Lyme-Old Lyme Schools Achievement Data

October 2021



Presentation Expectations

What you will see:

- Overview of assessment types
- District and/or grade level achievement data from state assessments (SAT, SBAC, NGSS)
- AP Data from Spring 2021
- Samples of current nationally normed benchmark assessments (K-8)
- Sample curricular assessment (K-3)
- Enhanced continuous improvements that include intervention strategies to support accelerated learning

What you won't see:

- Rankings based on state level assessments - State Directive on Data Data Sample
- Detailed nationally normed/curricular assessment results

Common Types of Assessment

State Testing

- Required in grades 3-8, 11
- Data used in accountability report
- Data is public

Benchmark

- Nationally standardized assessment
- Used to inform intervention services
- Measures growth over time

Summative

- End of unit assessment
- Grades accessible to student and parent

Formative

- Primary use: inform instruction
- Grades may or may not be included in final averages
- Can take many forms/formats

SAT COMPONENTS

1. Content Based Vocabulary
2. Evidence Based Reading & Writing
3. Math That Matters Most
4. Real World Context/Phenomena
5. US Founding Documents and Data Analysis

ERW SAT 2018-2019	ERW SAT Fall 2020	ERW SAT 2020-2021	MATH SAT 2018-2019	MATH SAT Fall 2020	MATH SAT 2020-2021
580	574	**561**	580	566	**580**
86% at or above goal	*Not released by state*	80% at or above goal	75% at or above goal	*Not released by state*	69% at or above goal

Continuous Improvement Model

SAT is high stakes for students *and* districts	• Public information • Achievement is part of the district “report card” • College entrance exam
Many years worth of trend data	• Historic achievement helps with curriculum review and instructional practices • Current achievement assists with new progress monitoring
Achievement and growth are different measures	• Growth in PSAT 9/10 • Growth calculator to estimate % of growth • Teacher SLOs
SAT preparation supports success	• Ivy Bound student sessions • Khan Academy used to target skills • Embedded curricular practice • TASC/Special Education intervention

Addressing Achievement Results and Supporting Students

- Discounted SAT preparation course with Ivy Bound
- After school TASC support
- Analysis of SAT data with a crosswalk with curriculum standards
- Pre-assessments to determine student readiness
- Embedded SAT preparation into content area classes
- SAT preparation for all juniors embedded into the school day

Advanced Placement Trend Data 2017-2020

Year	2017	2018	2019	2020	2021
Total AP Students	167	147	129	115	129
Number of Exams	265	263	231	207	218
AP Students with Scores 3+	123	119	112	100	105
% of Total AP Students with Scores 3+	74%	81%	87%	86%	83%



Lyme-Old Lyme SBAC Results

English Language Arts	
Areas of Knowledge and Skills Measured:	**Statement About Student Learning from which the Assessment was Built**
READING Literary (fiction) & informational (nonfiction) texts	The student can read closely and analytically to comprehend a range of increasingly complex literary and informational texts
WRITING - Organization & Purpose - Evidence & Elaboration - Conventions	The students can produce effective and well-grounded writing for a range of purposes and audiences
LISTENING	The students can employ effective listening skills for a range of purposes and audiences
RESEARCH	The student can engage in research and inquiry to investigate topics

Mathematics	
Areas of Knowledge and Skills Measured:	Statement about Student Learning from which the Assessment was Built:
Concepts & Procedures	Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency
Problem Solving	Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies
Modeling & Data Analysis	Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems
Communicating Reasoning	Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others

Types of Items on the Assessment



- Multiple choice/write-in responses for both ELA and Math
- Computer Adaptive Technology
- Embedded tools

SCORING

- Students receive an overall vertical scale score in each subject
- Scores range from ~ 2100 to 2800 spanning grades 3 to 8
- Math vertical scores cannot be compared to ELA scores
- Scores are divided into 4 levels

Content Area	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Mathematics						
Level 4	2501-2621	2549-2659	2579-2700	2610-2748	2635-2778	2653-2802
Level 3	2436-2500	2485-2548	2528-2578	2552-2609	2567-2634	2586-2652
Level 2	2381-2435	2411-2484	2455-2527	2473-2551	2484-2566	2504-2585
Level 1	2189-2380	2204-2410	2219-2454	2235-2472	2250-2483	2265-2503
ELA/Literacy						
Level 4	2490-2623	2533-2663	2582-2701	2618-2724	2649-2745	2668-2769
Level 3	2432-2489	2473-2532	2502-2581	2531-2617	2552-2648	2567-2667
Level 2	2367-2431	2416-2472	2442-2501	2457-2530	2479-2551	2487-2566
Level 1	2114-2366	2131-2415	2201-2441	2210-2456	2258-2478	2288-2486

