HINGHAM PUBLIC SCHOOLS

REPORT OF DISTRICT ACCOUNTABILITY AND STUDENT PERFORMANCE ON THE 2017 NEXT GENERATION MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM (MCAS 2.0)

Presented to the Hingham School Committee: November 20, 2017

Dr. James M. LaBillois
Assistant Superintendent of Schools

ACCOUNTABILITY

On December 10, 2015 President Obama signed the "Every Student Succeeds Act" (ESSA) into law, replacing the "No Child Left Behind (NCLB) Act" of 2001. The new ESSA continues the requirement for annual testing in ELA and math in grades 3-8 and once in high school, and science assessments at the elementary, middle and high school levels but shifts the responsibility for accountability to the states instead of the federal government.

School Percentiles

A school percentile between 1 and 99 is reported for schools with at least four years of data. This number is an indication of the school's overall performance relative to other schools that serve the same or similar grades. All schools are classified into one of five grade span categories: (1) Elementary; (2) Elementary/Middle; (3) Middle; (4) Middle/High; and (5) High.

Accountability and Assistance Level

Massachusetts' Framework for District Accountability and Assistance classifies schools and districts on a five-level scale, classifying the highest performing in Level 1 and lowest performing in Level 5. For a school to be classified into Level 1, the cumulative PPI for both the "all students" group and "high needs" students must be 75 or higher. If not, the school is classified into Level 2.

Schools in Level 1 are commended if they demonstrate high achievement, make strong progress, or narrow proficiency gaps in the current year.

Schools are classified into Level 3 if they are among the lowest 20 percent relative to other schools in their grade span statewide, if one or more subgroups in the school are among the lowest performing 20% of subgroups relative to all subgroups statewide, if they have persistently low graduation rates (less than 60% for any subgroup over a four-year period), or if they have very low MCAS participation rates for any group (less than 90%).

The lowest achieving, least improving Level 3 schools are candidates for classification into Levels 4 and 5, the most serious designations in Massachusetts' accountability system.

A district is classified into the level of its lowest performing school.

Annual Progress and Performance Index (PPI)

All districts, schools, and groups with sufficient data are assigned an annual PPI based on two years of data on a 0-100 scale. The annual PPI is a measure of the improvement that a group makes toward its own targets over a two-year period on up to seven indicators: narrowing proficiency gaps (English language arts (ELA), mathematics, and science); growth (ELA and mathematics); the annual dropout rate; and the cohort graduation rate.

Cumulative Progress and Performance Index (CPPI)

The Cumulative PPI combines information about narrowing proficiency gaps in ELA, math and science, student growth in ELA and math, and high school graduation and dropout rates over the most recent four-year period into a single number between 0 and 100 and a Cumulative PPI based on three annual PPIs. The Cumulative PPI is the average of a group's annual PPIs over four years, weighting the most recent years the most (1-2-3-4). A Cumulative PPI is calculated for a group if it has at least three annual PPIs. The Cumulative PPI is always reported on a 100-point scale. For a school to be considered to be making progress toward narrowing proficiency gaps, the Cumulative PPI for both the "all students" group and "high needs" students must be 75 or higher.

MCAS Participation

All districts, schools, and subgroups must assess at least 95 percent of their students on the ELA, mathematics, and science MCAS and/or the state English language acquisition assessment (for English language learners). Any school with less than 95 percent participation for any student group is ineligible for classification into Level 1 and is, at a minimum, classified into Level 2. Any school with less than 90 percent participation for any student group is automatically classified into Level 3.

HINGHAM PUBLIC SCHOOLS 2017 ACCOUNTABILITY RATINGS

In spring, 2017 the Massachusetts Department of Elementary and Secondary Education released the next generation MCAS assessment system in grades 3-8 in English-language arts and mathematics. Because of this transition, Hingham Public Schools was "held harmless" relative to our accountability ratings. None of our elementary schools, nor Hingham Middle School, have ratings for the 2017 Accountability cycle. Hingham High School, however, administered the traditional MCAS exams (now referred to as the "legacy" assessments) and has received a Level I designation and is ranked at the 95th percentile.

School	Performance Level	Percentile Rank
Hingham High School	Level 1	95th
Hingham Middle School	No Level	N/A
East Elementary School	No Level	N/A
Foster Elementary School	No Level	N/A
Plymouth River Elementary School	No Level	N/A
South Elementary School	No Level	N/A

MASSACHUSETTS COMPREHENSIVE SYSTEM OF ASSESSMENT

During the 2017 MCAS administration window Hingham Public Schools administered the following statewide assessments:

Schools	Assessment
Hingham High School	
• Grade 9 Biology	Legacy MCAS
• Grade 10 ELA & Math	Legacy MCAS
Hingham Middle School	
• Grade 6 ELA & Math	Next-Generation MCAS
• Grade 7 ELA & Math	Next-Generation MCAS
• Grade 8 ELA & Math	Next-Generation MCAS
• Grade 8 STE	Legacy MCAS
Elementary Schools	
• Grade 3 ELA & Math	Next-Generation MCAS
• Grade 4 ELA & Math	Next-Generation MCAS
• Grade 5 ELA & Math	Next-Generation MCAS
• Grade 5 STE	Legacy MCAS

The new MCAS assessment was created with input from teachers following a thorough review and update of the Massachusetts Curriculum Frameworks. Both the frameworks and the next-generation MCAS were developed with the active involvement of hundreds of experienced Massachusetts teachers and educators from all over the Commonwealth to ensure that we provide every child with the opportunity they deserve to graduate high school ready for college or career.

The next-generation MCAS is a reformatted test from the old MCAS, and the scores are not comparable to the prior tests. On the legacy MCAS, the four scoring categories were Advanced, Proficient, Needs Improvement, and Warning/Failing. On the next-generation MCAS, the four scoring categories are Exceeding Expectations, Meeting Expectations, Partially Meeting Expectations, and Not Meeting Expectations. The new categories emphasize readiness for higher-level work at the next grade level.

LEGACY	NEXT-GENERATION
Advanced Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.	**Exceeding Expectations** A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.
Proficient Students at this level demonstrate a solid understanding of challenging subject matter	**Meeting Expectations** A student who performed at this level met grade-level expectations and is academically on

and solve a wide variety of problems.

Needs Improvement
Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.

Warning
Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.

track to succeed in the current grade in this subject.

Partially Meeting Expectations
A student who performed at this level partially met grade-level expectations in this subject.

Not Meeting Expectations
A student who performed at this level did not meet grade-level expectations in this subject.

The next-generation MCAS establishes high expectations to better reflect whether students are on track for the next grade level and ultimately for college and a career. It is important to stress that 2017 is the baseline year - the first year of a new assessment - and we expect that over time, more students will score Meeting Expectations or above (when the original MCAS debuted in 1998, relatively few students scored Proficient, but that changed as students and teachers adjusted to the new expectations.). Students in grades 3-8 do not face any negative consequences as a result of their scores. Students in 10th grade will not begin taking the next generation MCAS until 2019, so they are not affected by any of these changes. The next-generation MCAS is a new test with a different approach to assessing student performance in grades 3-8, and this year's results cannot be compared to last year's. MCAS results are only one measure of a child's growth and achievement. In some subjects and grades, fewer students scored Meeting or Exceeding Expectations this year than scored Proficient or Advanced in previous years. This does NOT mean that students learned less; it reflects the fact that the next-generation MCAS measures more rigorous standards in a different way.

