# Student Achievement Results: Parts I, II, & III October 19, 2017

### New Fairfield Public Schools

Dr. Roy, Dr. McKinnon, Mr. Finlayson, Dr. Sanzo, Mrs. Baldelli

# Presentations

- Smarter Balanced, SAT/AP (Sept 19)
  - O How are we remaining focused on improvement?
  - O District Assessment Results 2016-2017 and Plan
- End-of-year and formative assessments (Oct 5) F&P, STAR

# Presentations

• CAPT/CMT Science (Oct 19) - progress and new programs

• Math overview (Nov 16)

• Next Gen Accountability (Jan or Feb)

# Presentation Outline

3-8 Smarter Balanced Results





High School Assessments

SAT

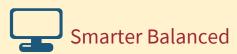
Advanced Placement (AP)



# Steps Taken to Improve

### Presentation One: External Assessments





Summative State Assessment that is administered in grades 3-8 on computers



SAT

College Readiness assessment that was administered to grade 11 students



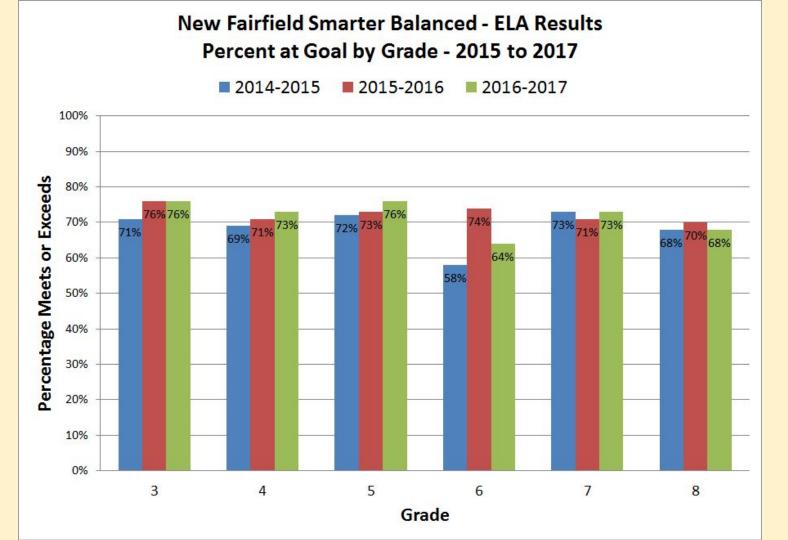
### **Advanced Placement**

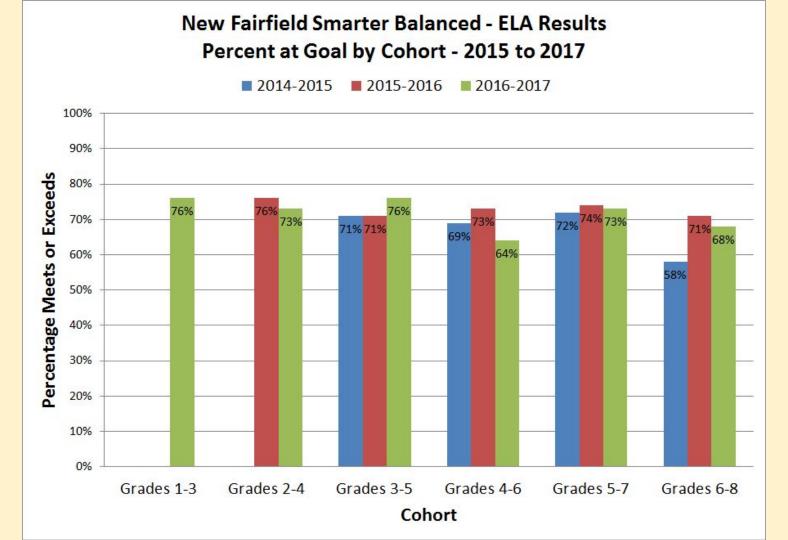
College-level curricula and courses that are offered to high school students for college credit

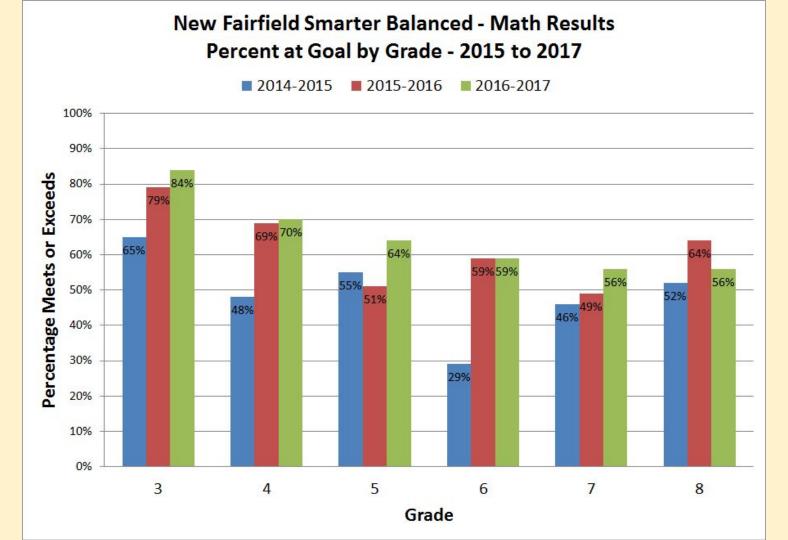


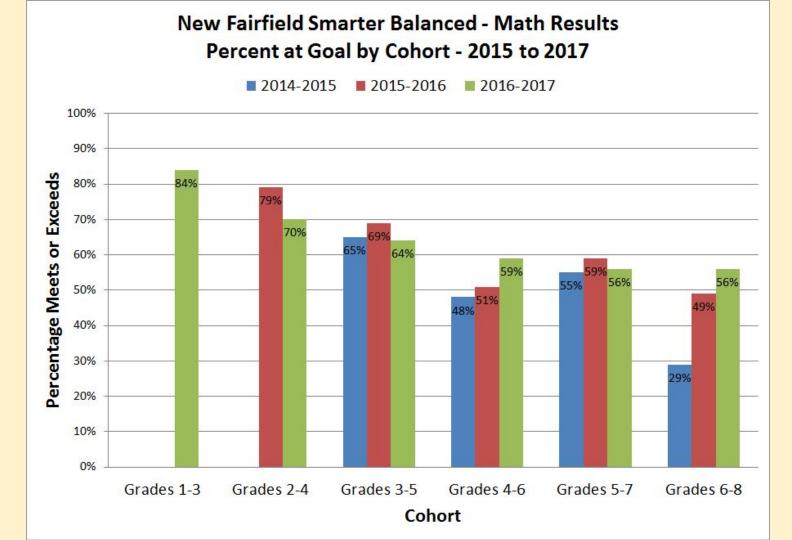
# Smarter Balanced Assessments

Grades 3-8



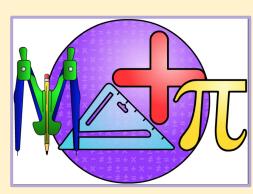






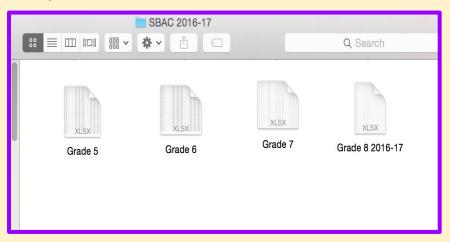
Our 3rd grade math scores on the Smarter Balanced Assessment, with 84% of the students meeting or exceeding the standard, are the



