

**RUMSON SCHOOL DISTRICT
MATH INFORMATION SESSION
OCTOBER 9, 2012**

**WELCOME
PARENTS**

YOUR HOSTS FOR THE EVENING:

Laurie Volpe, Supervisor of Curriculum, Instruction and Guidance
Kristen Feyereisen, Curriculum Specialist

Guest presenters:

Jacqueline Thompson, Pearson enVisionMATH Curriculum Specialist

Sandra Brand, Pearson Account Executive

Teachers:

Lori Blahut, Bridget Albrizio, Sue Schoenfeld,
Meaghan Cavanaugh, Joe Novellino, and
Sommer VanDeBoe

GOALS FOR THE EVENING

Introduce parents and the community to:

- ◉ the shift from the New Jersey Core Content Standards to the new Common Core State Standards in Mathematics;
- ◉ how this shift is connected to College and Career Readiness and the immediate impact upon instruction and coursework in Rumson;
- ◉ the enVisionMATH program pilot in grades (K-6) designed to support implementation of the CCSS, differentiated instruction and rigor to all learners; and
- ◉ a hands on exposure to lesson format and student resources through the eyes of the teacher in the classroom.

LET'S BEGIN.....

Common Core State Standards

What are they?

WHAT IS THE COMMON CORE?

Partnership...

The national pathway...

Of (now) 47 states to ensure.....

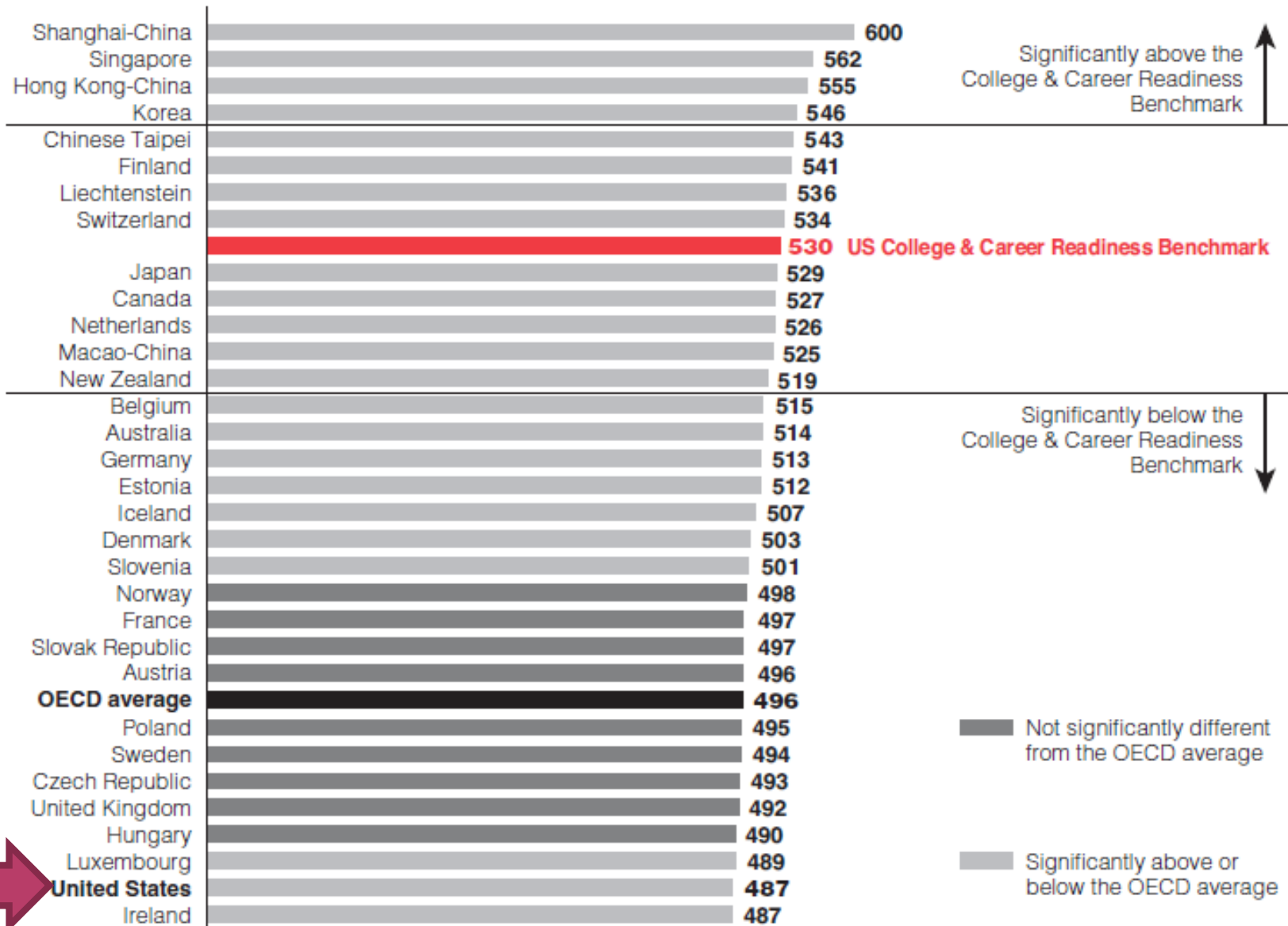
college and career readiness for
all students