The report of student performance is presented in four sections:

Section 1: Report of Elementary Performance on the ELA, Mathematics, and Science, Technology, and Engineering MCAS Examinations (for All Students, High Needs Students, and Students with Disabilities).
Section 2: Report of Middle School Performance on the ELA, Mathematics, and Science, Technology, and Engineering MCAS Examinations (for All Students, High Needs Students, and Students with Disabilities).
Section 3: Report of High School Performance on the ELA, Mathematics, and Science MCAS Examinations (for All Students, High Needs Students, and Students with Disabilities).

The report contains one Appendix:

Appendix I: Hingham Performance on 2017 Next Generation MCAS and Benchmark Comparisons

MCAS RESULTS
Meeting/Exceeding Expectations 2017

Grades 3, 4, & 5	Hingham	State
Grade 3 Reading	64	47
Grade 3 Math	70	49
Grade 4 ELA	73	48
Grade 4 Math	79	49
Grade 5 ELA	81	49
Grade 5 Math	83	46
Grade 5 STE*	86	46

Grades 6, 7, & 8	Hingham	State
Grade 6 ELA	77	51
Grade 6 Math	71	50
Grade 7 ELA	75	50
Grade 7 Math	71	47
Grade 8 ELA	70	49
Grade 8 Math	61	48
Grade 8 STE*	62	40

All Grades K-8	Hingham	State
ELA	73	49
Math	72	48

Grade 10	Hingham	State
Grade 10 ELA*	99	91
Grade 10 Math*	94	79
Grade 10 Science*	95	74

* Legacy MCAS - % Proficient or Advanced

High Needs Subgroup

- An unduplicated count of all students in a school or district belonging to at least one of the following individual subgroups: ***students with disabilities***, ***English language learners (ELL) and former ELL students***, or ***economically disadvantaged***.

MCAS RESULTS: High Needs Meeting/Exceeding Expectations 2017

Grades 3, 4, & 5	Hingham	State
Grade 3 Reading	27	29
Grade 3 Math	39	31
Grade 4 ELA	41	28
Grade 4 Math	39	30
Grade 5 ELA	41	28
Grade 5 Math	46	26
Grade 5 STE*	56	27

Grades 6, 7, & 8	Hingham	State
Grade 6 ELA	37	27
Grade 6 Math	28	27
Grade 7 ELA	39	26
Grade 7 Math	28	23
Grade 8 ELA	20	25
Grade 8 Math	14	24
Grade 8 STE*	12	18

All Grades K-8	Hingham	State
ELA	34	27
Math	33	27

Grade 10	Hingham	State
Grade 10 ELA*	85	79
Grade 10 Math*	67	58
Grade 10 Science*	69	52

* Legacy MCAS - % Proficient or Advanced

Students with Disabilities Subgroup

- A count of all students in a school or district with a disability, as defined under the IDEA, who have an IEP.

MCAS RESULTS: Special Education Meeting/Exceeding Expectations 2017

Grades 3, 4, & 5	Hingham	State
Grade 3 Reading	20	14
Grade 3 Math	35	18
Grade 4 ELA	32	14
Grade 4 Math	26	15
Grade 5 ELA	21	12
Grade 5 Math	31	14
Grade 5 STE*	47	17

Grades 6, 7, & 8	Hingham	State
Grade 6 ELA	25	13
Grade 6 Math	21	14
Grade 7 ELA	27	11
Grade 7 Math	12	11
Grade 8 ELA	14	12
Grade 8 Math	12	12
Grade 8 STE*	10	10

All Grades K-8	Hingham	State
ELA	23	13
Math	23	14

Grade 10	Hingham	State
Grade 10 ELA*	82	69
Grade 10 Math*	56	57
Grade 10 Science*	57	39

* Legacy MCAS - % Proficient or Advanced

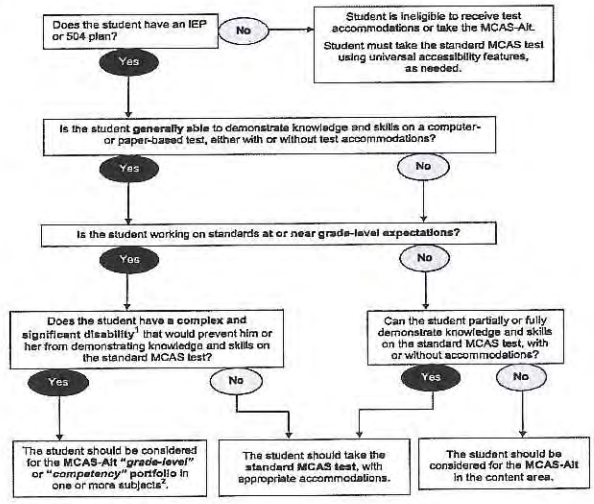
MCAS Alt – Hingham

School	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
East	2	3	1	0	2
Foster	0	0	0	0	2
PRS	0	0	1	1	1
South	0	1	1	4	4
HMS	7	6	6	5	5
HHS	0	0	5	0	2
Total	**9**	**10**	**14**	**10**	**16**

MCAS Alt – Decision Making

Decision-Making Tool for MCAS Participation by Students with Disabilities

The decision chart shown below may be used by IEP teams and 504 plan coordinators to make annual decisions regarding appropriate student participation in MCAS *for each content area* being assessed.



District Data-Based Action Plan

- Analysis of district, school and student results, item analyses, and disaggregated results with teaching staff
- Continued use of MCAS scores, item analyses, and additional assessment results to track and monitor individual student performance and cohort results.
- Continued opportunities for students to practice answering a variety of types of questions and assessment measures and to practice test-taking strategies.
- Continued emphasis on the use of instructional strategies which promote critical thinking, extended problem solving, and writing for a variety of purposes.
- Use of supervision and evaluation process to ensure consistent implementation of curriculum standards.
- Redirection of Title I Funds to HMS (continue program at Foster Elementary).
- Redesign of K-5 intervention program; implementation of 6-8 intervention program.