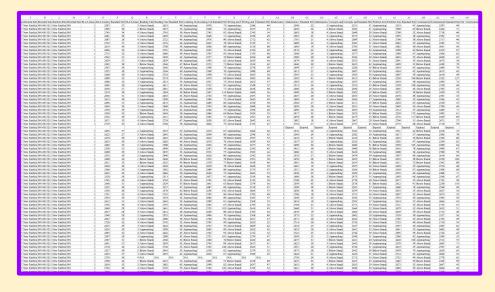


### SBAC Data Summer work

### Step 1:

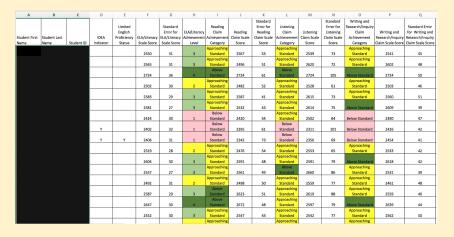


Step 2: Clean-up spreadsheet



### Formatted Data

Step 3: Data formatted and color coated



Step 4: Cohort Data Added



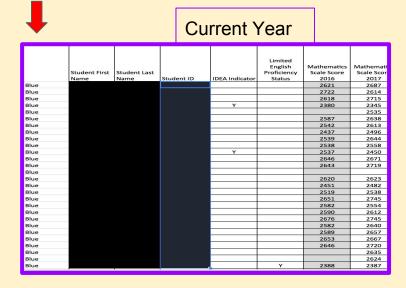
						2016	2017	
Student First Name	Student Last Name	IDEA Indicator	ELA/Literacy Scale Score 2016	ELA/Literacy Scale Score 2017	Standard Error for ELA/Literacy Scale Score	ELA/Literacy Achievement Level	ELA/Literacy Achievement Level	Re Ai
			2613	2583	29	4	3	Appro
		Y	2384	2402	32	1	1	Ве
		Y	2459	2406	31	2	1	Be
				2565	31		3	Appro
			2562	2587	29	3	3	At
			2679	2647	30	4	4	At
			2554	2589	28	3	3	At
			2662	2710	35	4	4	Al
		Y	2418	2466	29	1	2	Appr
			2476	2508	30	2	2	В
				2669	34		4	А
			2464	2524	27	2	2	В
			2641	2605	27	4	3	A
			2650	2657	33	4	4	A
			2534	2518	30	3	2	Appr
			2577	2526	29	3	2	Appr
			2597	2594	28	4	3	Al
			2537	2581	27	3	3	A
			2557	2556	29	3	3	Appr
			2683	2710	34	4	4	A
			2544	2541	30	3	3	Appr
			2533	2460	31	3	2	В
			2419	2497	33	1	2	Appr
			2556	2619	27	3	4	Appr
			2672	2629	30	4	4	Appr
			2400	2542	28	1	3	Appr
			2583	2586	29	4	3	Appr
			2701	2644	30	4	4	At
			2454	2551	29	2	3	Appro
			2487	2484	29	2	2	Appro

### Data Analysis

#### Growth Data examined:

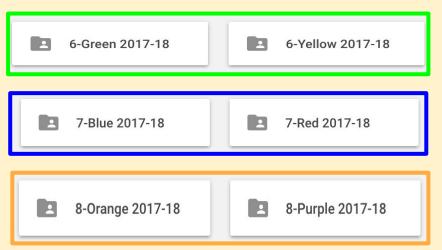
	Increase	Decrease	1-2	1-3	1-4	2-3	2-4	3-4	4-3	4-2	3-2	3-1	2-1
Reading	32	33	6	2		9		14	18		8	4	3
Math	27	25	5			6	3	13	6		12	2	5

				<u>-</u>	Teache	rs adde	d:
	•	Previou	us Year				
ss	ELA	Student First Name	Student Last Name	IDEA Indicator	ELA/Literacy Scale Score 2016	ELA/Lite Scale Sc 2017	
Braddock	Olivieri				2613	2583	
Braddock	Olivieri			Υ	2384	2402	
Braddock	Olivieri			Y	2459	2406	
Braddock	Olivieri					2565	
Braddock	Olivieri				2562	2587	
Braddock	Olivieri				2679	2647	
Braddock	Olivieri				2554	2589	
Braddock	Olivieri				2662	2710	
Braddock	Olivieri			Υ	2418	2466	
Braddock	Olivieri				2476	2508	
Braddock	Olivieri					2669	
Braddock	Olivieri				2464	2524	
Braddock	Olivieri				2641	2605	
Braddock	Olivieri	_			2650	2657	
Braddock	Olivieri				2534	2518	
Braddock	Olivieri				2577	252€	
Braddock	Olivieri	_			2597	2594	
Braddock	Olivieri	_			2537	2581	
Braddock	Olivieri				2557	255€	
Braddock	Olivieri				2683	2710	
Braddock	Olivieri				2544	2541	
Braddock	Olivieri	_			2533	2460	
Braddock	Olivieri				2419	2497	
Braddock	Olivieri				2556	2619	
Braddock	Olivieri				2672	2629	
Braddock	Olivieri				2400	2542	
Braddock	Olivieri				2583	2586	
Braddock	Olivieri				2701	2644	
Braddock	Olivieri				2454	2551	
Braddock	Olivieri				2487	2484	
		_					



