

# SUSD Department of Educational Services

Report to Foothill PTA

May 20, 2015



# SUSD Strategic Plan



## 2014 – 2017 Saratoga Union School District Strategic Plan

### MISSION:

Create an innovative public school system that stimulates intellectual curiosity, providing academic rigor for each and every learner, and instills leadership, responsibility, and global citizenship in a safe and nurturing environment where learners THRIVE.



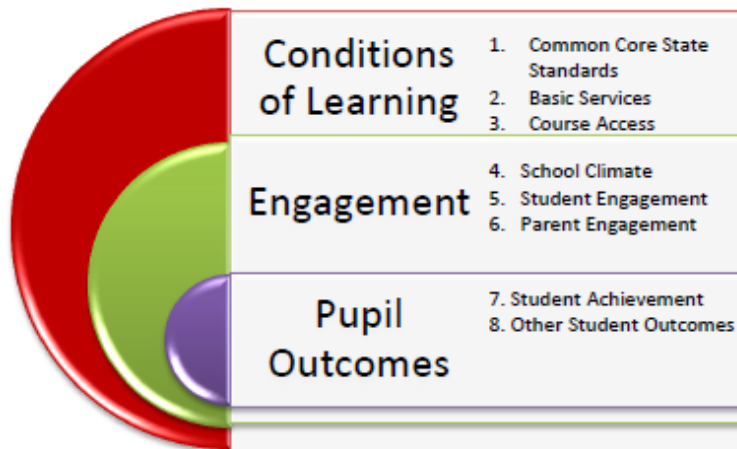
# SUSD LCAP



**SUSD' Local Control Accountability Plan (LCAP):**

## **Meeting the Needs of Saratoga Union School District's Students**

Eight state priority areas for which SUSD has established goals and actions:



Link to SUSD's LCAP: <http://www.saratogausd.org/index.php/lcap>

## **SUSD's LCAP Goals:**

All SUSD students will reach high standards and will demonstrate upward movement in student achievement through CCSS- and NGSS- aligned instruction, assessment, and teacher professional development.

Our District and school sites will maintain effective communication, provide a process to include input from all stakeholders, and offer opportunities for family engagement.

Our students will be educated in a safe environment that integrates social emotional literacy and provides opportunities for engagement of students and stakeholders at all levels.

Our District will cultivate innovative and empowered learners through personalized learning, 21<sup>st</sup> Century Learning Skills (creativity, collaboration, communication, and critical thinking), and the infusion of technology.

# Purpose of Instructional Materials Adoption

- \* SUSD Common Core Implementation Plan
- \* CA Education Code 60119
- \* SBE adopted materials: basic grade level, Algebra 1, Math 1
- \* Alignment to state-adopted Common Core State Standards for Mathematics
- \* Core program and supplemental resources

# *How does the adopted math curriculum fit into our math program?*

- \* The adopted math curriculum serves as a **resource** for planning and implementing quality instruction.
- \* Teachers utilize a **variety of instructional practices and curriculum**, valuing conceptual understanding, problem solving, critical thinking and mathematical fluency.
- \* The **adopted math curriculum is not the sole reference** for what is taught or how it is taught.
- \* Teachers will use the adopted materials to **guide** them in planning and implementing lessons.

# Purpose of Math Instructional Materials Evaluation Process

- \* Build on foundational documents (Common Core State Standards [CCSS], *Mathematics Framework*, *Math Progressions*) to inform the choice of pilot curriculum selections.
- \* Pilot selections and provide data and feedback using the *Mathematics Curriculum Evaluation Toolkit*
- \* Select K-5 and 6-8 core math curriculum to recommend to SUSD Board of Trustees

# Process & Timeline

- \* Spring 2014:
  - \* Preliminary review of programs
  - \* SCCOE Math Instructional Materials Faire
  - \* SCCOE *Math Evaluation Toolkit* Training
  - \* Training and researching programs
- \* Summer and Fall 2014:
  - \* Training and researching programs
- \* December 2014/January 2015:
  - \* Committee convenes: Evaluation Toolkit, District Lens, Framework
  - \* Intense evaluation of materials by teachers and administrators