THE PROBLEM.....

[HTTP://BIT.LY/OSAS6V](http://bit.ly/osas6v)

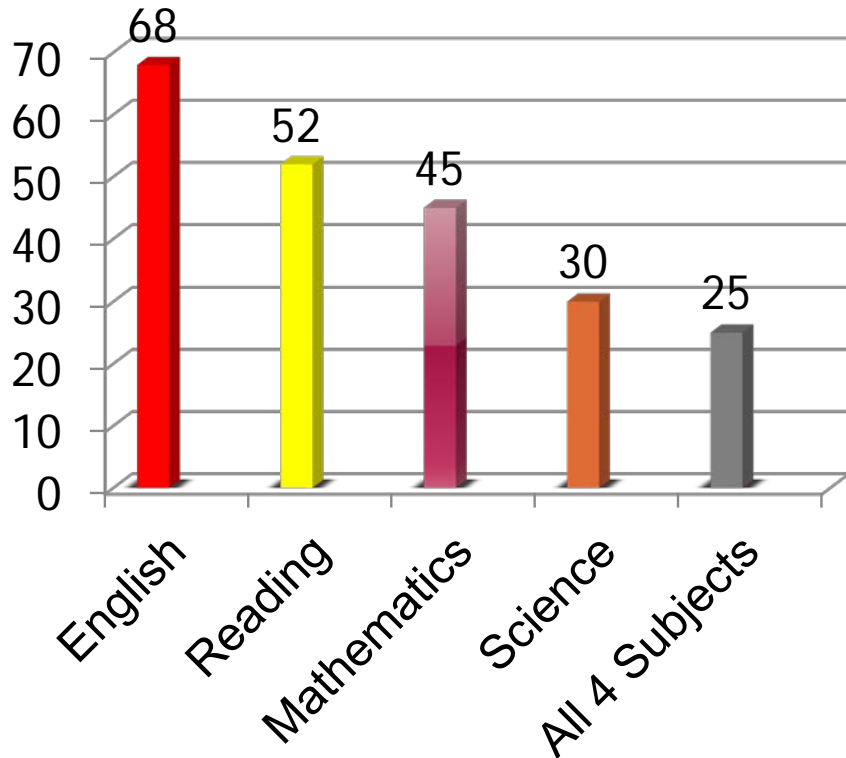


Tenth-Grade College and Career Readiness Performance Benchmark in Mathematics Compared to the Performance of Countries on PISA 2009 Mathematics



COLLEGE READINESS BENCHMARKS BY SUBJECT

Percent of ACT-Tested School Graduates Meeting College Readiness Benchmarks By Subject 2011



66% of all ACT-tested high school graduates met the English College Readiness Benchmark in 2011.

Just 1 in 4 (25%) met all four College Readiness Benchmarks.