SWD Improvement Plan

- Focus on measurable goal writing and associated data collection methods to track and monitor student performance
- Ensure IEP goals are aligned with grade level learning expectation and content
- Content-directed professional development in ELA, Math and Science and teacher level data analysis of student responses
- Increase tiered instruction support at Elementary level

SWD Improvement Plan

- Targeted Professional development in the following areas:
  - –3-day district courses on: Strengthening IEPs and goal development; Differentiated Instruction; Communication disorders- impact and strategies; Section 504
  - –3-day course on Project Read, Writing Expression and Framing Your Thoughts - all special education staff K-8
  - –Executive Function PD sessions: (a) "Smart but Scattered"; (b) Sarah Ward: Thinking in an Organized Way, Planning Ahead and Managing Materials in the Classroom & Home
- Student support activities, including:
  - –HHS after-school targeted Math instruction
  - –HMS after-school targeted Math instruction
  - –HHS and HMS Executive Function pilot programs
  - –Administrative Support - professional training on Special Education Procedure Manual and Implementation

SECTION I

Report of Elementary Performance on the ELA, Mathematics, and Science, Technology, and Engineering MCAS Examinations

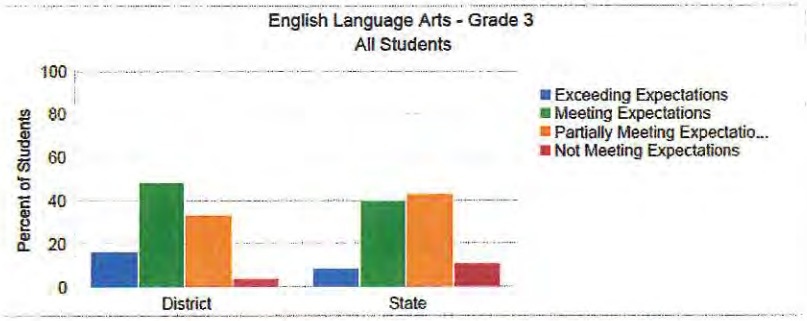
(All Students, High Needs Students, and Students with Disabilities)

2017 Grade 3 ELA Next-Generation MCAS

Grade 3 ELA MCAS

-- 64% of Hingham Grade 3 ELA students met or exceeded expectations on the new exam

-- Statewide, only 47% of Grade 3 ELA students met or exceeded expectations on the new exam



English Language Arts	N Included	% District	% State
Exceeding Expectations	58	16	8
Meeting Expectations	174	48	39
Partially Meeting Expectations	120	33	42
Not Meeting Expectations	12	3	10
Total Included	364		

Grade 3 ELA MCAS

-- Hingham Grade 3 ELA students performed 9% higher than the state average in ALL content strands: language, reading, and writing

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 3

All Students (358) **Mode:** Paper
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All Items	42	66%	57%	9
Question Type				
Constructed Response	3	43%	38%	5
Essay	13	51%	43%	8
Selected Response	26	76%	66%	10
Strand / Topic				
Language Anchor Standard	11	62%	53%	9
Conventions of Standard English	10	58%	50%	8
Vocabulary Acquisition and Use	1	96%	84%	12
Reading Anchor Standard	24	73%	64%	9
Craft and Structure	5	88%	79%	9
Integration of Knowledge and Ideas	3	69%	59%	10
Key Ideas and Details	16	70%	61%	9
Writing Anchor Standard	7	47%	39%	8
Text Types and Purposes	7	47%	39%	8

Grade 3 ELA MCAS

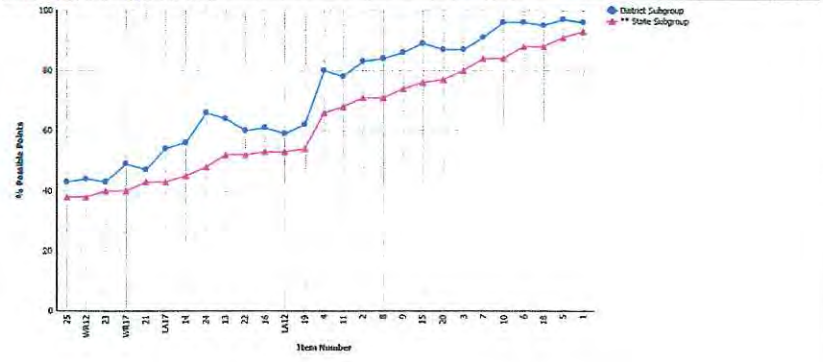
--Hingham Grade 3 ELA students performed ABOVE the state average on all 27 test items

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
Grade: Grade 3

All Students (358) **Mode:** Paper



Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

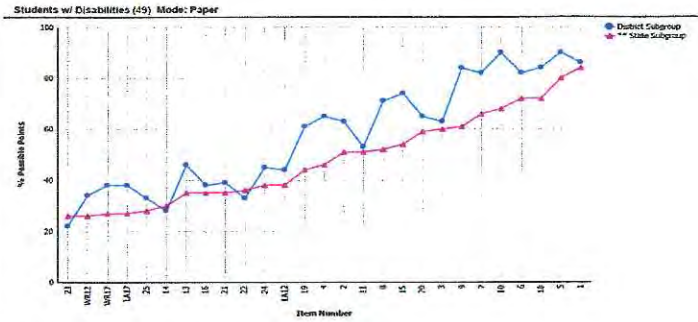
Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by Disability Status

District: Hingham
Grade: Grade 3

Grade 3 ELA MCAS-SWD

-- Grade 3 ELA students with disabilities performed above the state average for SWD on 24 of 27 test items

--Challenge areas included determining parts of speech and identifying supporting evidence



Students w/ Disabilities (49) **Standards:** MA 2011 Standards **Mode:** Paper

Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	% Possible Points: District	% Possible Points: State**	% Possible Points: District - State Diff
23	SR	LA	CCRA.L. 1	Determine the part of speech of a word used in the poem.	1	22%	26%	-4
14	SR	RE	CCRA.R. 1	Determine how a paragraph supports overall understanding of the passage.	2	28%	30%	-2
22	SR	LA	CCRA.L. 1	Determine the part of speech of two words used in the poem.	1	33%	36%	-3

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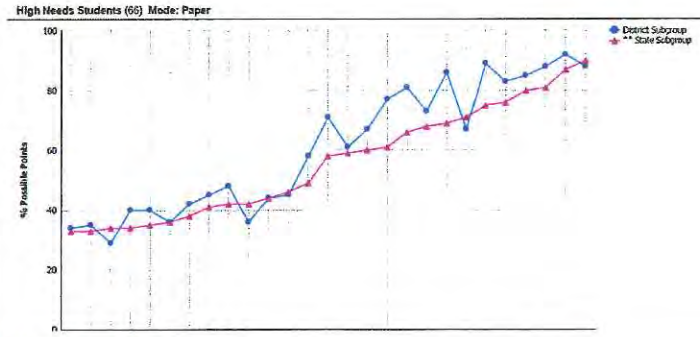
Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by High Needs Status

District: Hingham
Grade: Grade 3

Grade 3 ELA MCAS-High Needs

-- Grade 3 ELA students with high needs performed at or above the state average for high needs students on 22 of 27 test items

--Challenge areas included poetry, determining parts of speech, and identifying supporting evidence



High Needs Students (66) **Standards:** MA 2011 Standards **Mode:** Paper

Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	% Possible Points: District	% Possible Points: State**	% Possible Points: District - State Diff
23	SR	LA	CCRA.L. 1	Determine the part of speech of a word used in the poem.	1	29%	34%	-5
25	CR	RE	CCRA.R. 2	Write a paragraph that explains what the speaker is suggesting, using important details from the poem as evidence.	3	34%	33%	1
14	SR	RE	CCRA.R. 1	Determine how a paragraph supports overall understanding of the passage.	2	36%	36%	0
22	SR	LA	CCRA.L. 1	Determine the part of speech of two words used in the poem.	1	36%	42%	-6