# Process & Timeline

- \* February – March 2015:
  - \* K-5 and 6-8 pilot instructional materials
  - \* Teacher, student surveys
  - \* Parent previews and opportunity for input
- \* April 2015
  - \* Committee makes data – driven decision for K-5 and 6-8 core curriculum recommendations
- \* April 28:
  - \* Committee makes recommendations to SUSD Board



# Process & Timeline

- \* May 12:
  - \* Board votes on committee's recommendations for core curriculum in K- 5 and 6-8
- \* May – Summer 2015:
  - \* Professional development core training
- \* Fall 2015:
  - \* Math instructional materials in classrooms

# Teachers' Evaluation of Elementary Math Programs Reviewed

**Teachers thoroughly reviewed 7 programs:**

Math Expressions, Math in Focus, My Math, enVision, Everyday Math, Engage NY, and Go Math. 4 programs rose to the top (below).

Of those, the top 3 were piloted\*\*.

## Math in Focus (Singapore)

- Average score 2.9 on 27 criteria
- Strengths: bar model
- Weaknesses: not CCSS-aligned, not enough time on major cluster standards, lack of depth and rigor, not enough practice problems

## Everyday Math\*\*

- Average score 3.9 on 27 criteria
- Strengths: games and activities, CCSS-aligned
- Weaknesses: program organization, lack of coherence, assessments

## Engage NY\*\*

- Average score 4.4 on 27 criteria
- Strengths: CCSS-aligned, depth, rigor, coherence,
- Weaknesses: workbooks unengaging; time to learn program, plan PD, and design parent support system; requires differentiated support

## Go Math\*\*

- Average score 4.1 on 27 criteria
- Strengths: CCSS-aligned, program organization, teacher usability, online resources
- Weaknesses: low depth and rigor, consumables

# What is Engage NY/Eureka Math?

- \* Developed by Common Core, Inc, a Washington DC-based not-for-profit organization
- \* Provides an online platform for housing comprehensive mathematics curriculum
- \* Enhanced with student materials, professional development tools, dashboard functionality, and printed curriculum
- \* Based on the theory that math knowledge is conveyed most clearly and effectively when taught in a sequence that follows the “story” of math:
  - \* A Story of Units (Pre k – 5)
  - \* A Story of Ratios (6-8)
  - \* A Story of Functions (9-12)

Approximate  
date  
grades

6/26/18 Note that data as approximations are based on a first student day of 5/30/12 and last day of 6/26/13 with a testing date of approximately in late Aug.

Key:	Geometry	Number	Number and Geometry, Measurement	Fractions
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\*Please refer to grade-level descriptions to identify partially labeled modules and the standards corresponding to all modules.

# Engage NY: Program Strengths

(according to teachers, parents, students)

- \* Teaches math as a story – builds students' knowledge logically to achieve deep understanding
- \* Good feedback from substitute teachers about usability
- \* Exit tickets allow daily monitoring of student work
- \* Content from earlier modules incorporated into word problems in later modules
- \* Goes along with concepts and vocabulary of DreamBox, MARS, and Khan Academy
- \* Students and teachers love the Sprints, which cover more than basic facts
- \* Concepts chunked and mastered before going to another concept
- \* Loads of videos online for extra help, teaching training, and parent support
- \* Supplemental online resources are good, useful, easy to find

# Engage NY: Program Strengths

(according to K-8 teachers, parents, students)

- \* Rigorous, focus on cluster standards, coherent organization of concepts
- \* Students can download and print HW
- \* Rubrics are easy to use; answers are on rubric; students and parents can see what expected answer should have included
- \* Interactive drills, mental math, efficient games and concept worksheets
- \* Sprints = fluency activities and physical exercise
- \* Online assessments can be modified as needed
- \* Test questions directly keyed to standards
- \* Uses real world problems; DOK levels 1-4
- \* Requires students to explain reasoning and understand why
- \* Very well aligned and meets standards

# Engage NY: Program Challenges

(according to K-8 teachers, parents, students)