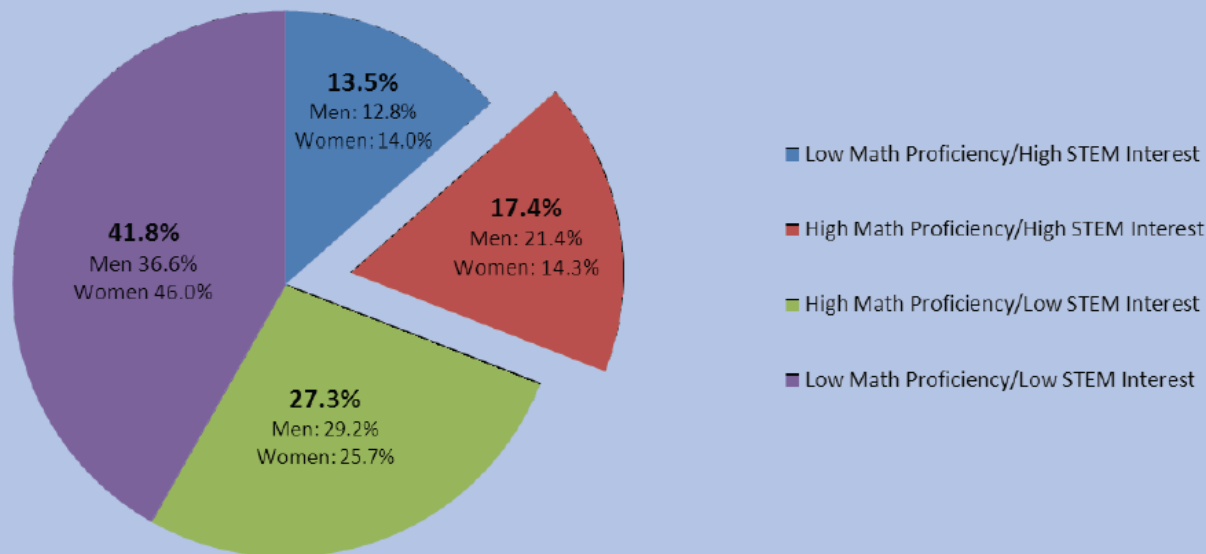
In 2011, 52% of graduates met The Reading Benchmark, while 45% met the Mathematics Benchmark.

Just under 1 in 3 (30%) met the College Readiness Benchmark in Science.

FURTHER:

AMERICAN STUDENTS' MATH PROFICIENCY AND STEM CAREER INTEREST DECLINE THROUGHOUT HIGH SCHOOL. BY 12TH GRADE, ONLY 17% OF STUDENTS ARE MATH PROFICIENT AND INTERESTED IN A STEM CAREER.

12th Grade Student STEM Interest and Math Proficiency



ACT Study - Schmeiser, 2006

Chance of later success

Science

Mathematics

Unprepared
in Reading

1%

15%

Prepared
in Reading

32%

67%

THE ANSWER

The Common Core State Standards

**A FOOT WIDE AND A MILE
DEEP!**

INCREASING RIGOR

- ⦿ Not a matter of more content sooner and “answer getting” !
- ⦿ It is a matter of engaging students in deep mathematical practice.

ANSWER GETTING VS. LEARNING MATHEMATICS

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

USA

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

JAPAN

SOME OF THE DIFFERENCES

- ◉ Use
- ◉ Recognize
- ◉ Demonstrate
- ◉ Explore
- ◉ Understand

New Jersey

- ◉ Interpret
- ◉ Write
- ◉ Make
- ◉ Solve
- ◉ Apply
- ◉ Write and evaluate
- ◉ Summarize and report
- ◉ Describe and relate
- ◉ Analyze and synthesize

Common Core

Handout:
Snapshot of the New Jersey Standard
in comparison to the Common Core

STANDARD 4.1
(NUMBER AND NUMERICAL OPERATIONS)

EMPHASIS IS ON THE STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments/ critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

TEACHER ACTIVITY AND STUDENT EXPECTATION CHANGES

- ◉ The Common Core State Standards emphasize student outcomes at higher levels of cognitive performance/critical **thinking**.
- ◉ Instruction **MUST** expect higher levels of critical **understanding**.

Cognitive Demand Categories for Mathematics

Level I	Level II	Level III	Level IV	Level V
Memorize Facts, Definitions, Formulas	Perform Procedures	Demonstrate Understanding of Mathematical Ideas	Conjecture, Analyze, Generalize, Prove	Solve Non-Routine Problems, Make Connections
Recite basic mathematics facts	Use numbers to count, order or denote	Communicate mathematical ideas	Determine the truth of a mathematical pattern or proposition	Apply and adapt a variety of appropriate strategies to solve problems
Recall mathematics terms and definitions	Do computational procedures or algorithms	Use representations to model mathematical ideas	Write formal or informal proofs	Apply mathematics in contexts outside of mathematics
Recall formulas and computational	Follow procedures/instructions	Explain findings and results from data analysis	Analyze data	Recognize, generate or create patterns
	Make measurement, do computations	Develop/explain relationships between concepts	Find a mathematical rule to generate a pattern or number sequence	Synthesize content and ideas from several sources
	Solve equations/formulas, routine word problems	Explain relationships between models, diagrams, & other representations	Identify faulty arguments or misrepresentations of data	
	Organize or display data		Reason inductively or deductively	
	Read or produce graphs and tables		Use spatial reasoning	
	Execute geometric constructions			