### First Day of 17-18

### Team Google folders:

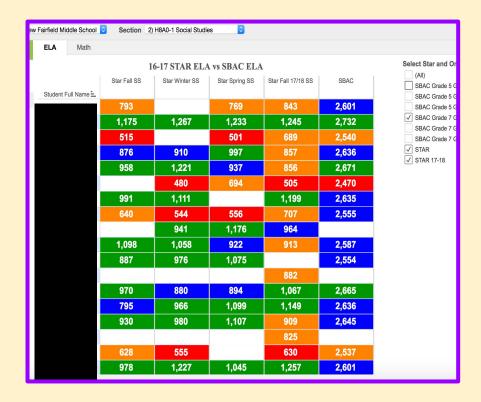


#### Content in folders:



### Data Dashboard

v Fairfield M	Middle School	Section H	R) HR8A-2 Homeroon	n 8-Orange 📀			
ELA	Math						
		1	6-17 STAR ELA	vs SBAC ELA	\		Select Star and One SBAC (G
Student	Full Name =	Star Fall SS	Star Winter SS	Star Spring SS	Star Fall 17/18 SS	SBAC	(All) SBAC Grade 5 G1 SBAC Grade 5 G1 ELA
		1,169	1,155	1,157	1,208	2,614	SBAC Grade 5 G1 Math
		826	569	680	657	2,535	✓ SBAC Grade 7 G1 SBAC Grade 7 G1 ELA
		590	705	576	568	2,489	SBAC Grade 7 G1 Math
		876	910	997	857	2,636	✓ STAR ✓ STAR 17-18
		991	1,111		1,199	2,635	V 31AK 17-10
		530		682	813	2,538	
		980	1,260		1,191	2,745	
		902	525	186	503	2,525	
		768	954	973	1,193	2,612	
		931	1,026	875	1,191	2,624	
		1,219	1,251	1,322	1,293	2,745	
		1,206	1,330	1,282	1,304	2,677	
		885		1,097	1,252	2,697	
		688	916	867	819	2,604	
		628	555		630	2,537	
		682	632	630	674	2,553	
		412		758	910	2,497	
		852	955		839	2,589	



### **Target Report Interpretation Chart**

Interpreting summative assessment data

**Grade 7 ELA** 

		Relati	ve to Overall Performa	ance
		-	=	+
	-	Worse than expected and below the proficiency standard	As expected but below the proficiency standard	Better than expected but below the proficiency standard
Relative to (Minimum Overall) Proficiency	=	Worse than expected but near the proficiency standard	As expected and near the proficiency standard	Better than expected but near the proficiency standard
	+	Worse than expected but above the proficiency standard	As expected but above the proficiency standard	Better than expected and above the proficiency standard

ELA Results (2014-15)

	ELA
	2014-2015
Monroe	84.6
Avon	82.3
Simsbury	79.9
Guilford	79.9
Orange	79.6
District No. 15	78.8
Cheshire	78.4
Farmington	78.1
Greenwich	77.8
Glastonbury	77.7
DRG AV	75.6
Granby	75
Newtown	74.8
Madison	74.8
Fairfield	74.3
Woodbridge	72.9
West Hartford	72.3
Trumbull	71
South Windsor	71
Brookfield	70.3
District No. 5	69.3
New Fairfield	65.8

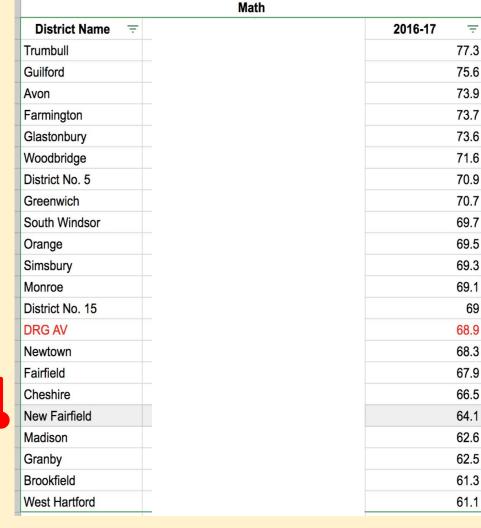
ELA Results (2016-2017)

E	-A
	2016-
Frumbull	
Simsbury	
Avon	
Monroe	
armington	
District No. 5	
Guilford	
Glastonbury	
Cheshire	
Voodbridge	
District No. 15	
Greenwich	
RG AV	
outh Windsor	
airfield	
Drange	
Granby	
lew Fairfield	
Vest Hartford	
ewtown	
ladison	
Brookfield	

Math Results (2014-15)

	Math
District Name =	2014-2015 =
Avon	72.4
Glastonbury	67
Orange	64.9
Simsbury	64.8
Guilford	63.8
armington	63.8
Greenwich	63.8
South Windsor	61.4
Voodbridge	61.1
ORG AV	60.7
Granby	60.7
rumbull	60.4
airfield	59.8
Madison	59.8
Monroe	59.7
Newtown	59.6
District No. 15	59.4
Cheshire	58.5
Brookfield	56.7
District No. 5	55.5
Vest Hartford	54.7
New Fairfield	46.2

Math Results (2016-2017)



### Smarter Balanced Improvements Needed

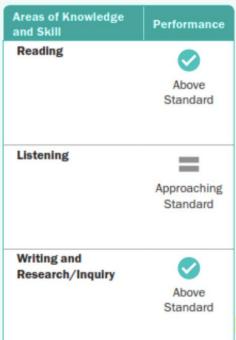
- Identify skills and gaps at the Claim and Target level that need improvement (District Data Team and School Data Teams)
- Use new performance tasks and tools (Claims & Targets > Standards
   > Report Cards)
- Leverage new tools and practices in the classroom to improve student achievement
- Increase focus of our Professional Learning Communities on student work, which includes conversations of learning progressions and lesson planning

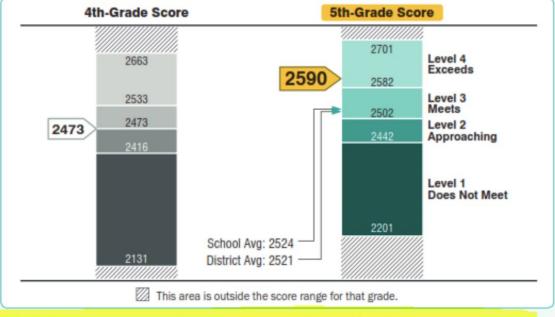
#### **SAMPLE**

### Jonathan's ELA/Literacy Score for 2017

2590

Level 4 Exceeds Jonathan has **exceeded the achievement standard** for English language arts and literacy expected for this grade. Students performing at this standard are **demonstrating advanced progress toward mastery** of English language arts and literacy knowledge and skills. Students performing at this standard are on track for likely success in the next grade.



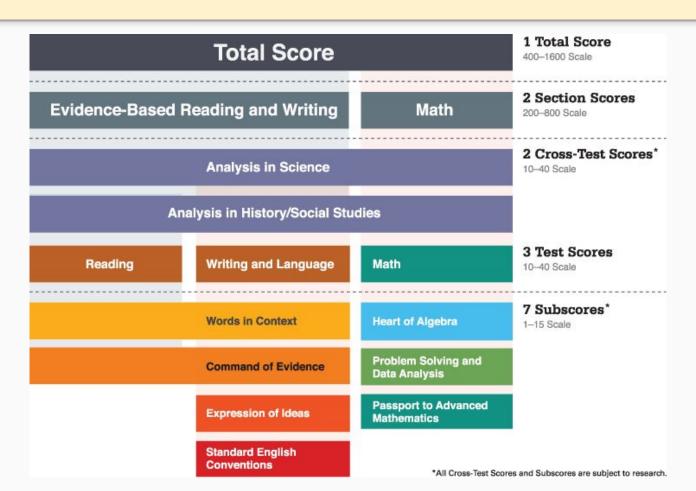


A student's test scores can vary if tests are taken several times. If Jonathan were tested again on ELA/Literacy, the new scale-score would probably fall between 2580 and 2600.