- \* Some students are frustrated to have to explain work in so many ways – too much explaining “why” is difficult for EL students
- \* Homework tear-outs in printed material were initially a problem
- \* Homework may take a long time, needs instructions for parents
- \* Lessons are too long if you do the whole thing
- \* Could lose the class if you don't skip to the heart of the lesson – takes awhile for teachers to be able to do this
- \* No examples on student worksheets or homework
- \* Sometimes parents have a hard time figuring out how to help with homework
- \* HW/tests sometimes don't measure student understanding
- \* No manual/book for student/parent reference
- \* Lots of word problems
- \* Lower performing and EL students really struggled and had difficulty keeping up
- \* Need for differentiation

# Mathematics K-5

# Overview of the Common Core State Standards

	K	1	2	3	4	5
Counting and Cardinality	<ul style="list-style-type: none"> <li>Know number names and the count sequence</li> <li>Count to tell the number of objects</li> <li>Compare numbers</li> </ul>					
Operations and Algebraic Thinking	<ul style="list-style-type: none"> <li>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</li> </ul>	<ul style="list-style-type: none"> <li>Represent and solve problems involving addition and subtraction</li> <li>Understand and apply properties of operations and the relationship between addition and subtraction</li> <li>Add and subtract within 20.</li> <li>Work with addition and subtraction equations</li> </ul>	<ul style="list-style-type: none"> <li>Represent and solve problems involving addition and subtraction.</li> <li>Add and subtract within 20.</li> <li>Work with equal groups of objects to gain foundations for multiplication.</li> </ul>	<ul style="list-style-type: none"> <li>Represent and solve problems involving multiplication and division.</li> <li>Understand properties of multiplication and the relationship between multiplication and division.</li> <li>Multiply and divide within 100.</li> <li>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</li> </ul>	<ul style="list-style-type: none"> <li>Use the four operations with whole numbers to solve problems.</li> <li>Gain familiarity with factors and multiples.</li> <li>Generate and analyze patterns.</li> </ul>	<ul style="list-style-type: none"> <li>Write and interpret numerical expressions.</li> <li>Analyze patterns and relationships.</li> </ul>
Number and Operations in Base Ten	<ul style="list-style-type: none"> <li>Work with numbers 11-19 to gain foundations for place value.</li> </ul>	<ul style="list-style-type: none"> <li>Extend the counting sequence.</li> <li>Understand place value.</li> <li>Use place value understanding and properties of operations to add and subtract.</li> </ul>	<ul style="list-style-type: none"> <li>Understand place value.</li> <li>Use place value understanding and properties of operations to add and subtract.</li> </ul>	<ul style="list-style-type: none"> <li>Use place value understanding and properties of operations to perform multi-digit arithmetic.</li> </ul>	<ul style="list-style-type: none"> <li>Generalize place value understanding for multi-digit whole numbers.</li> <li>Use place value understanding and properties of operations to perform multi-digit arithmetic.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the place value system.</li> <li>Perform operations with multi-digit whole numbers and with decimals to hundredths.</li> </ul>
Numbers and Operations – Fractions				<ul style="list-style-type: none"> <li>Develop understanding of fractions as numbers.</li> </ul>	<ul style="list-style-type: none"> <li>Extend understanding of fraction equivalence and ordering</li> <li>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</li> <li>Understand decimal notation for fractions, and compare decimal fractions.</li> </ul>	<ul style="list-style-type: none"> <li>Use equivalent fractions as a strategy to add and subtract fractions.</li> <li>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</li> </ul>
Measurement and Data	<ul style="list-style-type: none"> <li>Describe and compare measurable attributes.</li> <li>Classify objects and count the number of objects in categories.</li> </ul>	<ul style="list-style-type: none"> <li>Measure lengths indirectly and by iterating length units.</li> <li>Tell and write time.</li> <li>Represent and interpret data.</li> </ul>	<ul style="list-style-type: none"> <li>Measure and estimate lengths in standard units.</li> <li>Relate addition and subtraction to length.</li> <li>Work with time and money.</li> <li>Represent and interpret data.</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</li> <li>Represent and interpret data.</li> <li>Geometric measurement: understand concepts of area and relate area to multiplication and addition.</li> <li>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving measurement and conversion of measurement from a larger unit to a smaller unit.</li> <li>Represent and interpret data.</li> <li>Geometric measurement: understand concepts of angle and measure angles.</li> </ul>	<ul style="list-style-type: none"> <li>Convert like measurement units within a given measurement system.</li> <li>Represent and interpret data.</li> <li>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</li> </ul>
Geometry	<ul style="list-style-type: none"> <li>Identify and describe shapes</li> <li>Analyze, compare, create, and compose shapes.</li> </ul>	<ul style="list-style-type: none"> <li>Reason with shapes and their attributes.</li> </ul>	<ul style="list-style-type: none"> <li>Reason with shapes and their attributes.</li> </ul>	<ul style="list-style-type: none"> <li>Reason with shapes and their attributes.</li> </ul>	<ul style="list-style-type: none"> <li>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</li> </ul>	<ul style="list-style-type: none"> <li>Graph points on a coordinate plane to solve real-world and mathematical problems.</li> <li>Classify two-dimensional figures into categories based on their properties.</li> </ul>





