



MATH MATTERS PARENT WORKSHOP

**POWDER SPRINGS ELEMENTARY SCHOOL
JANUARY 21ST 2023**

WELCOME !!!!

Raven Brown Slaughter, Academic Coach

Raven.Brown@cobbk12.org

Lisa Daves, Parent Facilitator

Lisa.Daves@cobbk12.org

Louise Felton, Academic Coach

Louise.Felton@cobbk12.org

Beth Ruff, School Counselor

Beth.Ruff@cobbk12.org

WELCOME !!!!

Shari Martin, Second Grade

Shari.Martin@cobbk12.org

Janis Rone, Fifth Grade

Janis.Rone@cobbk12.org

Michelle Tinch, Fourth Grade

Michelle.Tinch@cobbk12.org

Dina.Voyles, RTI Facilitator/EIP

Dina.Voyles@cobbk12.org

AGENDA

Ice Breaker

Introductions and Overview

Why has Math Instruction Changed?

Math Mindset with Dr. Ruff

Grade Level Sessions **9:40-11:10**

What Resources Are Available to Parents?

Questions

ICEBREAKER



SOUND FAMILIAR?



WHAT CHALLENGES DO YOU FACE WHEN YOU ARE HELPING YOUR CHILD WITH MATHEMATICS?

GOALS

To build parent understanding of math instruction



To develop knowledge of resources provided by CCSD



To practice commonly used strategies



To provide math games, apps and websites that can be used at home

CCSD BALANCED MATH INSTRUCTION

APPLICATION & PROBLEM SOLVING

Students use the concepts and skills that they acquire to:

Solve problems with the use of models and explanations.

Solve and analyze performance tasks for deep/rich contextualized problem solving and application of the concepts to new or unique situations.

Apply towards Problem Based Learning where students explore real-world problems and challenges for possible solutions.

Work individually and collaboratively to explain and justify their thinking.

K-12 BALANCED MATHEMATICS INSTRUCTION

The Cobb Teaching and Learning Standards for Mathematics focus on the acquisition of math skills through conceptual instructional strategies. This results in an understanding of math principles to apply towards critical thinking and problem solving.

Students use manipulatives, software, and technology to investigate and discover math concepts.

Students understand concepts through models, simulations and relevant real world examples.

Students represent the mathematics through drawing pictures, graphics, tables, numbers, and symbols.

Students are given purposeful skills and practice to strengthen computation.

Students engage in explanatory writing to justify their thinking.

Students become fluent by applying strategies and procedures efficiently and accurately.

MATHEMATICS FOUNDATIONAL SKILLS

STANDARDS for MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Justify and explain their reasoning and critique the reasoning of others.
4. Model with mathematics, i.e. graphs, drawings, tables, symbols, etc.
5. Use appropriate math tools strategically, i.e. manipulatives, calculators, rulers, etc.
6. Attend to precision, i.e. clear communication, accuracy, measurement, calculations.
7. Look for and make use of patterns and structure.
8. Look for and express regularity in repeated reasoning through rules, properties and shortcuts.





**WHY HAS
MATH
INSTRUCTION
CHANGED?**

TRENDS IN PERFORMANCE DATA

FEBRUARY 15, 2017



U.S. students' academic achievement still lags that of their peers in many other countries

How Do American Students Compare to Their International Peers?

The most recent math results from an international survey place the United States near the bottom.

Scores in math, reading and science posted by 15-year-olds in the United States were flat while their counterparts elsewhere — particularly in Shanghai, Singapore and other Asian provinces or countries — soared, according to the [results](#) of a well-regarded international exam released Tuesday.

HOW DO WE MEASURE UP?