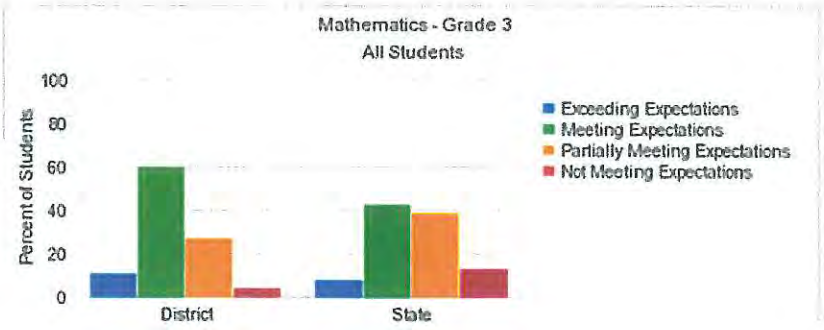
2017 Grade 3 Mathematics MCAS

Grade 3 Mathematics MCAS

-96% of Grade 3 math students earned a passing score on mathematics MCAS with **69% of students earning a score of meeting expectations or higher.**

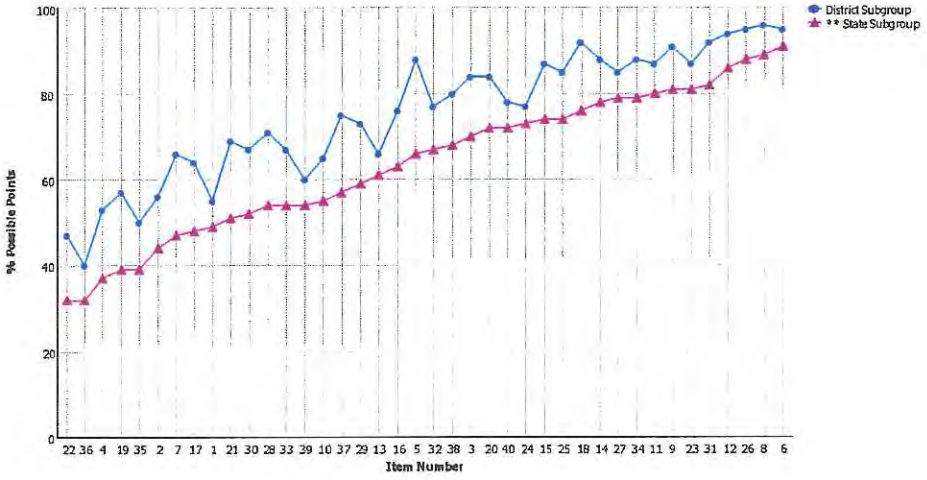
-**Statewide**, only 49% of Grade 3 students earned a score of meeting expectations or higher on mathematics MCAS.

Mathematics	N Included	% District	% State
Exceeding Expectations	38	10	7
Meeting Expectations	216	59	42
Partially Meeting Expectations	97	27	38
Not Meeting Expectations	13	4	13
Total Included	364		



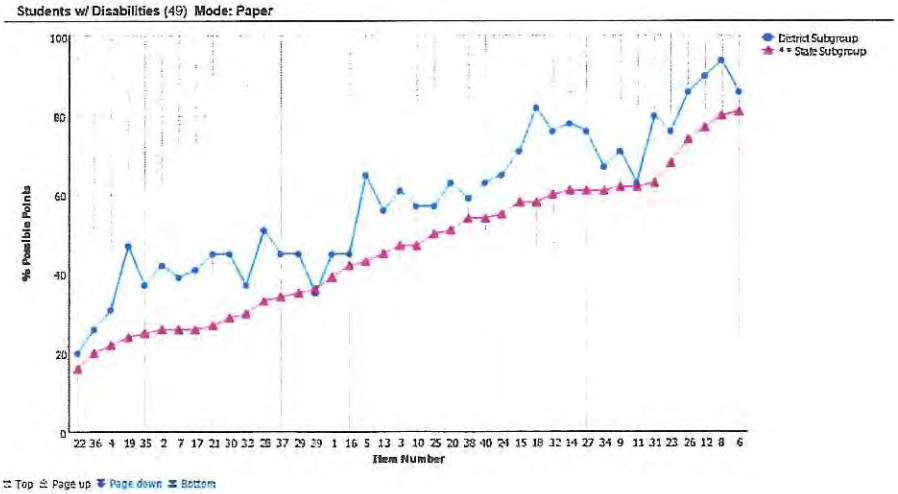
Grade 3 Math MCAS

-Hingham Grade 3 students performed **above the state average** on all 40 test questions.



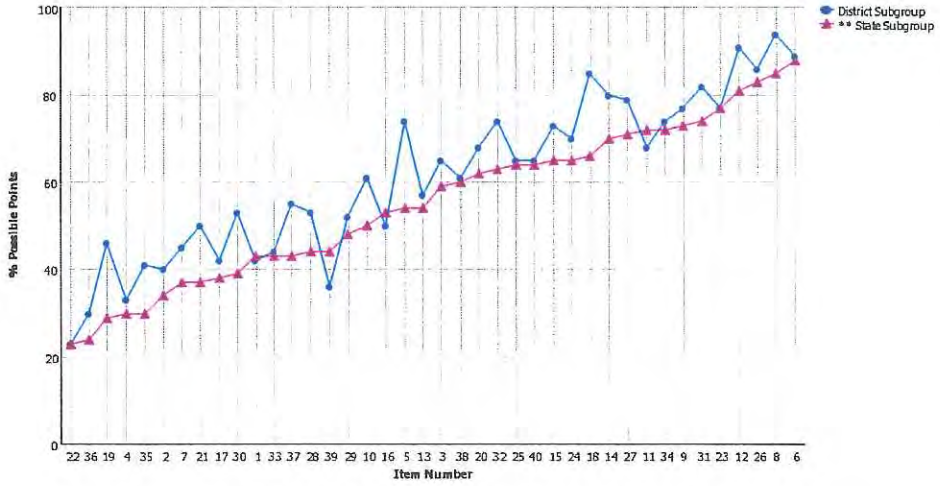
Grade 3 Math MCAS-SWD

-Grade 3 students with disabilities performed **above the state average** for SWD on 39 of 40 test questions.



Grade 3 Math MCAS-High Needs

-Grade 3 High Needs students performed **above the state average** for SWD on 37 of 40 test questions.