# Common Core Math | Scope & Sequence

## Standards Grouped by Domain



<a href="#">Home</a>	<a href="#">CC</a>	<a href="#">OA</a>	<a href="#">NBT</a>	<a href="#">NF</a>	<a href="#">MD</a>	<a href="#">G</a>	<a href="#">RP</a>	<a href="#">NS</a>	<a href="#">EE</a>	<a href="#">F</a>	<a href="#">SP</a>
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NEW! Visit our [CCSS English/Language Arts Scope and Sequence](#). It is still under development, but click now to get a preview!

<a href="#">K</a>	1	2	3	4	5	6	7	8	<a href="#">CC: Counting and Cardinality</a>
<a href="#">K</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	6	7	8	<a href="#">OA: Operations and Algebraic Thinking</a>
<a href="#">K</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	6	7	8	<a href="#">NBT: Number and Operations in Base Ten</a>
K	1	2	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	6	7	8	<a href="#">NF: Number and Operations - Fractions</a>
<a href="#">K</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	6	7	8	<a href="#">MD: Measurement and Data</a>
<a href="#">K</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">G: Geometry</a>
K	1	2	3	4	5	<a href="#">6</a>	<a href="#">7</a>	8	<a href="#">RP: Ratios and Proportional Relationships</a>
K	1	2	3	4	5	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">NS: The Number System</a>
K	1	2	3	4	5	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">EE: Expressions and Equations</a>
K	1	2	3	4	5	6	7	<a href="#">8</a>	<a href="#">F: Functions</a>
K	1	2	3	4	5	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">SP: Statistics and Probability</a>