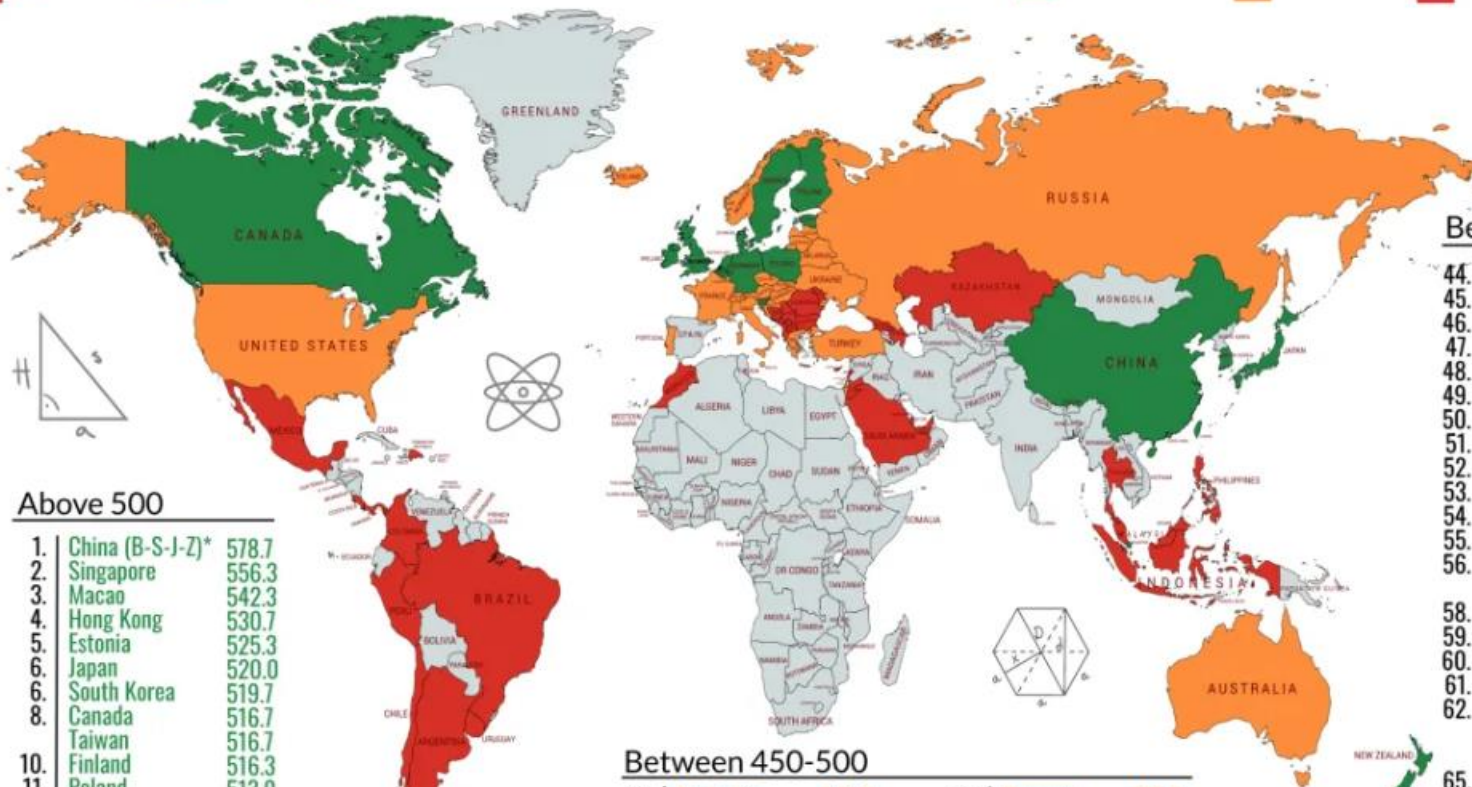
factsmaps.com

Source: OECD, 2018-2019

above 500

450-500

below 450



Above 500

1.	China (B-S-J-Z)*	578.7
2.	Singapore	556.3
3.	Macao	542.3
4.	Hong Kong	530.7
5.	Estonia	525.3
6.	Japan	520.0
7.	South Korea	519.7
8.	Canada	516.7
	Taiwan	516.7
10.	Finland	516.3
11.	Poland	513.0
12.	Ireland	504.7
13.	Slovenia	503.7
	United Kingdom	503.7
15.	New Zealand	502.7
16.	Netherlands	502.3
17.	Sweden	501.0
18.	Denmark	500.3
	Germany	500.3
20.	Belgium	500.0

* Beijing, Shanghai, Jiangsu, Zhejiang

Between 450-500

21.	Australia	499.0
22.	Switzerland	498.0
23.	Norway	496.7
24.	Czechia	495.3
25.	United States	495.0
26.	France	493.7
27.	Portugal	492.0
28.	Austria	491.0
29.	Latvia	487.3
30.	Russia	487.1
31.	Iceland	481.3
32.	Lithuania	479.7
33.	Hungary	479.3
34.	Italy	477.0
35.	Luxembourg	476.7
36.	Belarus	472.3
37.	Croatia	471.7
38.	Slovakia	469.3
39.	Israel	465.0
40.	Turkey	462.7
	Ukraine	462.7
42.	Malta	459.0
43.	Greece	453.3