IMMEDIATE IMPACT IN RUMSON?

⊙ Curriculum -

- revised K-2(2011), 3-5 (2012), 6-8 (2013)

⊙ Instruction

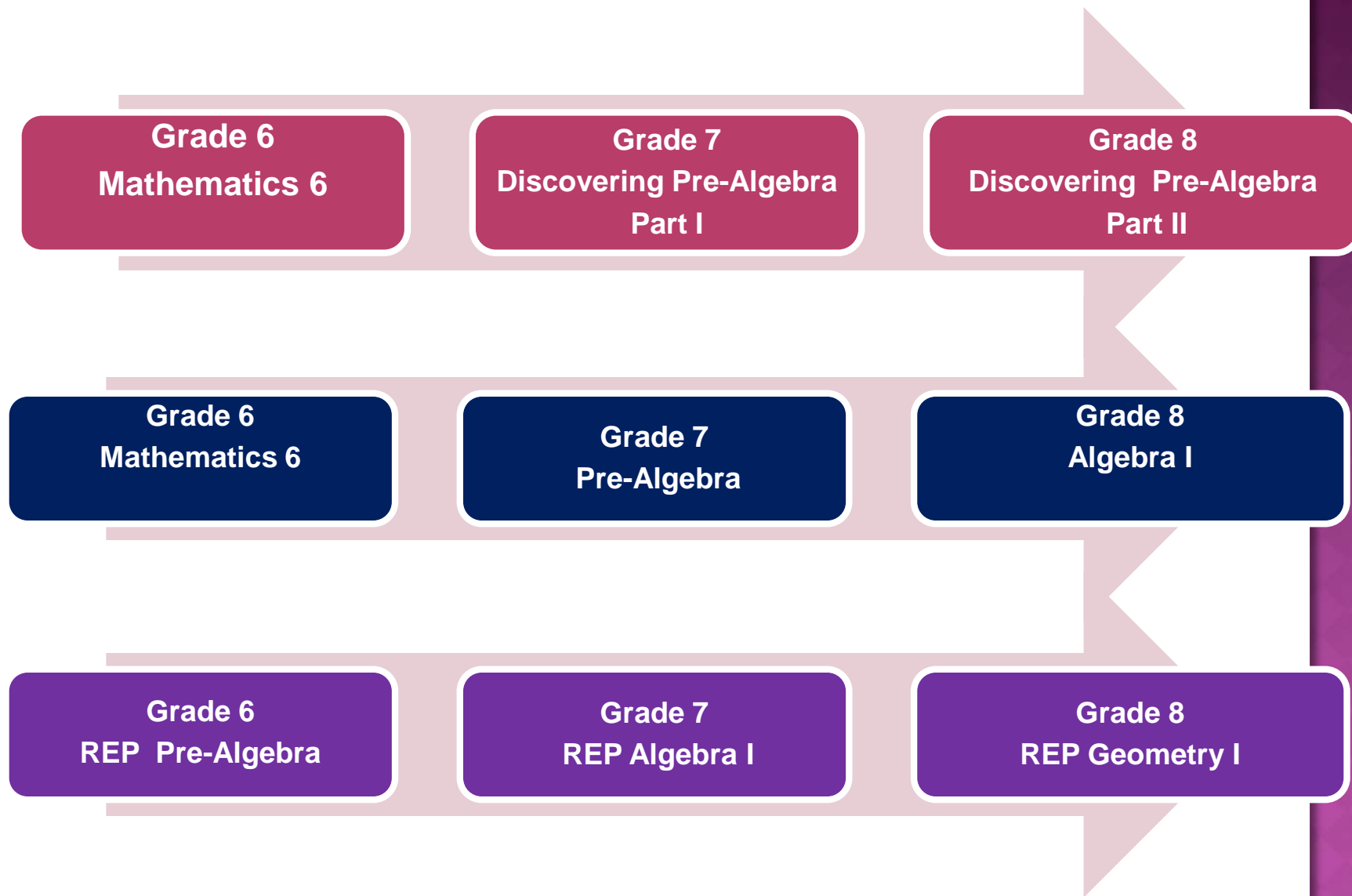
- enVisionMATH pilot (K-6)
- Re-alignment of grade 6-8 scope and sequence