2020-2021 AVERAGE **ELA** SCALE SCORES BY GRADE LEVEL

Level	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Level 4	2490-2623	2533-2663	2582-2701 **2589**	2618-2724	2649-2745	2668-2769
Level 3	2432-2489 **2481**	2473-2532 **2531**	2502-2581	2531-2617 **2553**	2552-2648 **2627**	2567-2667 **2622**
Level 2	2367-2431	2416-2472	2442-2501	2457-2530	2479-2551	2487-2566
Level 1	2114-2366	2131-2415	2201-2441	2210-2456	2258-2478	2288-2486

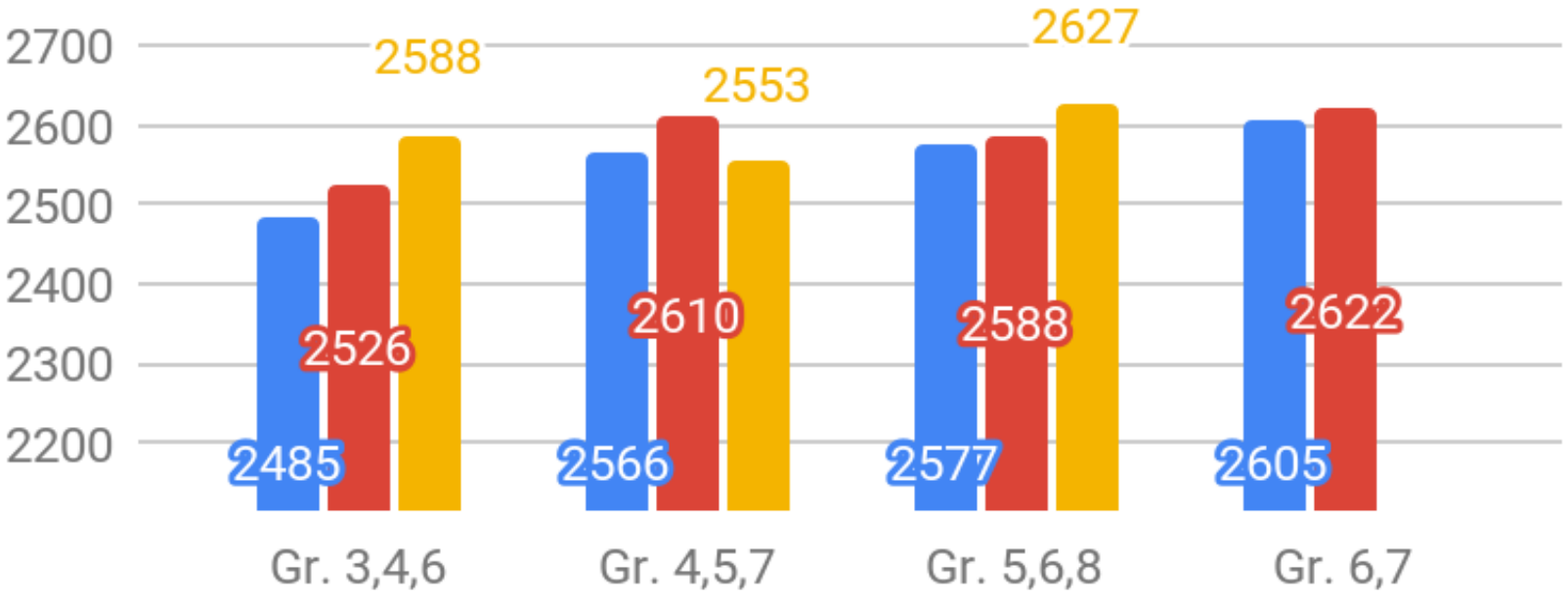
2020-2021 **ELA** BREAKOUT BY GRADE LEVEL

GRADE	SCALE SCORE	% at 3 or 4	% at 2	% at 1
3	2481	76%	20%	4%
4	2531	80%	10%	10%
5	2589	87%	11%	2%
6	2553	64%	20%	16%
7	2627	83%	11%	6%
8	2622	75%	11%	13%

ELA SBAC ACHIEVEMENT RESULTS

	% at 3 or 4 2017-18	% at 3 or 4 2018-19	2019-2020	% at 3 or 4 2020-21	Scale Score 2020-21
3	86%	81%		**76%**	**2481**
4	92%	71%		**80%**	**2531**
5	81%	93%		**87%**	**2589**
6	70%	75%		**64%**	**2553**
7	79%	77%		**83%**	**2627**
8	73%	81%		**75%**	**2622**