Grade 3 Math MCAS

-Hingham Grade 3 students performed **between 7-14 points above the state average** for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
Mathematics
All Students

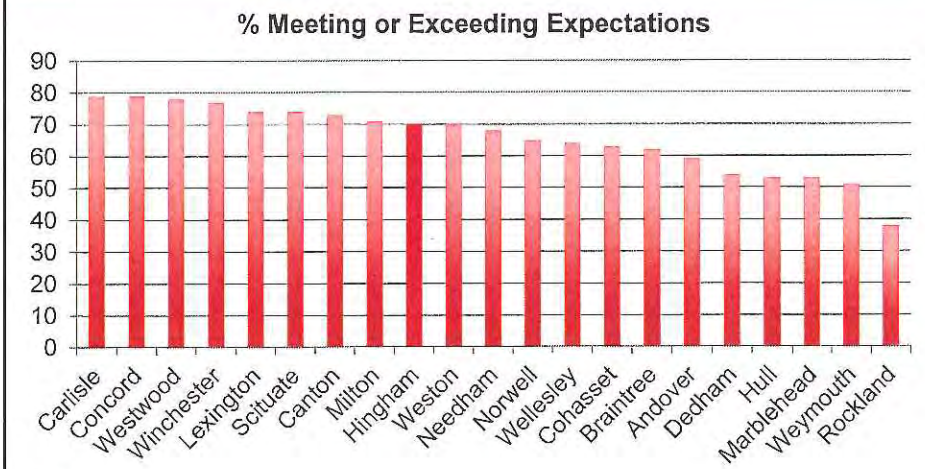
District: Hingham
Grade: Grade 3

All Students (358) Mode: Paper
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/ State Diff
Mathematics				
All items	48	73%	62%	11
Question Type				
Constructed Response	10	64%	51%	13
Short Answer	11	70%	58%	12
Selected Response	27	78%	67%	11
Strand / Topic				
Geometry	5	67%	60%	7
Reason with shapes and their attributes.	5	67%	60%	7
Measurement and Data	12	74%	61%	13
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	2	66%	49%	17
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	4	77%	63%	14
Represent and interpret data.	2	90%	80%	10
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	4	65%	56%	9
Number and Operations in Base Ten	7	77%	65%	12
Use place value understanding and properties of operations to perform multi-digit arithmetic.	7	77%	65%	12
Number and Operations—Fractions	8	72%	58%	14
Develop understanding of fractions as numbers.	8	72%	58%	14
Operations and Algebraic Thinking	16	73%	62%	11
Multiply and divide within 100.	3	72%	59%	13
Represent and solve problems involving multiplication and division.	9	80%	71%	9
Solve problems involving the four operations, and identify and explain patterns in arithmetic.	3	61%	48%	13
Understand properties of multiplication and the relationship between multiplication and division.	1	53%	37%	16

Benchmark Comparison: Grade 3 Reading

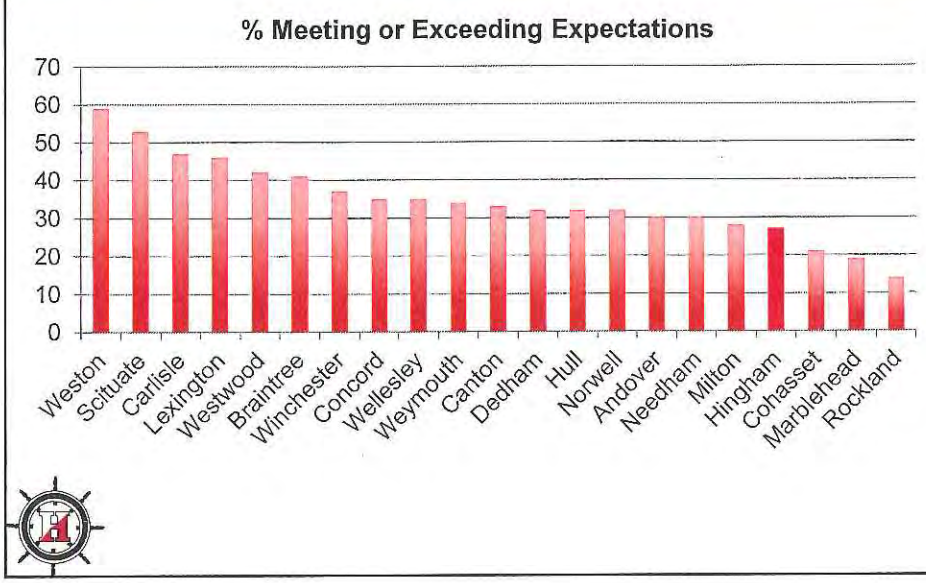
Benchmark Comparison: Grade 3 Math



Grade 3: Performance Summary

Subject	Summary
ELA	• 64% of students met or exceeded expectations; performed ABOVE the state average on all 27 test items • Performed 9% higher than the state average in ALL content strands: language, reading, and writing
Math	• 69% of students earning a score of meeting expectations or higher • Performed above the state average on all 40 test questions. • Performed between 7-14 points above the state average for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking.*

High Needs: Grade 3 Reading

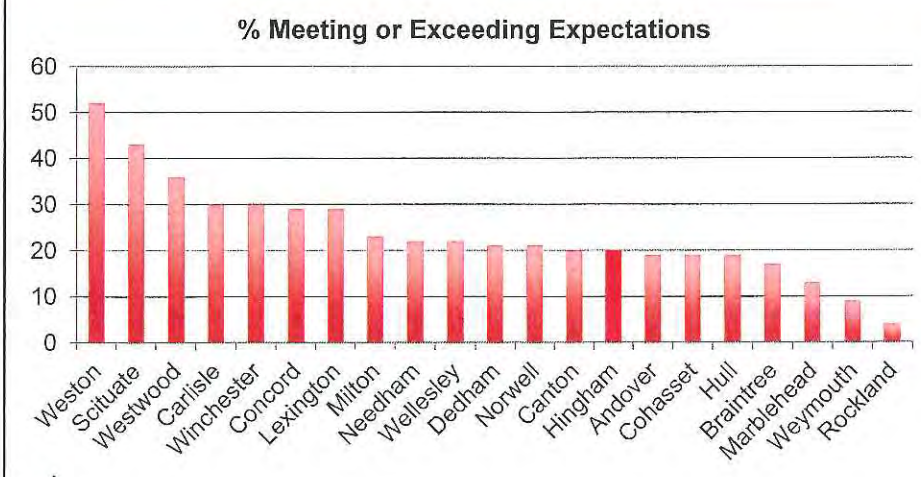


High Needs: Grade 3 Math

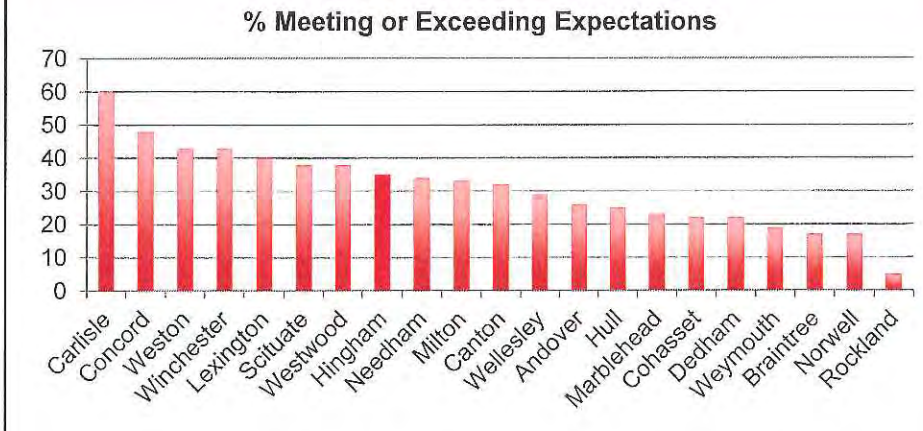
Grade 3: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 22 of 27 test items	• Challenge areas included poetry, determining parts of speech, and identifying supporting evidence
Math	• Performed above the state average for SWD on 37 of 40 test questions	• Challenge areas include attributes of polygons, fractions on number lines, and fractions in real world context