⊙ Assessment -

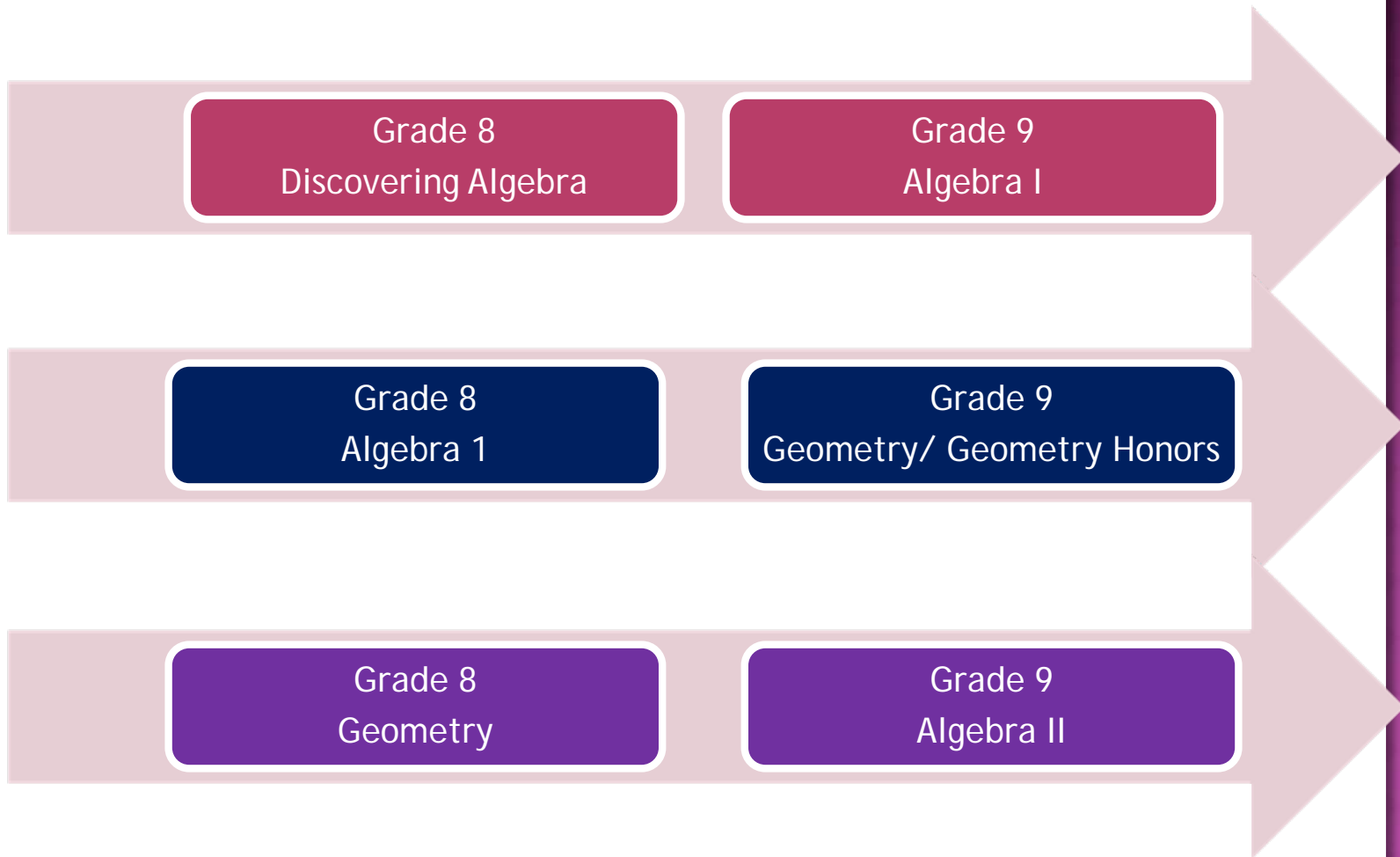
- District benchmark assessments
- Preparation for PARCC

IMPACT ON DELIVERY OF INSTRUCTION:

PATHWAY TO HIGH SCHOOL MATH AND COLLEGE AND CAREER READINESS



YOUR CHILD'S HIGH SCHOOL MATH PROGRESSION IS NOT CHANGING



Please refer to R-FH Math Course Progression Chart for further information

SO.....