ELA Cohort Growth



Blue: 2017-2018 Red: 2018-2019 Yellow: 2020-2021

2020-2021 AVERAGE **MATH** SCALE SCORES BY GRADE LEVEL

Level	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Level 4	2501-2621	2549-2659	2579-2700	2610-2748	2635-2778	2653-2802
Level 3	2436-2500 **2500**	2485-2548 **2544**	2528-2578 **2575**	2552-2609	2567-2634 **2617**	2586-2652 **2611**
Level 2	2381-2435	2411-2484	2455-2527	2473-2551 **2531**	2484-2566	2504-2585
Level 1	2189-2380	2204-2410	2219-2454	2235-2472	2250-2483	2265-2503

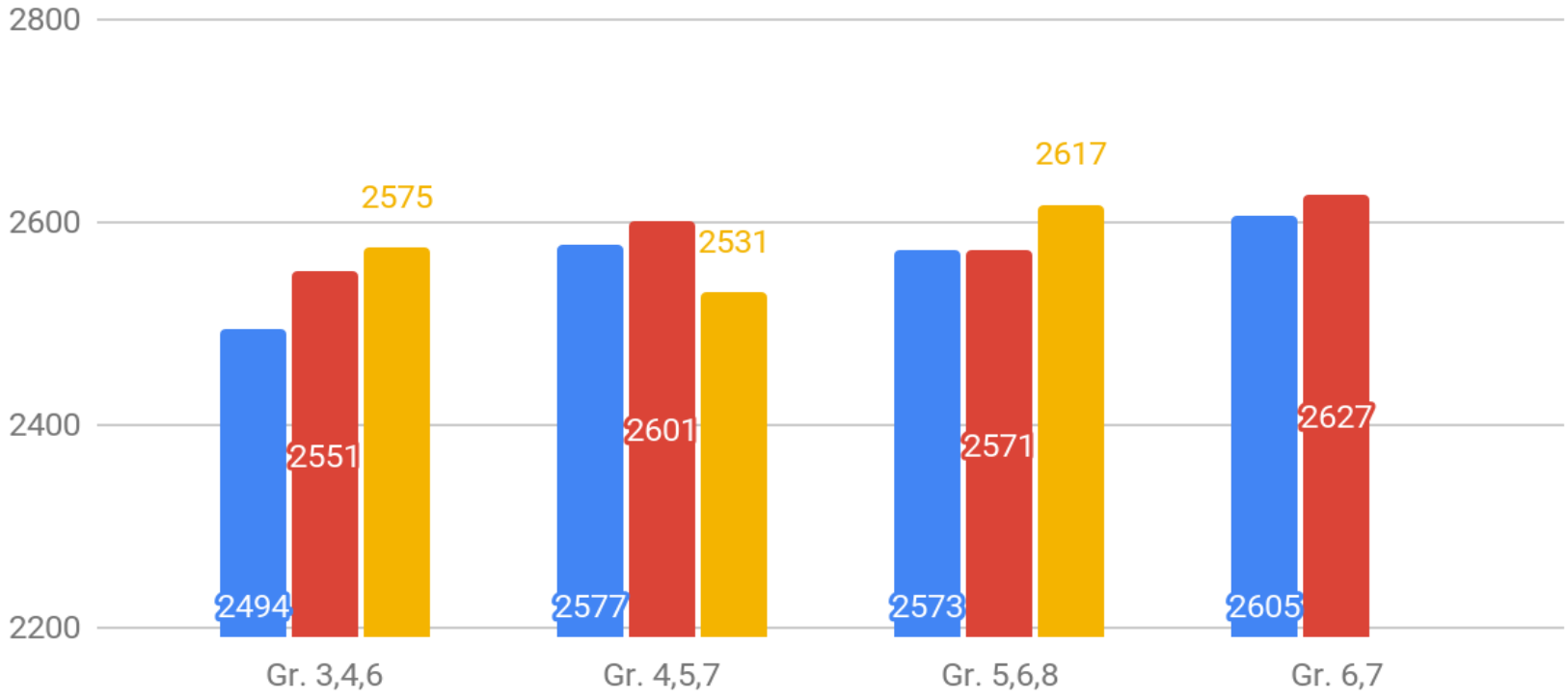
2020-2021 MATH BREAKOUT BY GRADE LEVEL

GRADE	SCALE SCORE	% at 3 or 4	% at 2	% at 1
3	2500	78%	18%	5%
4	2544	81%	14%	5%
5	2575	78%	17%	5%
6	2531	44%	30%	26%
7	2617	75%	15%	11%
8	2611	62%	20%	18%