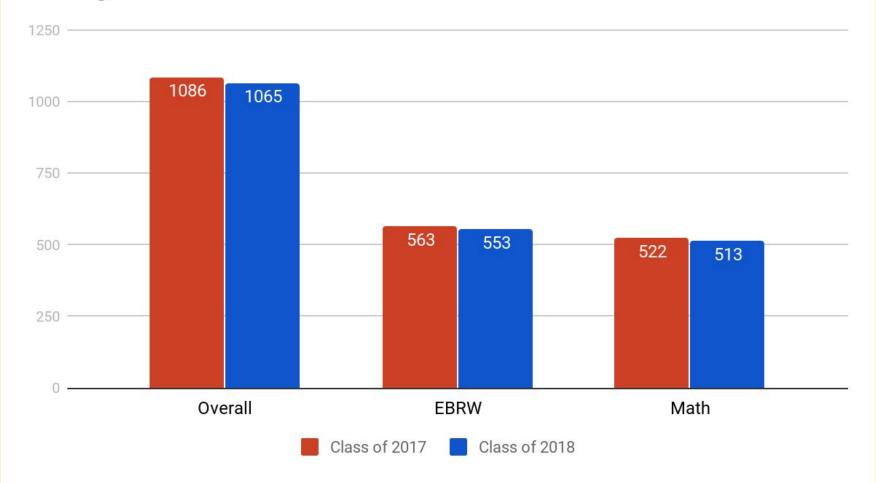


# **PSAT & SAT Results**

### PSAT / SAT Structure

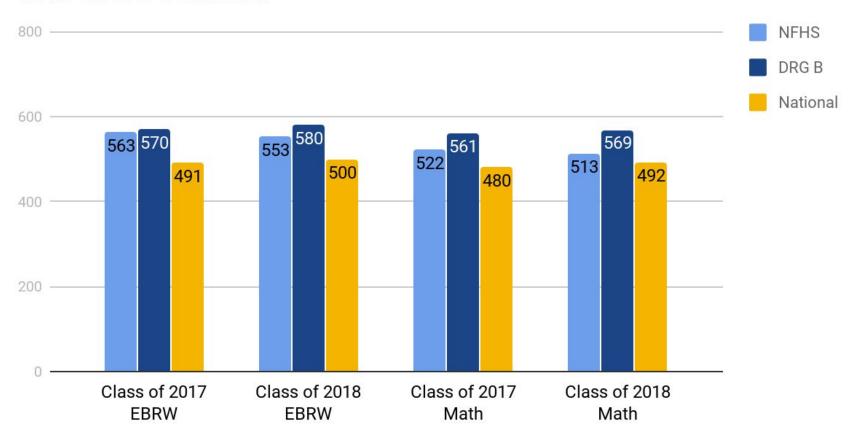


### Average SAT Score - Class of 2017 c.f. Class of 2018

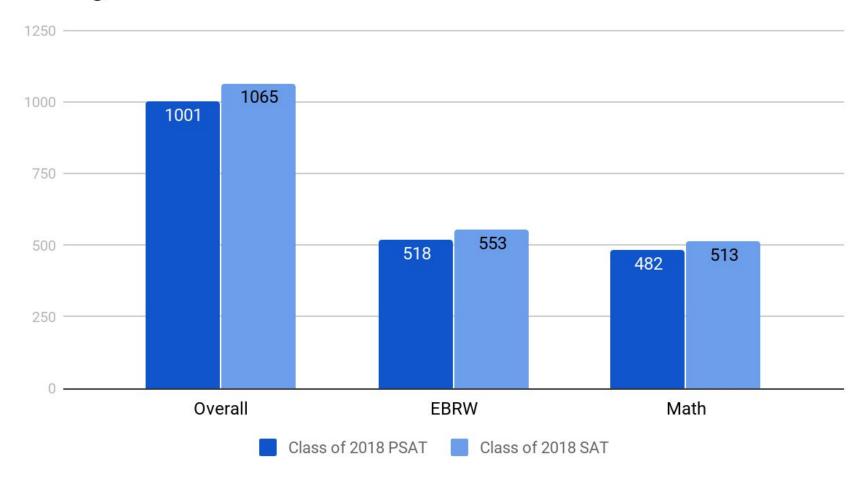


### **SAT Scores**

NFHS c.f. DRG B c.f. Nation



### Average PSAT c.f. SAT Score - Class of 2018



### Steps to PSAT/SAT Improvement

- Administer PSAT to all Grade 9, 10, and 11 students
  - Allows for the monitoring of individual and cohort growth in relation to yearly benchmarks
- Promote Khan Academy partnership to provide individualized support
  - Currently approximately <sup>2</sup>/<sub>3</sub> of juniors have linked their PSAT scores to Khan Academy
- Continue to disaggregate SAT and PSAT scores to target intervention
  - Analysis suggests need to provide additional practice with *Heart of Algebra*

### SAMPLE

#### Your Scores: Next Steps

Additional skills and improvement suggestions can be found in your online score report.

Your score indicates that you are already likely able to:

Reading Test

Improve your skills by focusing on the following suggestions:

Revise text as needed to improve the exactness or content appropriateness of word choices within somewhat challenging texts

Retain or add information or ideas to a piece of a text to support claims or points in somewhat challenging text

Revise somewhat challenging text to ensure that information is presented in the most logical order



Retain or add information or ideas to a piece of text to support claims or points in challenging text

Use a variety of sentence structures to accomplish a rhetorical purpose such as persuading an audience

Revise text as needed to improve the exactness or content appropriateness of word choices within challenging texts

#### Writing and Language Test

Draw reasonable conclusions from somewhat challenging texts

■ Describe the overall structure of a somewhat challenging text

Identify claims and counterclaims explicitly stated in a somewhat challenging passage



Draw reasonable inferences and logical conclusions from challenging texts

Analyze information presented quantitatively in such forms as graphs, tables, and charts and relate that information to information presented in somewhat challenging text

Determine how the selection of specific words shapes meaning and tone in a challenging passage

#### Math Test

Interpret a linear inequality in one variable with rational coefficients that represents a context. Select the equation of a line of best fit and interpret the slope and intercept of the line in the context of the situation (when a linear model is appropriate)

- Interpret sample statistics understanding and using margin of error
- Solve and interpret a quadratic function or equation that represents a context and requires multiple steps
- Calculate and interpret frequency distributions using tables and other representational methods



- Determine how a graph may be affected by a change to its equation
- Determine the value of a constant or coefficient for an equation with no solution or infinitely many solutions
- Using a specified model, make a prediction and compare the predicted values with the actual values in the data set
- Within a context, compare the center of two separate data sets with different spreads
- Determine whether two events are independent given their probabilities