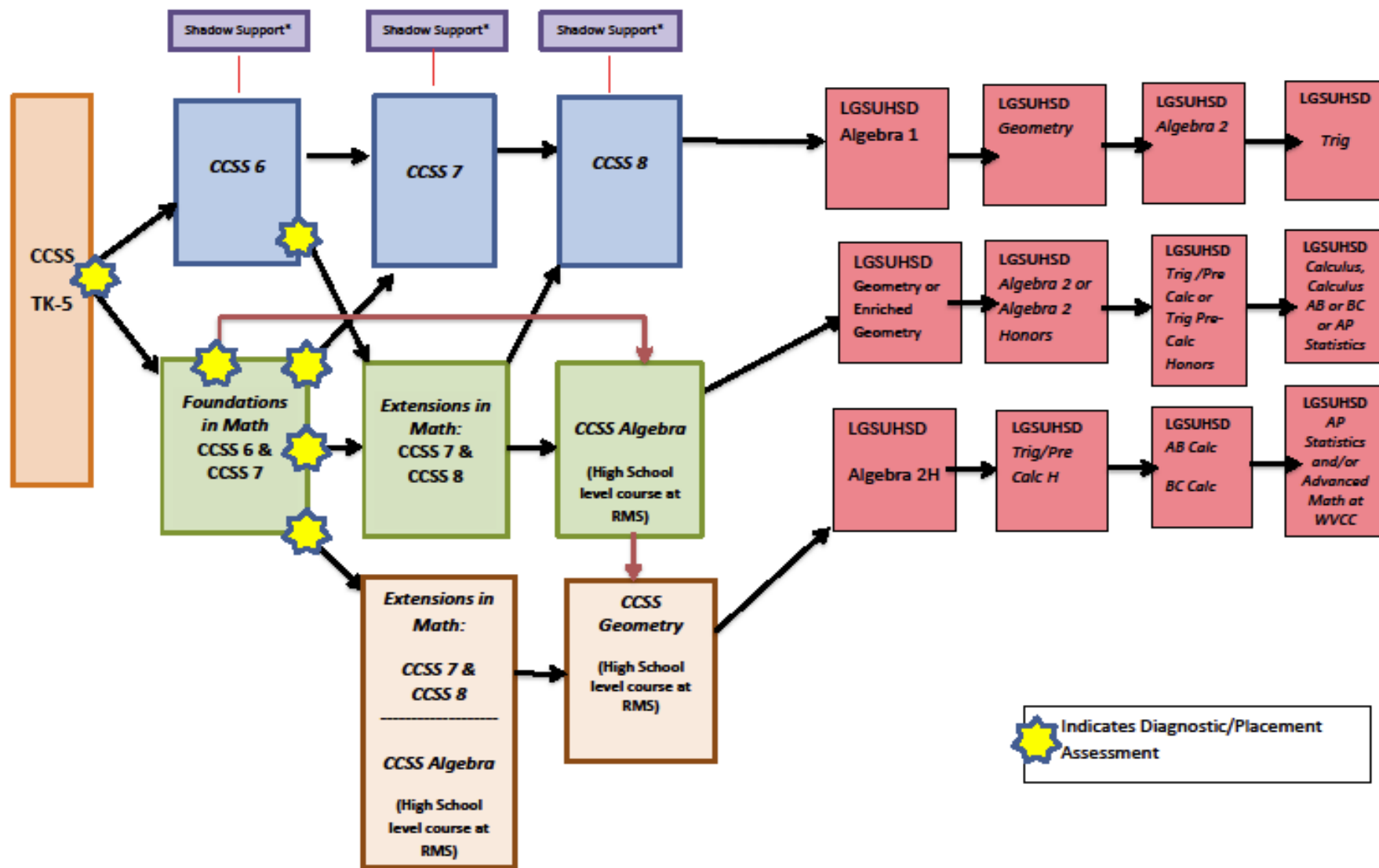
<http://www.projectlearning.org/commoncore/scopesequence/sshome.html>

# Math Diagnostic/Placement Assessments

- \* Purpose: course placement assessment for rising 6<sup>th</sup> & 7<sup>th</sup> graders to measure student readiness for acceleration in middle school and diagnostic info about student preparedness
- \* Objective, reliable, valid, multiple measures of data to assess procedural fluency and problem solving
- \* Reliable indication of a student's current mathematical proficiency matched to skills needed for success in a course.
- \* Partnerships: Wested, SCCOE, Cupertino, SVEF

# SUSD – LGSUHSD Math Pathways

Approved by SUSD Board of Trustees May 12, 2015



# SUSD Assessment System

- \* Purpose: to track students' growth toward grade level standards; to assess areas of need and areas of strength; to design instruction at students' "learning edge"
- \* Local Assessments: MARS, DRA, LC Writing, classroom formative assessments
- \* ELA/Math Summative Assessment: SBAC
- \* ELA/Math Interim Assessments: SBAC
- \* Other Assessments: Physical Fitness (PFT; 5<sup>th</sup> & 7<sup>th</sup>), English Learner (CELDT), CST Science (5<sup>th</sup> & 8<sup>th</sup>)

# SBAC Student Score Report

- \* Student score reports will be sent home to parents and will include an overall score, a description of the student's achievement level for English–language arts and mathematics, and other information.
- \* It is important to note that these scores cannot be compared to scores that your child previously received on the STAR Program tests because this test is based on the new Common Core State Standards, involves different types of test questions, and will not be reported using the STAR Program reporting categories.

# SBAC Student Score Report

## Juan's Results on California's Assessments

The following provides a further breakdown of Juan's overall scores, represented on the front of this report. Each of the following areas may be represented as Above Standard, At or Near Standard, or Below Standard. To learn more about these tests, visit <http://www.SmarterBalanced.org/>.