Students with Disabilities: Grade 3 Reading



Students with Disabilities: Grade 3 Math



Grade 3: Areas of Strength & Opportunity

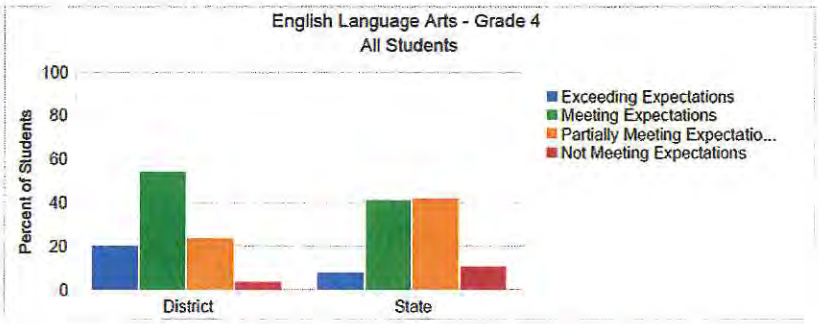
Subject	Strength	Opportunity for Growth
ELA	• Grade 3 ELA students with high needs performed at or above the state average for high needs students on 22 of 27 test items	• Challenge areas included poetry, determining parts of speech, and identifying supporting evidence
Math	• Grade 3 students with disabilities performed above the state average for SWD on 39 of 40 test questions	• Challenge areas include attributes of polygons, fractions on number lines, and determine mass using a subtraction equation

2017 Grade 4 ELA Next-Generation MCAS

Grade 4 ELA MCAS

-- 74% of Hingham Grade 4 ELA students met or exceeded expectations on the new exam

-- Statewide, only 48% of Grade 4 ELA students met or exceeded expectations on the new exam



English Language Arts	N Included	% District	% State
Exceeding Expectations	65	20	7
Meeting Expectations	176	54	41
Partially Meeting Expectations	76	23	42
Not Meeting Expectations	11	3	10
Total Included	328		

Grade 4 ELA MCAS

-- Hingham Grade 4 ELA students performed 11% higher than the state average in ALL content strands: language, reading, and writing

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 4

All Students (319) **Mode:** Online
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All Items	42	76%	65%	11
Question Type				
Constructed Response	3	62%	48%	14
Essay	13	63%	52%	11
Selected Response	26	84%	73%	11
Strand / Topic				
Language Anchor Standard	12	80%	68%	12
Conventions of Standard English	6	66%	56%	12
Vocabulary Acquisition and Use	6	92%	81%	11
Reading Anchor Standard	23	79%	68%	11
Craft and Structure	6	89%	79%	10
Key Ideas and Details	17	75%	64%	11
Writing Anchor Standard	7	59%	49%	10
Text Types and Purposes	7	59%	49%	10

Grade 4 ELA MCAS

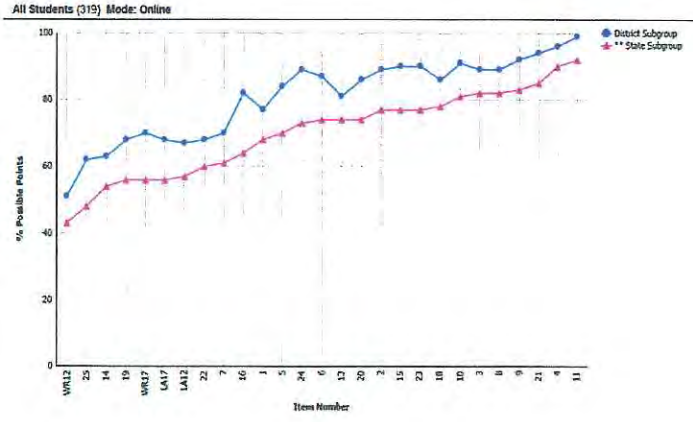
--Hingham Grade 4 ELA students performed ABOVE the state average on all 27 test items

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
Grade: Grade 4

All Students (319) **Mode:** Online



Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by Disability Status

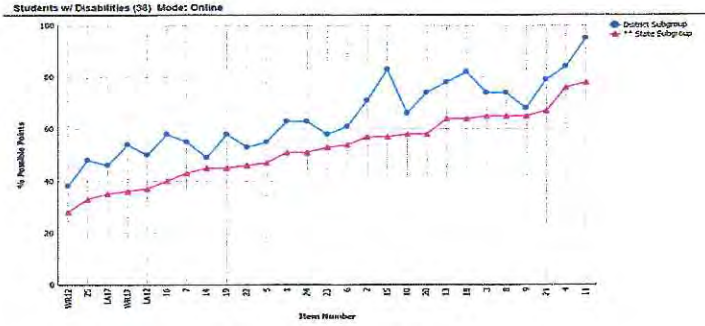
District: Hingham
Grade: Grade 4

Grade 4 ELA MCAS-SWD

-- Grade 4 ELA students with disabilities performed above the state average for SWD on ALL 27 test items

--Challenge areas included writing to compare or explain, and identifying supporting evidence

Students w/ Disabilities (38) Mode: Online



Students w/ Disabilities (38) **Standards: MA 2011 Standards Mode: Online**

Item Information					% Possible Points			
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
12	ES	-	-	Write an essay to explain how a character changed over time; use information from the passage to support your explanation.	7	43%	32%	11
25	CR	RE	CCRA.R. 2	Write a paragraph that compares the main ideas of the poem and the article; include important details from both texts.	3	48%	33%	15
14	SR	RE	CCRA.R. 3	Identify a description of a character and supporting evidence from the passage.	2	49%	45%	4

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by High Needs Status

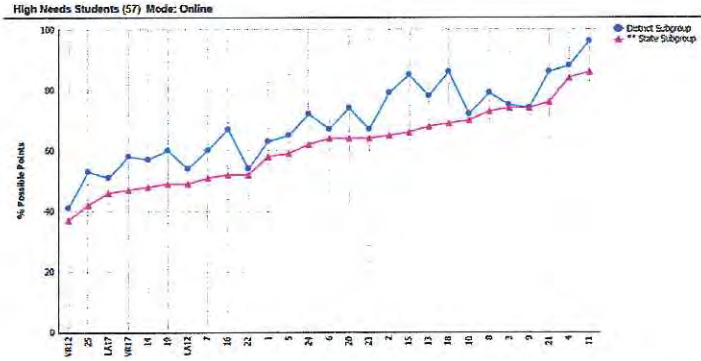
District: Hingham
Grade: Grade 4

Grade 4 ELA MCAS-High Needs

-- Grade 4 ELA students with high needs performed above the state average for high needs students on ALL 27 test items