## Steps to PSAT/SAT Improvement

- Provide professional learning for all faculty on instructional strategies and key shifts to the SAT to outline best practices that will be embedded into lessons
- Support professional learning through the College Board on specific content-area strategies to improve scores
- Support from administrators and department chairs who will provide feedback on incorporating identified strategies



### Rebel U

- Structured mini-lessons
  - Emphasis on specific reading, writing, and math skills
    - Isolated skills are modeled, students supported through guided practice
    - Students demonstrate the skill through independent practice with SAT-style items featuring SAT question stems
    - Students receive feedback through correct answer rationale
- Strategies and key academic language
- Wording and structure of prompts and problems bring the lexicon of the SAT into the classroom
- Skills relevant to classroom instruction



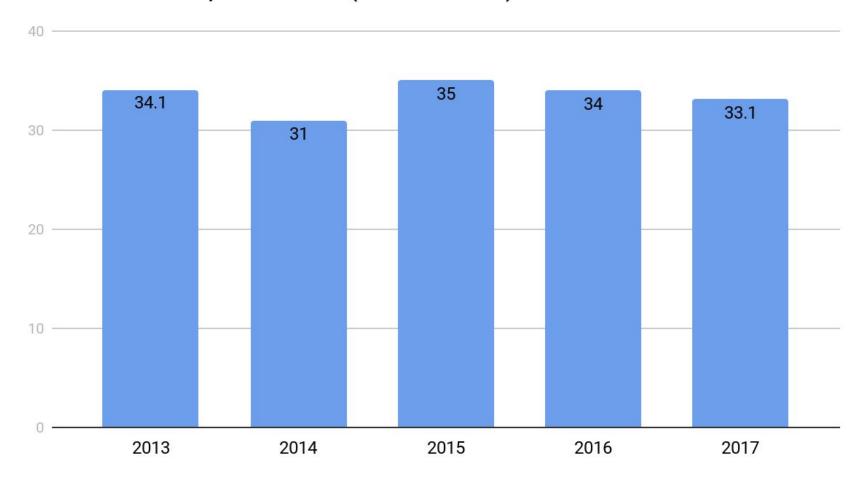
### Rebel U

- Materials allocated among English, Social Studies, Science, and Math departments
  - Materials dispersed by grade level to prevent repetition
  - Allows for multiple teachers and departments to participate in Rebel U
- Yearlong initiative, all four grades
- Teacher feedback will help to improve the design & implementation of Rebel U
- Reading Seminar, Math Seminar, & Writing Seminar will reinforce skills
- Opportunities for teachers to use skills practice for personalized learning and small group learning



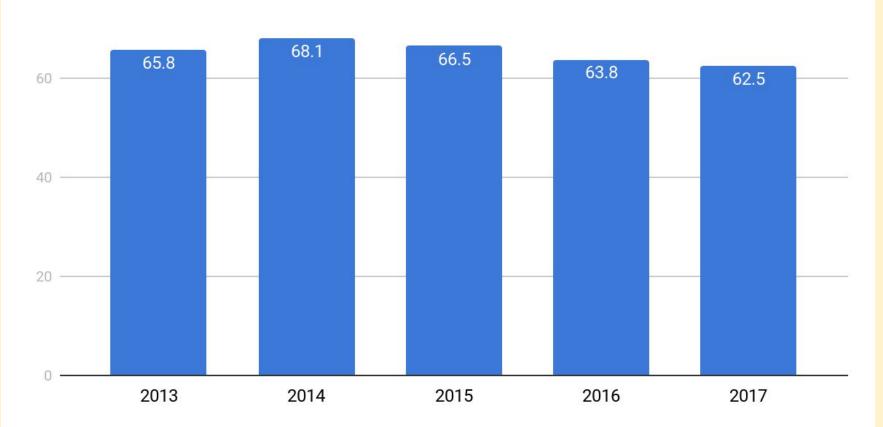
# Advanced Placement

### AP Exam Participation Rate (Grade 10 -12)



#### % of AP Students with Scores 3+





# Steps to AP Improvement

- Made course syllabus adjustments using disaggregated data from AP scores
  - All courses are audited annually by the College Board
  - Examples include AP European History, Chemistry, and English Language who reworked course structure
- Continue to send teachers to AP training and scoring
  - Pilot an AP mentor program
  - Three teachers attended summer AP intensive institutes
- Analyze vertical alignment of Pre-AP courses to identify areas of growth
- Expanding Access: Use AP Potential, a research-driven tool based on PSAT scores, to identify AP students and help students choose the AP courses that most interest them

## Part II: District Assessments

#### Formative and Benchmarks

#### Formative assessment

Classroom formative assessment is best positioned to help improve learning.

Well-designed classroom formative assessment focuses information on the growing edge of learning.



### Examples include:

- Writing on-demand assessments
- Reading Performance Tasks
- Writing and Reading Checklists
- Math Problem Solving and End of ModuleAssessments

# District Assessments Formative and Benchmarks

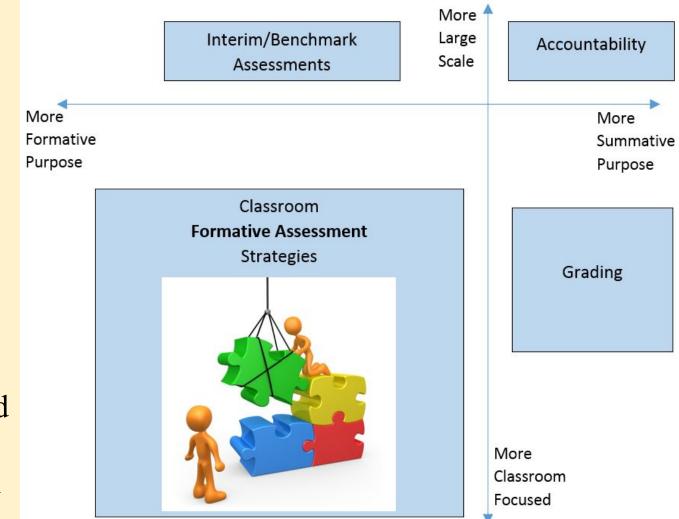
## Examples Include:

- Fountas and Pinnell Assessments
- STAR
- Letter ID & Sound
- Developmental Spelling Inventory
- Sight words
- PhonemeSegmentation
- Fluency