Below 450

44.	Serbia	442.3
45.	Cyprus	438.0
46.	Chile	437.7
47.	Un. Arab Emirates	433.7
48.	Malaysia	431.0
49.	Romania	428.0
50.	Bulgaria	426.7
51.	Moldova	424.3
52.	Uruguay	423.7
53.	Brunei	423.0
54.	Montenegro	422.0
55.	Albania	419.7
56.	Jordan	416.0
	Mexico	416.0
58.	Costa Rica	414.7
59.	Qatar	413.3
60.	Thailand	412.7
61.	Colombia	405.3
62.	Kazakhstan	402.3
	Azerbaijan	402.3
	Bosnia and Herz.	402.3
65.	Peru	401.7
66.	Brazil	400.3
67.	North Macedonia	400.0
68.	Argentina	395.0
69.	Georgia	387.0
70.	Saudi Arabia	386.0
71.	Indonesia	382.0
72.	Lebanon	376.7
73.	Morocco	368.0
74.	Panama	365.0
75.	Kosovo	361.3
76.	Philippines	350.0
77.	Dominican Rep.	334.3

SOLUTION

This “New Math” is centered around the idea that a student should be exposed to core components of more complicated math earlier on to build number sense and understanding of number relationships early, bit by bit.





MATH MINDSET

DEVELOPING POSITIVE ATTITUDES
TOWARDS MATHEMATICS

DR. BETH RUFF

A vertical teal bar with a wavy, scalloped edge on the left side of the slide.

GRADE LEVEL SESSIONS

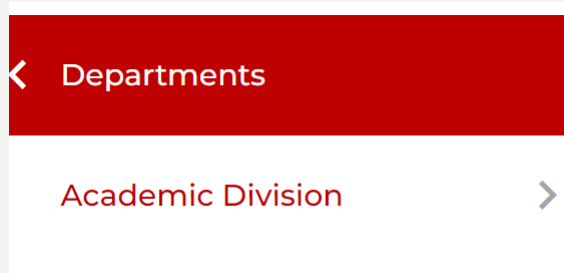
9:40 – 11:10



**WHAT
RESOURCES
ARE AVAILABLE
TO PARENTS?**

COBB COUNTY RESOURCES

- Go to cobbk12.org, select Departments and select Academic Division



- Select Instruction and Innovative Practice and scroll to Mathematics



Mathematics

Michelle Mikes, Ed.D.

Supervisor

[Email](#)

- Parent resources are located here.



Home / Departments / Academic Division / Instruction and Innovative Practice / Mathematics

Teaching & Learning

Applied Learning and Design >

Mathematics

SHARE



COBB COUNTY RESOURCES

- Video Overviews

Kindergarten Parent Overview Videos - By Unit

Kindergarten Unit 1



- Parent Resources include explanation of standards, parent letters and strategy guides.

1st Grade - Elementary School

[Click to Receive Parent Resources \(English\)](#)