--Challenge areas included writing to compare or explain, and writing in the narrative mode

High Needs Students (57) Mode: Online



High Needs Students (57) **Standards: MA 2011 Standards Mode: Online**

Item Information					% Possible Points			
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
12	ES	-	-	Write an essay to explain how a character changed over time; use information from the passage to support your explanation.	7	47%	42%	5
25	CR	RE	CCRA.R. 2	Write a paragraph that compares the main ideas of the poem and the article; include important details from both texts.	3	53%	42%	11
17	ES	-	-	Write a narrative about the events in the passage from another character's point of view.	6	54%	47%	7

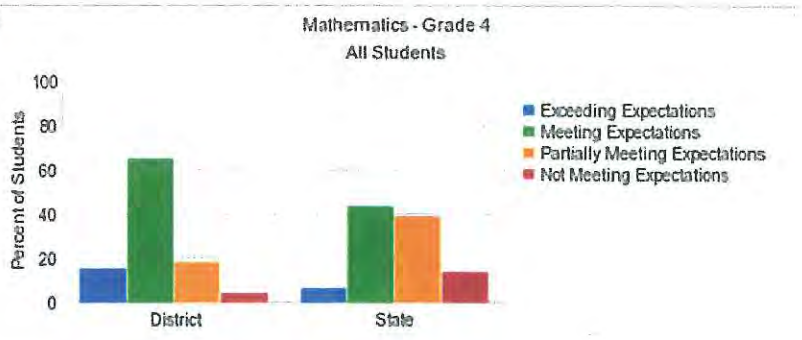
2017 Grade 4 Mathematics MCAS

Grade 4 Mathematics MCAS

-97% of Grade 4 students earned a passing score with **79% of students earning a score of meeting expectations or higher.**

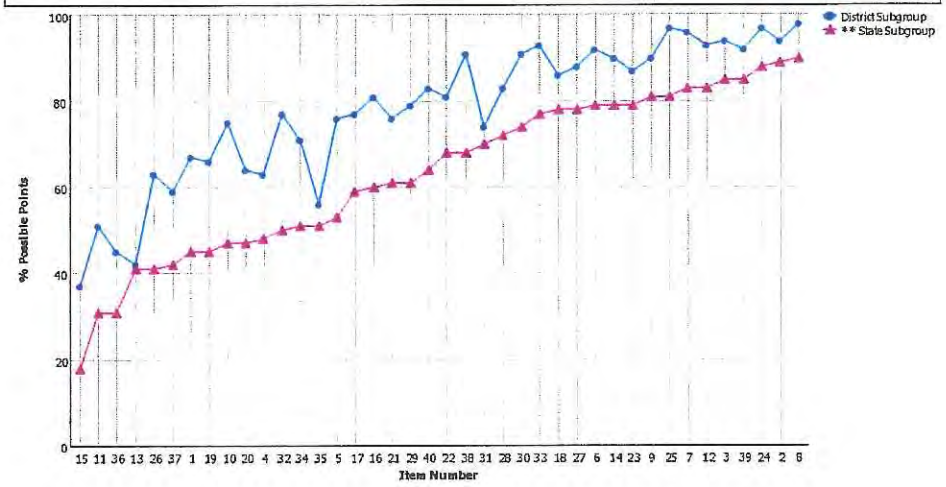
-**Statewide** only 49% of Grade 4 students earned a score of meeting expectations or higher.

Mathematics	N Included	% District	% State
Exceeding Expectations	48	15	6
Meeting Expectations	211	64	43
Partially Meeting Expectations	58	18	39
Not Meeting Expectations	11	3	13
Total Included	328		



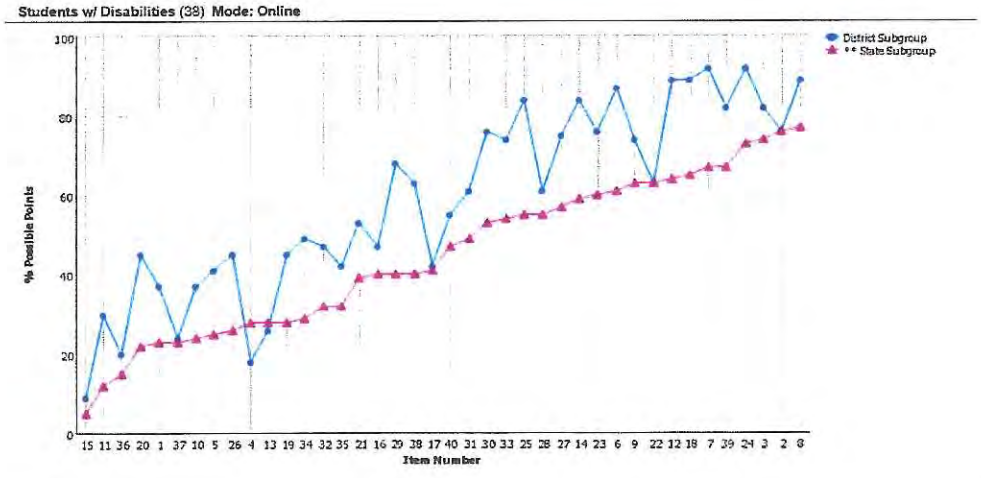
Grade 4 Math MCAS

-Grade 4 students performed **above the state average** on all 40 test questions.



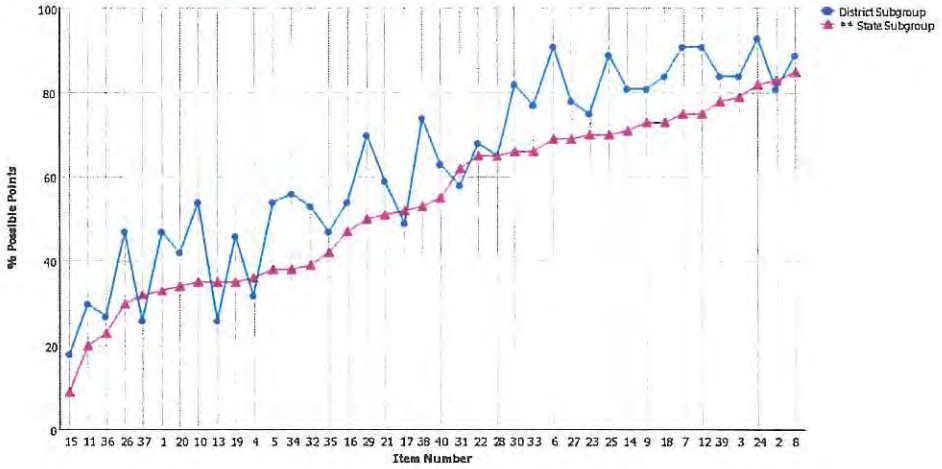
Grade 4 Math MCAS-SWD

Grade 4 students with disabilities performed **at or above the state average** for SWD on 38 of 40 test questions and **below the state average** for 2 of 40 test questions.