MATH SBAC ACHIEVEMENT RESULTS

	% at 3 or 4 2017-18	% at 3 or 4 2018-19	2019-2020	% at 3 or 4 2020-21	Scale Score 2020-21
3	82%	90%		**78%**	**2500**
4	90%	81%		**81%**	**2544**
5	Not Reported	85%		**78%**	**2575**
6	79%	66%		**44%**	**2531**
7	74%	81%		**75%**	**2617**
8	75%	74%		**62%**	**2611**

MATH Cohort Growth



Blue: 2017-2018 Red: 2018-2019 Yellow: 2020-2021

Achievement Vs. Growth

Achievement: *A snapshot measure of academic performance*

SBAC Scale Score / Level

ELA Grade 5: 2581 / Level 3

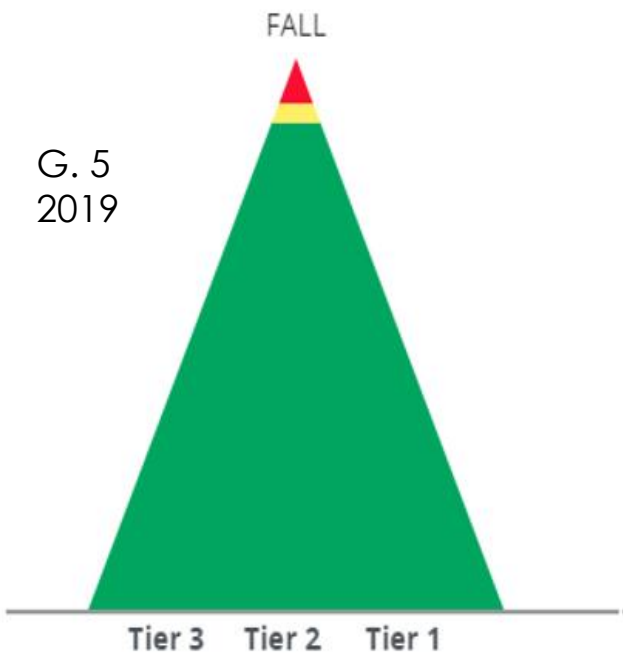
Growth: *A change in achievement between one or more points.*

Growth Rate (Target) and Percentage of Target Achieved

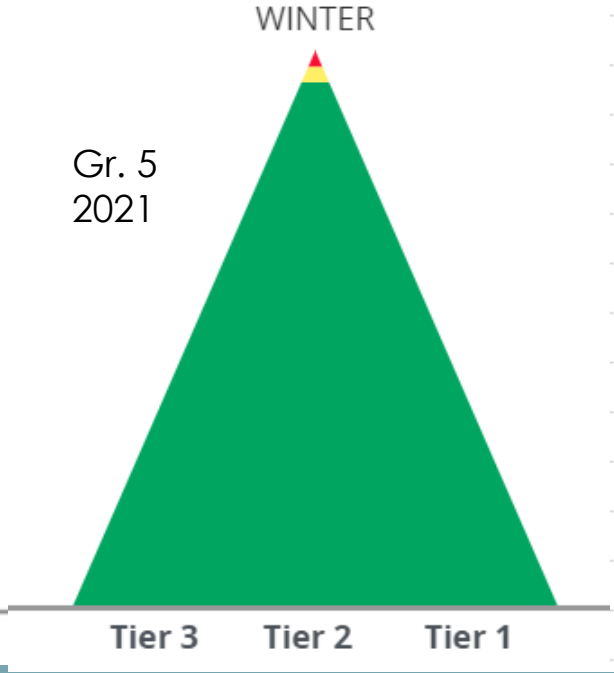
Yes or No / % of Target

Sample: Elementary Fall Benchmark Scores Pre. vs. Post Pandemic - Math (year to year)