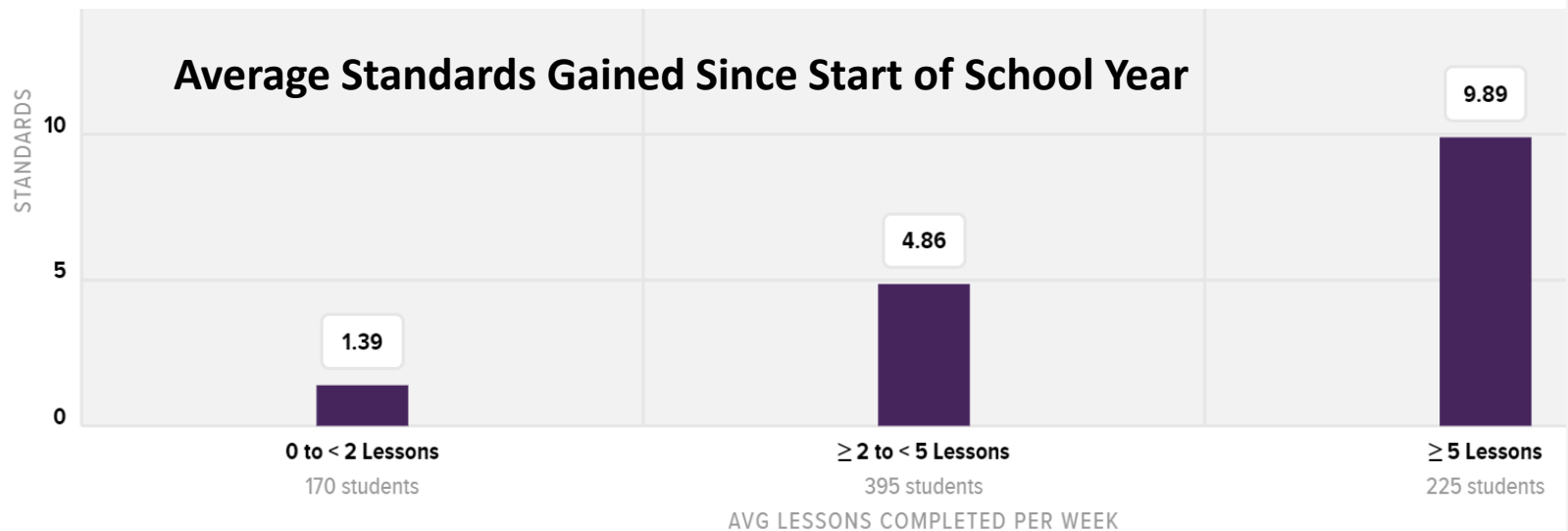
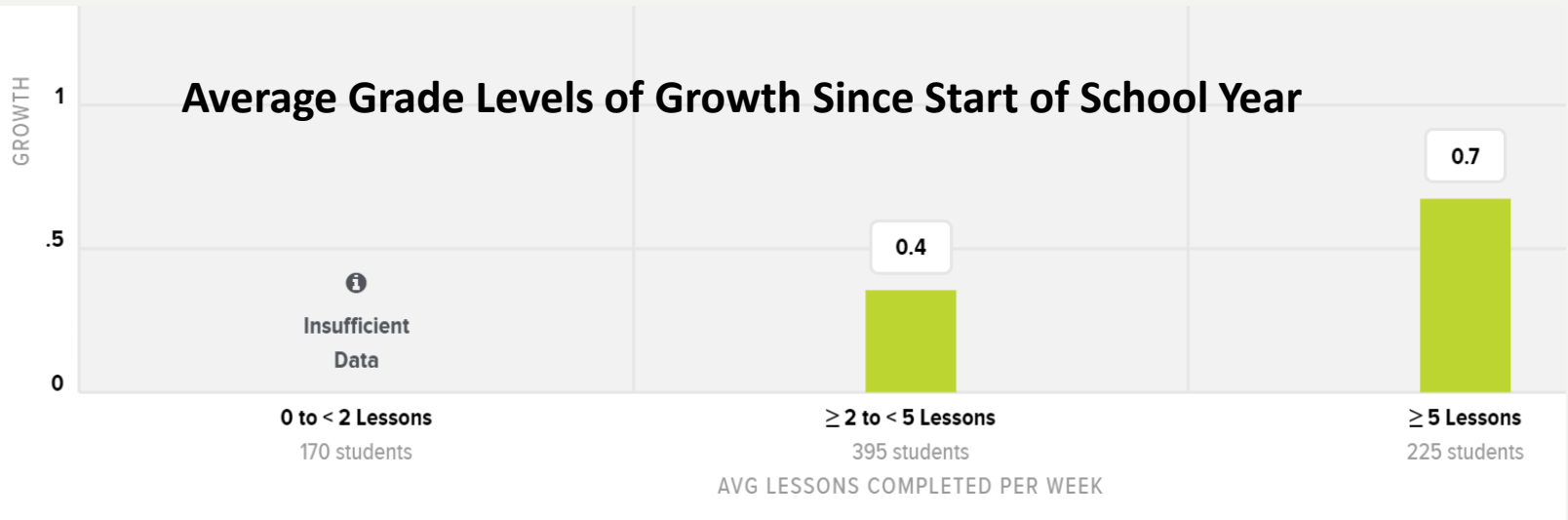
[Click to Receive Parent Resources \(Spanish\)](#)

[Click to Receive Clarification of Standards for Parents](#)

DREAMBOX



GROWTH BASED UPON LESSON COMPLETION



OTHER MATH APPS AND WEBSITES



MORE MATH WEBSITES

[Khan Academy](#)

[Math Playground](#)

[Maths Frame](#)

[Funbrain](#)

[Xtra Math](#)

[Prodigy Game](#)

[Cool Math 4 Kids](#)

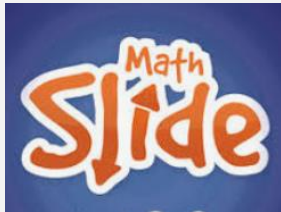
[IXL](#)

[AAA Math](#)

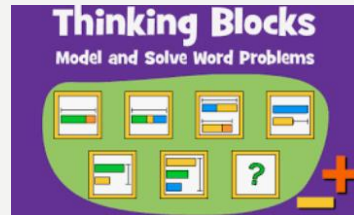
[Fog Stone Isle](#)

FREE MATH APPS

K-2 Math Apps



3-5 Math Apps



QUESTIONS & FEED BACK



THANK YOU

- We appreciate your attendance at today's session. Please provide any feedback on how the workshop will assist you to work with your child at home.

The only way
to learn
mathematics
is to do
mathematics.

PAUL HALMOS