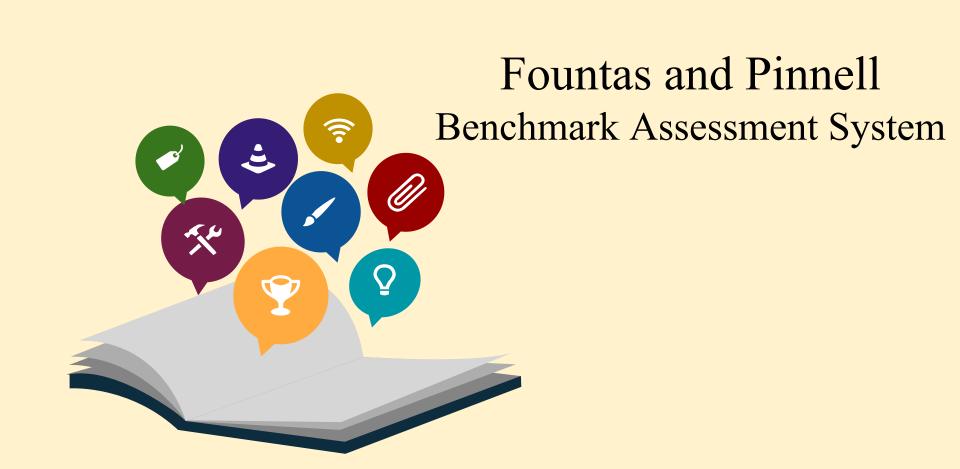


#### Benchmark assessments

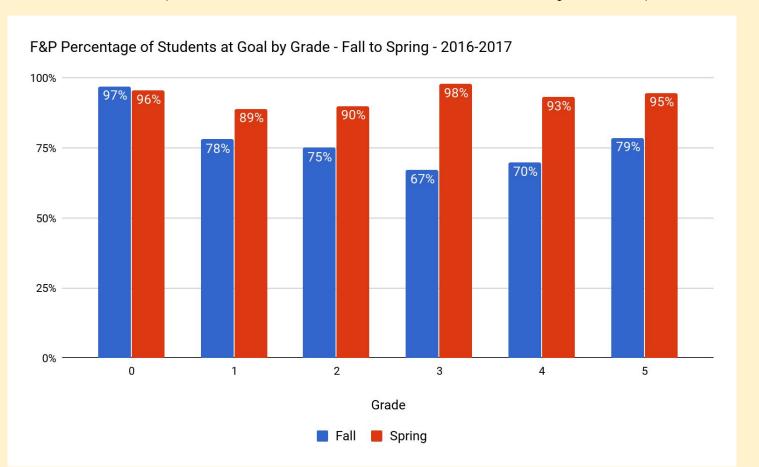
Benchmark assessments emphasize instructional adjustments. These checkpoints are used to inform instruction, predict future achievement and evaluate curriculum.



Assessments and Accountability: The Continuum



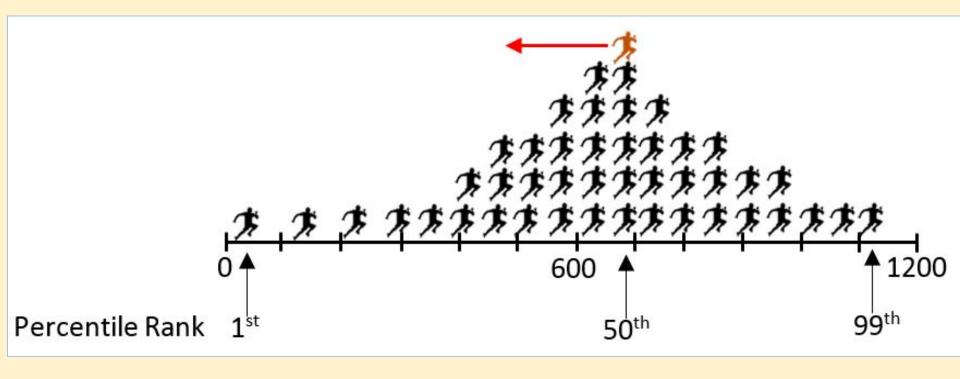
# K-5 BAS (Benchmark Assessment System) Data



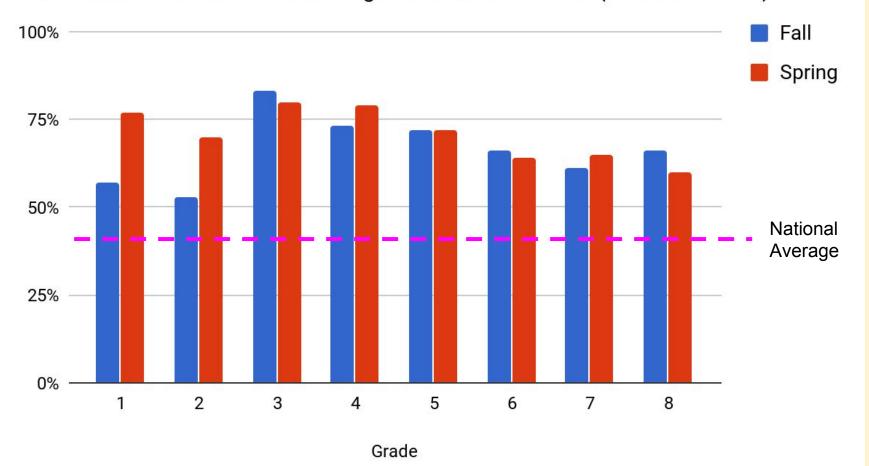


# STAR Math

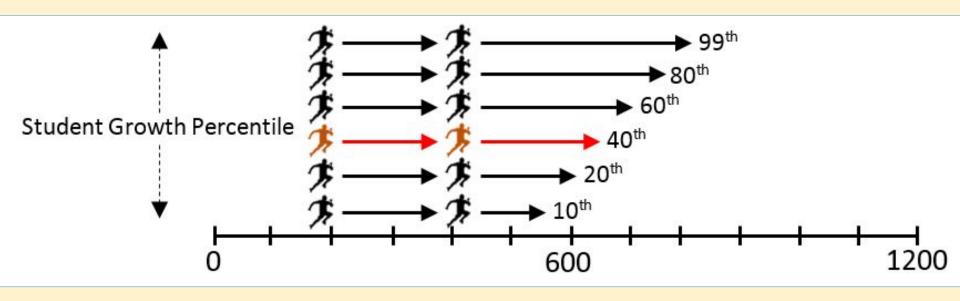
# Percentile Rank



#### STAR Math 2016-2017 - Percentage of Students at Goal (60th Percentile)



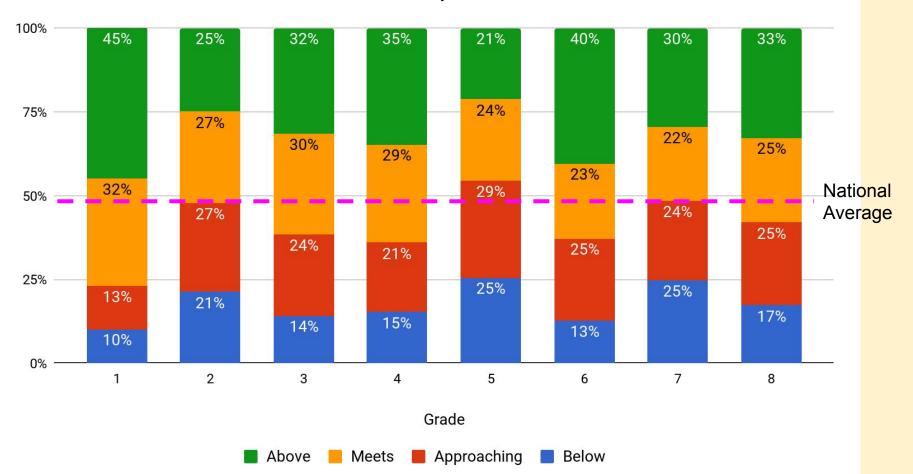
# Growth Rate (SGP)



