of tape
- 1 yard of string
- 1 large marshmallow
- scissors (to cut materials)
- yard stick (to measure)



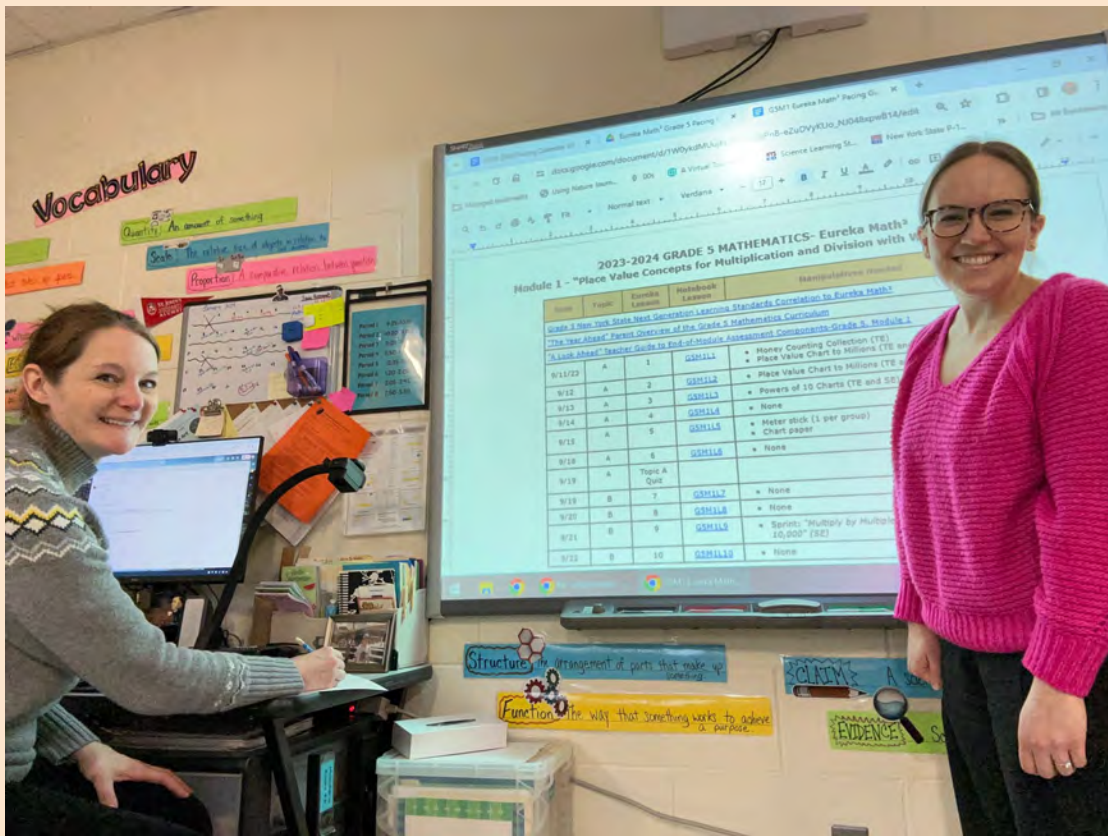
### Rules:

- Your challenge is to build the tallest freestanding structure using ONLY the above listed materials.
- The winning team is the one that builds the tallest freestanding structure measured from the table top surface to the top of the marshmallow.
- The team's structure must stand on its own for measuring. Teams touching or supporting their structure will be disqualified.
- Teams can use as much or as little of the 20 sticks of spaghetti, tape, and string provided. Extra materials CANNOT be provided.
- The entire marshmallow must be on the top of your structure. Cutting or eating part of the marshmallow will disqualify your team.



Mrs. Schaentzler's class

# future areas of growth



Continue to support our students' ability to achieve and demonstrate mastery of mathematics



**Thank You!**