### ENGLISH LANGUAGE ARTS/LITERACY

Juan's overall score is: **2508**

AREA	PERFORMANCE
<b>Reading</b> <i>Demonstrating understanding of literary and non-fiction texts</i>	<b>Above Standard</b>
<b>Writing</b> <i>Producing clear and purposeful writing</i>	<b>At or Near Standard</b>
<b>Listening</b> <i>Demonstrating effective communication skills</i>	<b>At or Near Standard</b>
<b>Research/Inquiry</b> <i>Investigating, analyzing and presenting information</i>	<b>Below Standard</b>

### MATHEMATICS

Juan's overall score is: **2279**

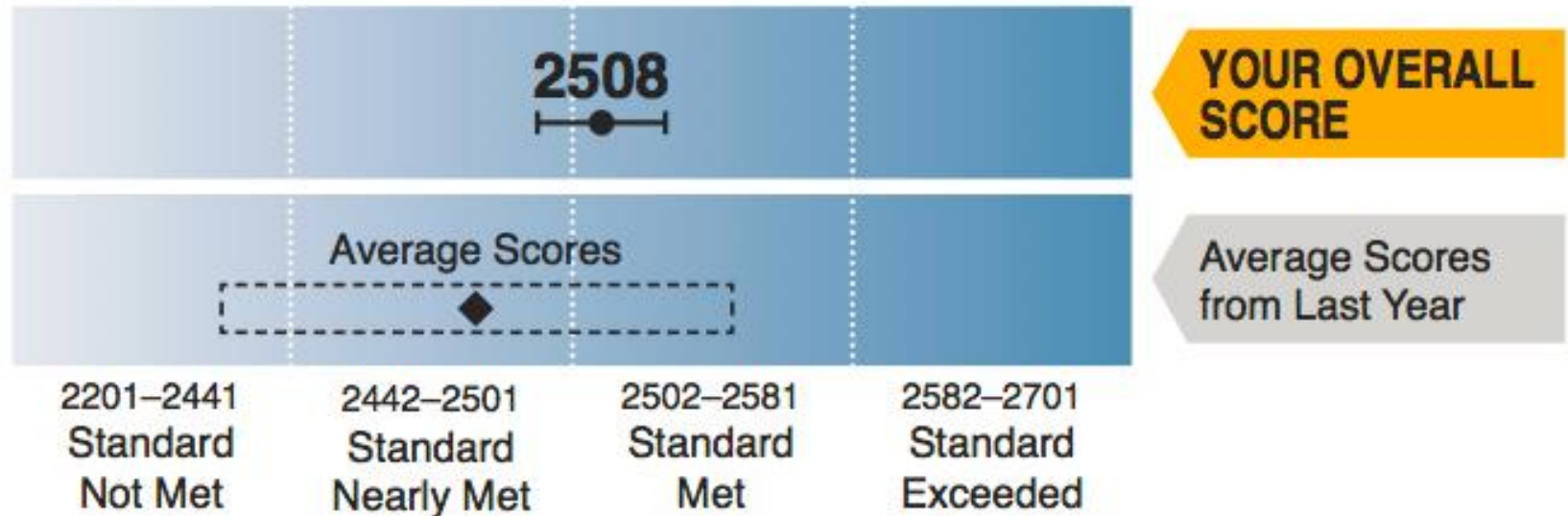
AREA	PERFORMANCE
<b>Problem Solving &amp; Modeling/Data Analysis</b> <i>Using appropriate tools and strategies to solve real world and mathematical problems</i>	<b>Above Standard</b>
<b>Concepts &amp; Procedures</b> <i>Applying mathematical concepts and procedures</i>	<b>Below Standard</b>
<b>Communicating Reasoning</b> <i>Demonstrating ability to support mathematical conclusions</i>	<b>Below Standard</b>

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# SUSD Progress Updates (Report Cards)

- \* Purpose: tool to communicate a student's progress toward meeting end-of-year grade level expectations
- \* ELA & Math Common Core-aligned
- \* Comprehensible, parent-friendly language
- \* Revisions for next year



# Questions?