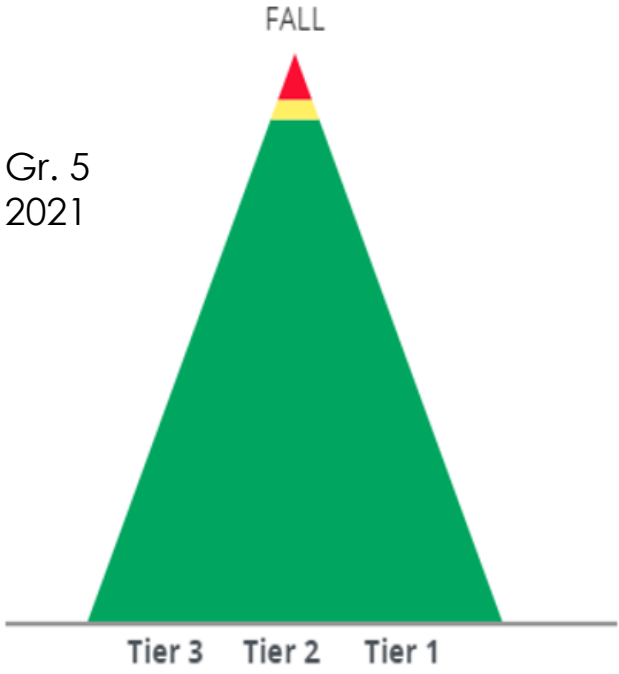
G. 5
2019



Gr. 5
2021



Gr. 5
2021

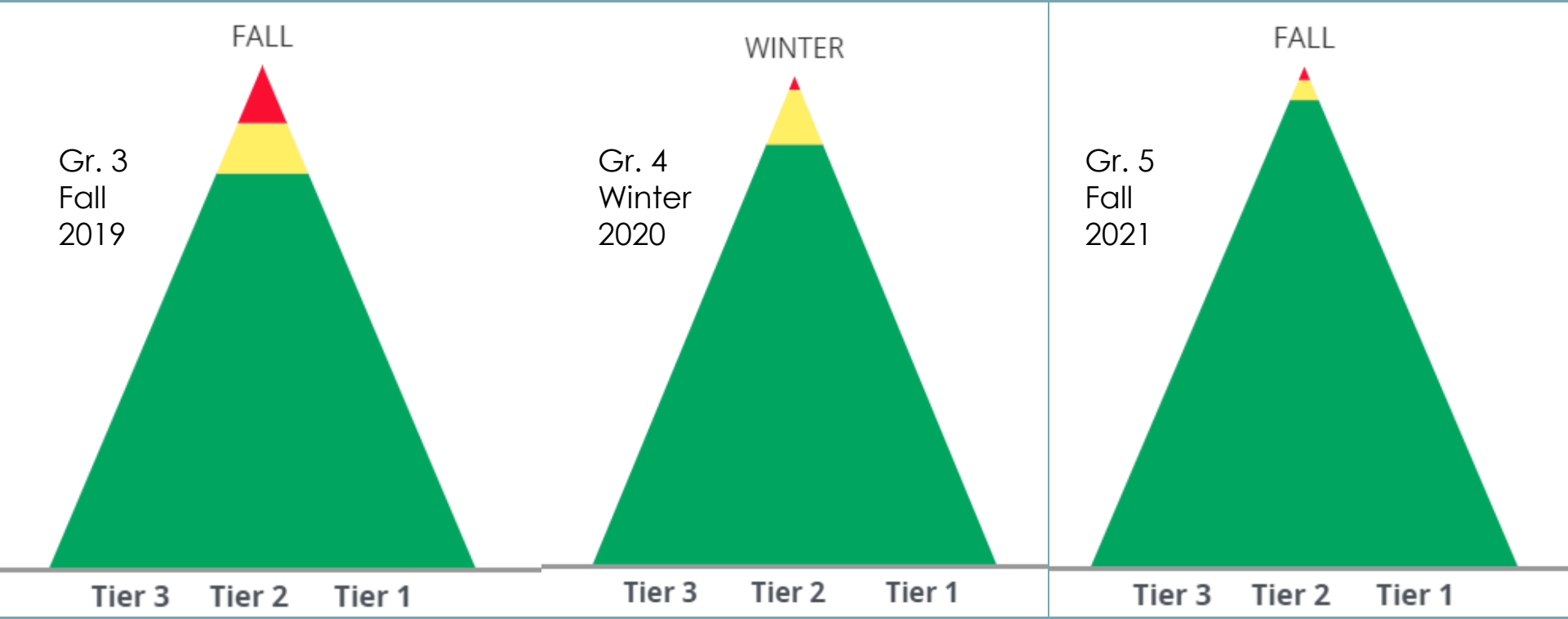


Green = Met goal

Yellow = Approaching Goal

Red = Below Goal

Sample: Elementary Benchmark Cohort Comparison
Pre vs. Post Pandemic - Reading



Green = Met goal Yellow = Approaching Goal Red = Below Goal

ELA Fundations Tracker (Formative/Summative)