STAR Math - Average Growth Rate by Grade - Spring 2017



#### STAR Math- 2016-2017 - Breakdown of Growth Rate by Grade



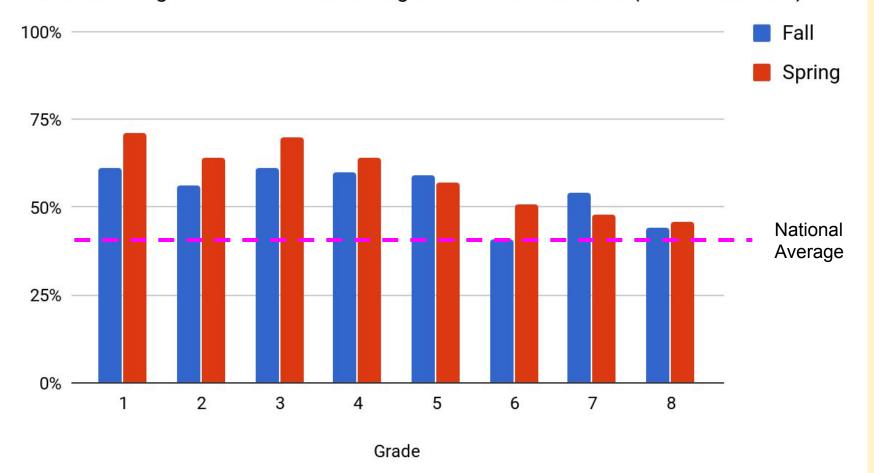
# Steps to Improvement

- Isolate the areas in need of the greatest growth in comparison to the standards and the projected growth
- FOR EXAMPLE, students currently in grade 6 who are most in need of growth receive support in the following areas:
  - Solving a problem using the area and perimeter formulas for rectangles
  - Fluently multiplying multi-digit whole numbers
  - Drawing a line of symmetry
  - Dividing a whole number of up to four digits by a 2-digit whole number using one of various strategies



# STAR Reading

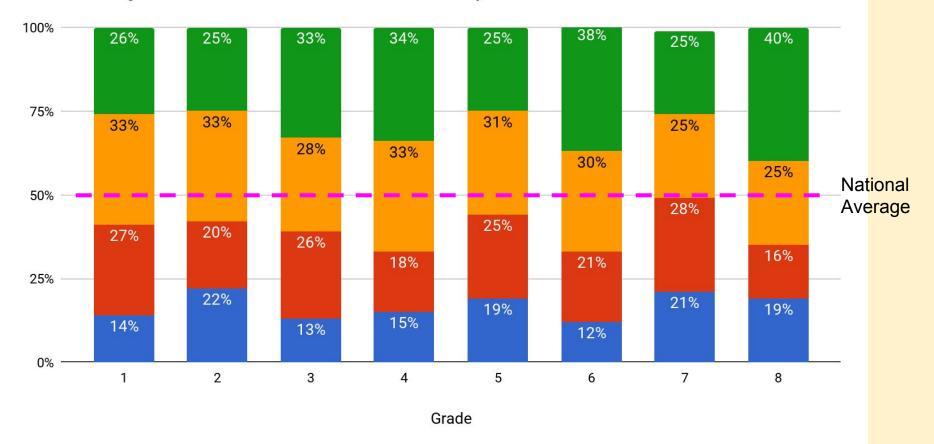
#### STAR Reading 2016-2017 - Percentage of Students at Goal (60th Percentile)



#### STAR Reading - 2016-2017 - Breakdown of Growth Rate by Grade

Above

Meets



Approaching

Below

STAR Reading - Average Growth Rate by Grade - Spring 2017





# Part III: CMT/CAPT Science Grades 5, 8, and 10

# Content Strand Mastery

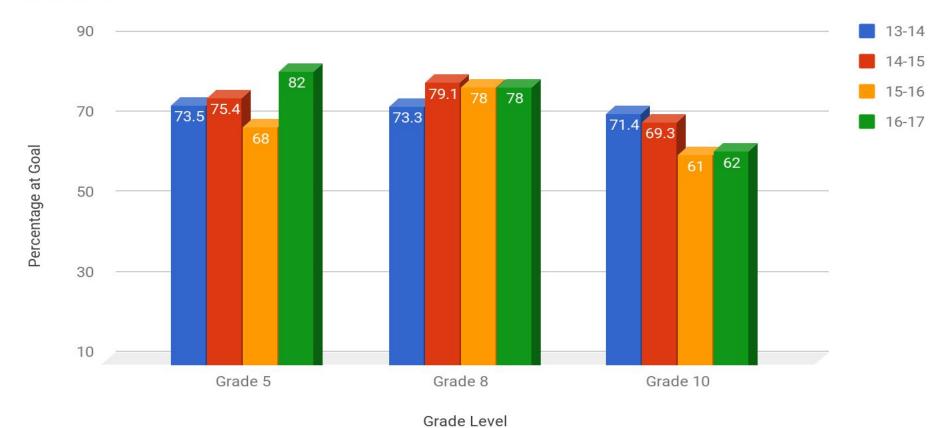
GRADE 5 CONTENT STRAND	Maximum Score Possible
Science	
1 . Physical Science	14
2 . Earth Science	14
3 . Life Science	14
4 . Content Knowledge	24
5 . Scientific Inquiry, Literacy & Numeracy	18

Maximum Score Possible
17
17
17
30
21

GRADE 10 CONTENT STRAND	Maximum Score Possible
Science	
1 . Energy Transformations	15
2 . Chemical Structures and Properties	15
3 . Global Interdependence	15
4 . Cell Chemistry and Biotechnology	15
5 . Genetics, Evolution and Biodiversity	15

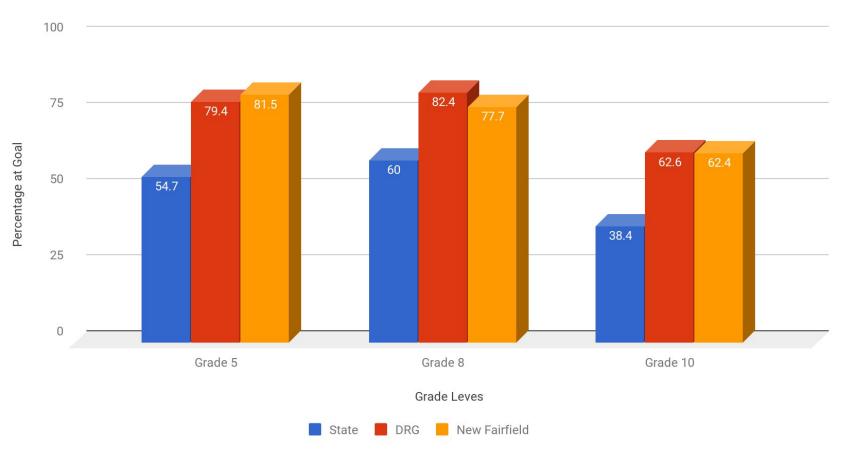
#### **CMT** and **CAPT** Science Scores