WHAT ABOUT THE
TEST?

ASSESSING COLLEGE AND WORKPLACE READINESS?

Yesterday & Through
2014

State Testing
For mastery of the
NJ Common Core
Content Standards

NJASK

Today, Tomorrow &
Beyond:

College & Workplace
Readiness Benchmarks

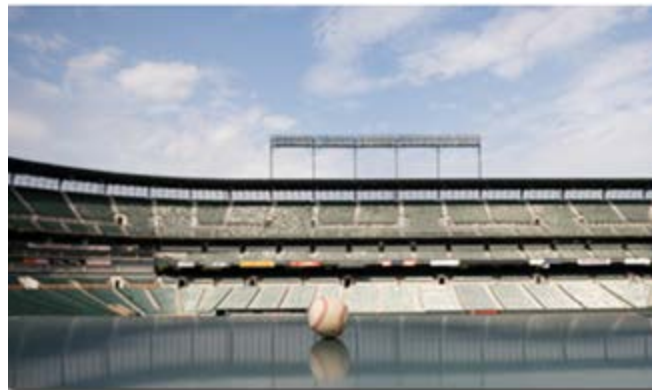
PARCC

PARCC OVERVIEW

ARE YOU READY TO PLAY????

ARE YOU SMARTER THAN A 4TH GRADER?

Baseball stadiums have different numbers of seats.



San Francisco
Giants' stadium:
41,915 seats

Washington
Nationals' stadium:
41,888 seats

San Diego
Padres' stadium:
42,445 seats

Compare these statements from two students.

Jeff said, "I get the same number when I round all three numbers of seats in these stadiums."

Sara said, "When I round them, I get the same number for two of the stadiums but a *different* number for the other stadium."

Can Jeff and Sara both be correct? Explain how you know.

REMEMBER.....

TEACHER LEARNING TARGETS

Knowledge

Reasoning

Demonstration

Products

ARE YOU SMARTER THAN A 6TH GRADER?

The Tasty Treats Cake Factory bakes cakes to sell for a grocery chain. Each cake is weighed to see how close it is to the factory's target weight of 30 ounces. The scale shows how close the cake's weight is to the target. The scale will display:

- A positive number if the cake's weight is over 30 ounces.
- A negative number if the weight is less than 30 ounces.



On Wednesday, the factory records the weights of 5 cakes. The reading with the largest absolute value belongs to:

- The cake that weighs the least.
- The cake that weighs the most.
- The cake that is closest to the target weight.
- The cake that is furthest from the target weight.

WHY ENVISIONMATH PILOT?

- ◉ Seeking instructional resources that will best support the re-alignment of curriculum and instruction to the common core state standards
- ◉ Seeking instructional resources that will provide both rigor and intervention as needed for our diverse student population

PLEASE WELCOME
JACQUELINE THOMPSON
SANDY BRAND
PEARSON CURRICULUM SPECIALISTS

Parent introduction
to enVisionMATH

BREAK OUT SESSIONS

- ◉ Grade 1 - 2 (Blahut/Albrizio) (DP)
- ◉ Grade 3/BSI -(Schoenfeld/Cavanaugh) (DP)
- ◉ Grade 4 - 6 - (Novellino/VandeBoe) Rm 306

Feel to roam and move in an out of rooms as needed. See you back in the café in about 20 minutes.

CLOSING REMARKS:

OUR GOALS FOR TONIGHT IN REVIEW

- ◉ To raise an awareness about the shift to the new Common Core State Standards and the rigor required to meet College and Career Readiness benchmarks
- ◉ To understand the immediate impact of the CCSS on curriculum and instruction in Rumson
- ◉ To introduce parents to the enVisionMath (pilot) program and materials

http://teachertube.com/viewVideo.php?video_id=1103

The vision

For parents to be collaborative partners in our district's mission to ensure all students are college and career ready.

Thank you for coming!