Test Date	Sounds (5)	WORDS		SENTENCES		Total % Correct
		Spelling (5)	Marking (5)	Phonetic (5)	Trick (5)	
12/18/2020	5	5	5	5	5	100%
12/18/2020	5	4	5	4	4	88%
12/18/2020						
12/18/2020	5	4	5	5	4	92%
12/18/2020	4	5	4	4	4	84%
12/18/2020	5	4	5	3	4	84%
12/18/2020	5	5	5	3	2	
12/18/2020	4	5	5	4	5	92%
12/18/2020	4	3	0	4	5	64%
12/18/2020	4	3	3	4	1	60%
12/18/2020	4	5	5	5	5	96%
12/18/2020	4	4	4	4	2	72%

Grade level sample from unit assessment:

Data is used to inform instruction:

- Re-teaching
- Targeted intervention
- Monitor growth over time

Bridges Pre-Assessment (Formative)

MCE Student solves at least 6 facts correctly.	MCE Stude…aws a 6 x 8 arra…d demonstra…ny accurate st…gy for finding product.	MCE Student solves at least three problems correctly.	MCE Student solves at least three problems correctly.
1	0	1	1
1	1	1	1
1	1	1	1
1	0	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	0	0	1

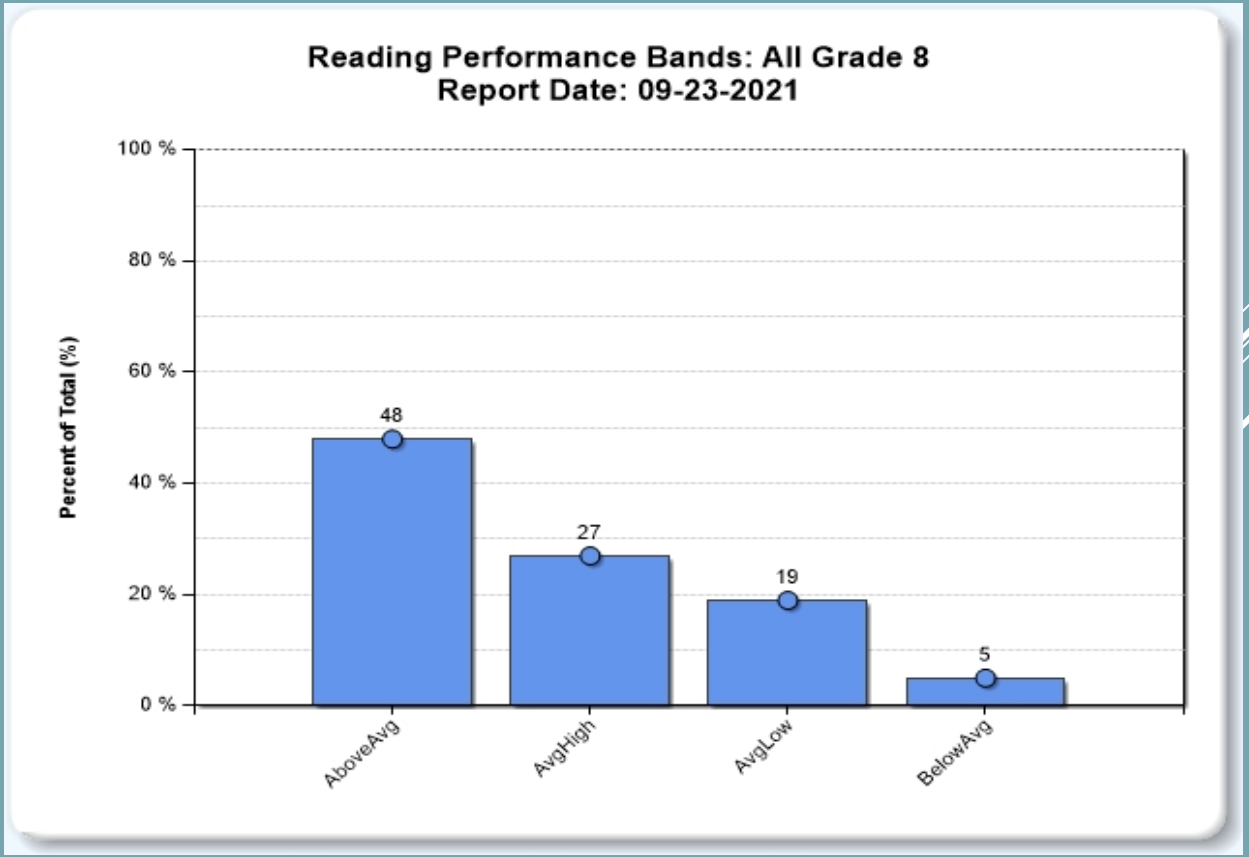
Grade level sample from unit pre-assessment:

Data is used to inform instruction:

- What off grade level standards need review/reteaching
- Whole class vs. targeted support
- Curriculum compacting

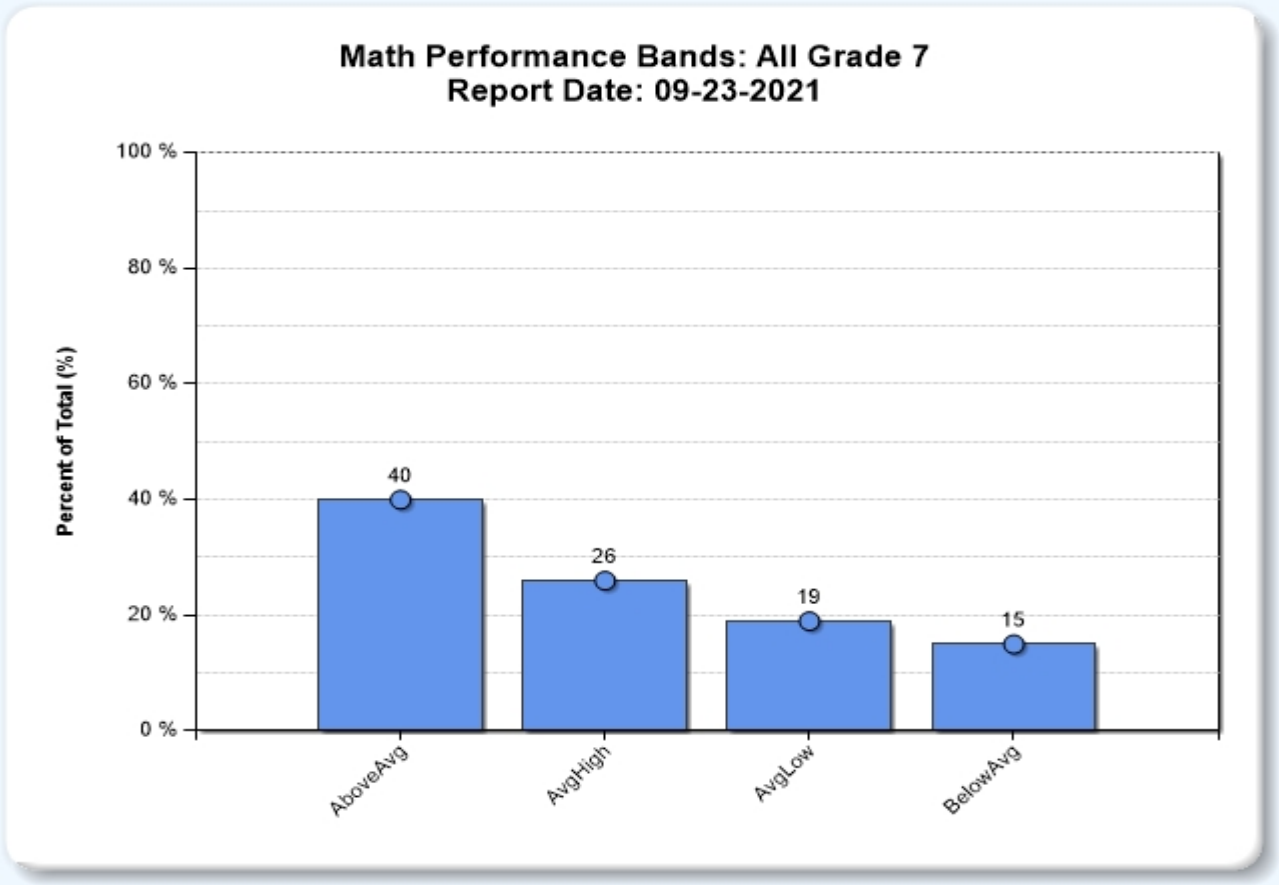
Sample: Scantron Benchmark - Grade 8 Reading

Based on curricular standards at grade 8, 75% of students are testing above to high average with a mean scale score of 3076 for all students (Average High Quartile 2949-3085).



Sample: Scantron Benchmark - Grade 7 Math

Based on curricular standards at grade 7, 66% of students are testing above to high average with a mean scale score of 2715. (Average High Quartile 2658-2788).