2014-2017

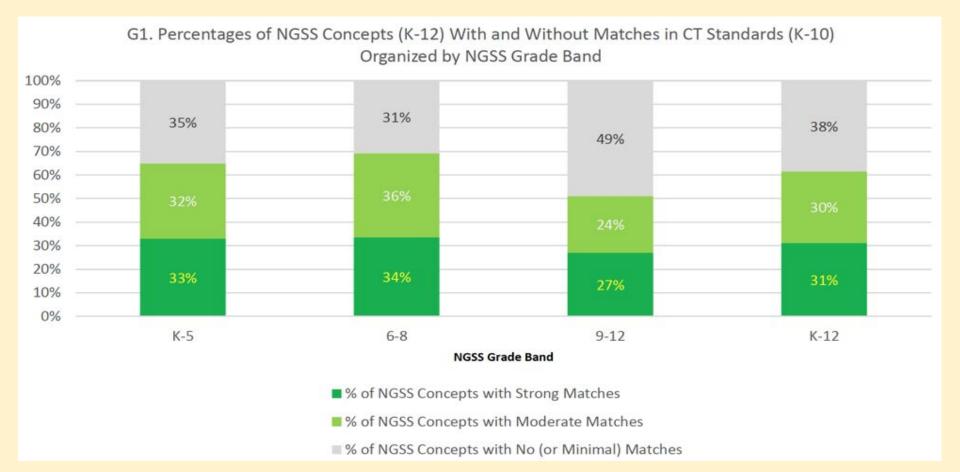


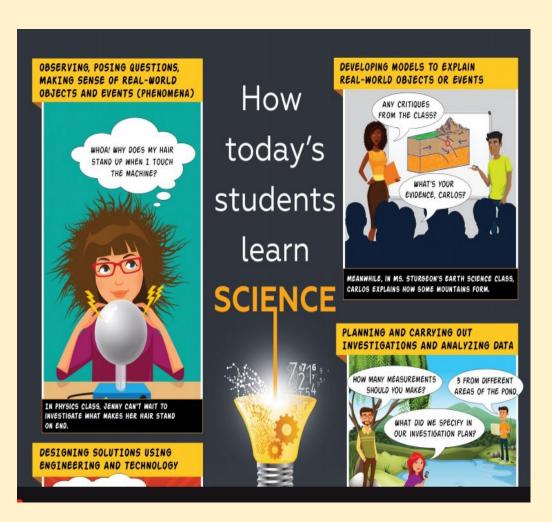
#### CMT and CAPT Comparisons 2017

Grades 5, 8 and 10



# Alignment of CMT Standards to the NGSS by Grade

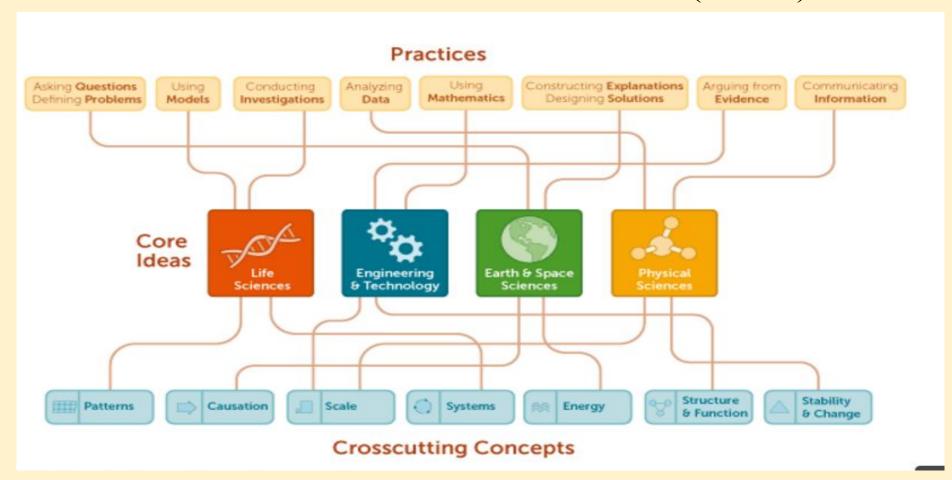




# About the Next Generation Science Standards

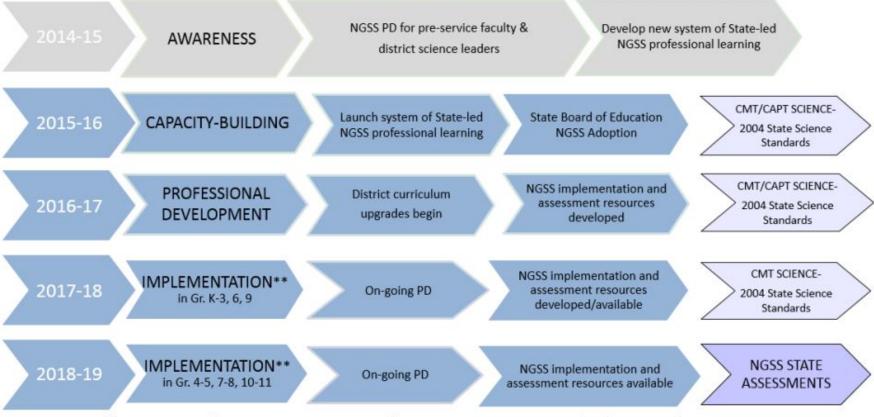
http://ngss.nsta.org/About.aspx

# Next Generation Science Standards (NGSS)



### **DRAFT\* 5-Year NGSS Implementation Timeline**

September 2017

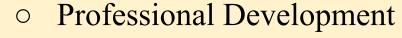


\*\* An option for transitioning away from current state standards to teaching NGSS.

Districts have flexibility to develop their own transition and implementation plans.

# Science Resource Update

• Grades K-3 Science: FOSS Textbook adoption



- August 28: Overview of program
- October 6: Grade level planning and collaboration
- Next Steps: Classroom model lessons with consultant

Curriculum Alignment and Development



# Science Resource Update

- Grades 4-9 HMH Dimensions Textbook adoption
  - Professional Development
    - August 28: Overview of program
    - October 6: Grade level planning and collaboration
    - Next Steps: Classroom model lessons with consultant
  - Curriculum Alignment and Development