Example: Sample Scantron Summary of Grade Level Standard Achievement

Area	Mathematics
Unit(s)	Algebra, Data Analysis & Probability, Geometry, Measurement, Number & Operations
Standards for Grade Level	6
Exclude objectives that are not in a selected Standards	No

Unit	Standard	Attained	Not Attained
Algebra	CCSS.Math.Content.6.RP.A.3.a The learner will find missing values in a table representing a ratio relationship.	36	6
Algebra	CCSS.Math.Content.6.NS.C.6.c The learner will graph ordered pairs with coordinates with positive and negative rational numbers.	34	8
Algebra	CCSS.Math.Content.6.EE.B.7 The learner will solve real-world problems using one-step equations.	26	16
Algebra	The learner will determine the output values of a given function.	25	17
Algebra	CCSS.Math.Content.6.NS.C.7.c The learner will be able to define absolute value and determine the absolute value of rational numbers (including positive and negative).	13	29
Algebra	CCSS.Math.Content.6.EE.A.2.c The learner will evaluate a given variable expression by substituting the given values.	11	31
Algebra	The learner will be able to identify the multiplicative inverse (reciprocal) of a number.	7	35
Algebra	CCSS.Math.Content.6.EE.A.1 The learner will write expressions with whole-number exponents.	2	40
Algebra	CCSS.Math.Content.6.EE.C.9 The learner will analyze the relationship between the dependent and independent variables using tables.	2	40

Continuous Improvement Model

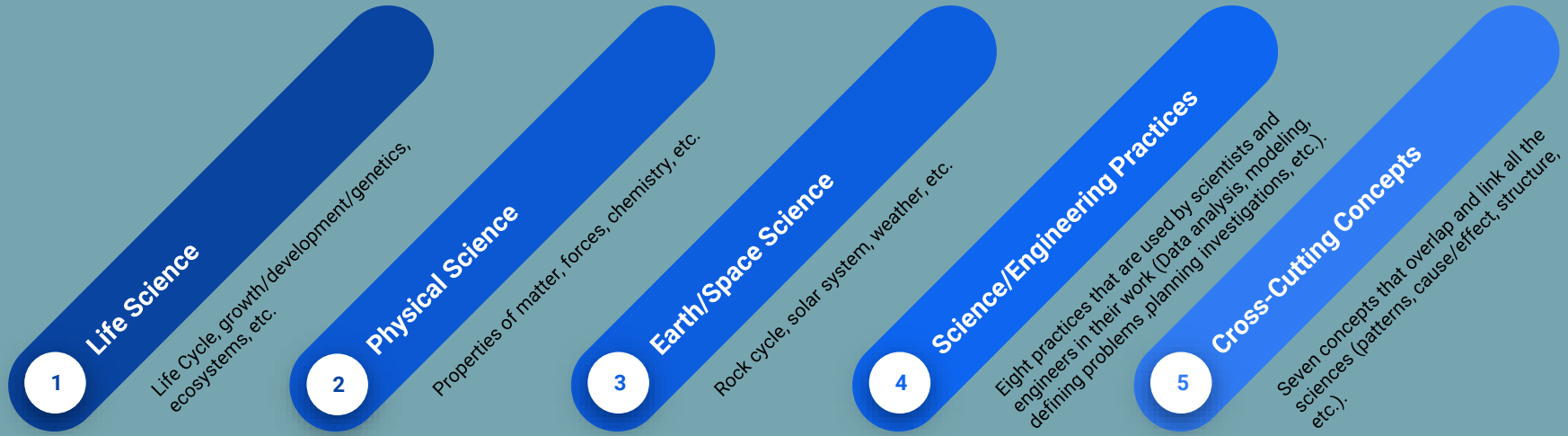
SBAC is high stakes for districts	• Achievement is part of the district “report card” • Public information • Teachers take ownership for data
Many years worth of trend data	• Trend and cohort data available for all demographics • Benchmark and progress monitoring allows for year-long growth measures
Achievement and growth are different measures	• Achievement against standards informs curricular and instructional changes • Growth trends inform *where/with whom* to differentiate curriculum and instruction • Teacher SLOs
SBAC preparation supports success	• Interim Assessment Blocks/AVA • Embedded curricular practice • Expanded progress monitoring through SRBI • Extended Day programming in progress



NEXT GENERATION SCIENCE STANDARDS

For States, By States

NGSS Components



NGSS Assessment Results

2018-2019

Grade	% at or above goal
5	90%
8	84%
11	71%

2020-2021

Grade	% at or above goal
5	84%
8	73%
11	77%

Continuous Improvement Model

NGSS is high stakes for districts	• Achievement is part of the district “report card” • Public information • Teachers take ownership for data K-12
New assessment	• Only two testing years • Minimum of three years for valid results/deeper meaning • No cohort data yet
Teacher preparation supports growth	• NGSS supports as needed/curricular renewal as needed
Student preparation supports success	• Practice test items • Updated curricular courses/materials/practice

Final Questions?