Grade 4 Math MCAS-High Needs

Grade 4 High Needs students performed **at or above the state average** on 34 of 40 test questions and **below the state average** for 6 of 40 test questions.



Grade 4 Math MCAS

-Grade 4 students performed **between 11-19 points above the state average** for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
Mathematics
All Students

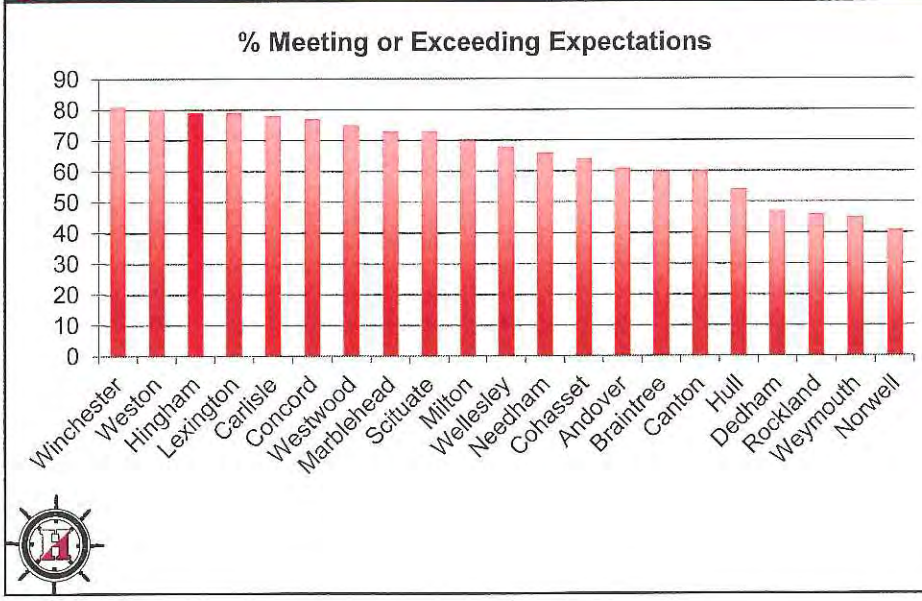
District: Hingham
Grade: Grade 4

All Students (319) Mode: Online
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/ State Diff
Mathematics				
All Items	54	74%	59%	15
Question Type				
Constructed Response	14	61%	43%	18
Short Answer	15	73%	55%	18
Selected Response	25	83%	70%	13
Strand / Topic				
Geometry	7	81%	62%	19
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	7	81%	62%	19
Measurement and Data	11	70%	53%	17
Geometric measurement: understand concepts of angle and measure angles.	5	70%	51%	19
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	6	69%	55%	14
Number and Operations in Base Ten	11	84%	73%	11
Generalize place value understanding for multi-digit whole numbers.	1	93%	83%	10
Use place value understanding and properties of operations to perform multi-digit arithmetic.	10	83%	72%	11
Number and Operations—Fractions	12	78%	64%	14
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	6	90%	75%	15
Extend understanding of fraction equivalence and ordering.	2	82%	70%	12
Understand decimal notation for fractions, and compare decimal fractions.	4	57%	46%	11
Operations and Algebraic Thinking	13	63%	45%	18
Gain familiarity with factors and multiples.	5	79%	59%	20
Use the four operations with whole numbers to solve problems.	8	53%	37%	16

Benchmark Comparison: Grade 4 ELA

Benchmark Comparison: Grade 4 Math



Grade 4: Performance Summary

Subject	Summary
ELA	• 74% of students met or exceeded expectations; performed ABOVE the state average on all 27 test items • Performed 11% higher than the state average in ALL content strands: language, reading, and writing
Math	• 79% of students earning a score of meeting expectations or higher. • Performed above the state average on all 40 test questions. • Performed between 11-19 points above the state average for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking.*

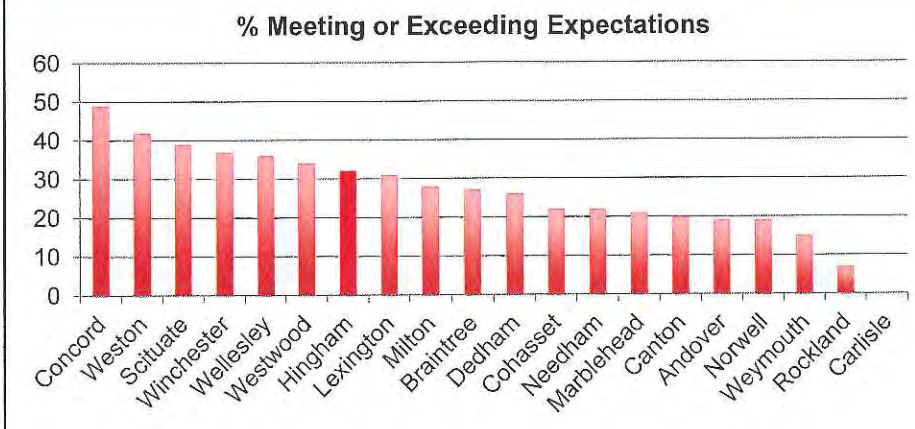
High Needs: Grade 4 ELA

High Needs: Grade 4 Math

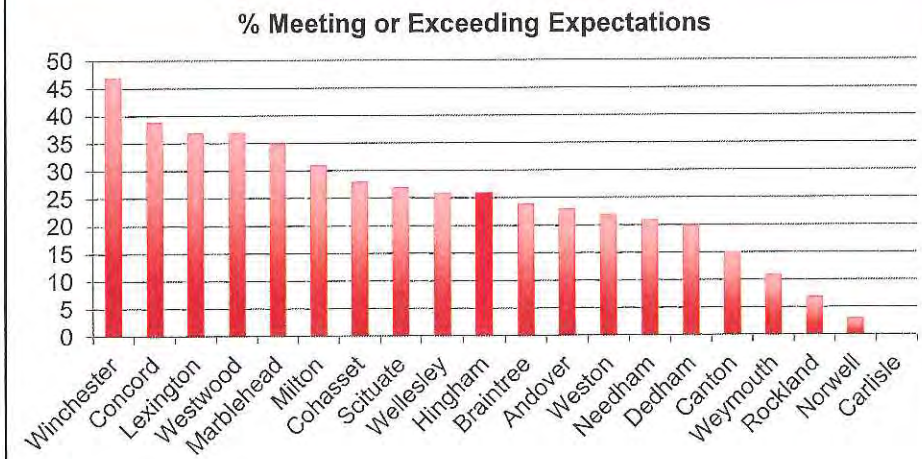
Grade 4: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed above the state average for high needs students on ALL 27 test items	• Challenge areas included writing to compare or explain, and writing in the narrative mode
Math	• Performed at or above the state average on 34 of 40 test questions and below the state average for 6 of 40 test questions	• Challenge areas include perpendicular lines, metric units, product of 2 two-digit numbers, and product of a whole number and a fraction

Students with Disabilities: Grade 4 ELA

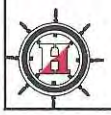


Students with Disabilities: Grade 4 Math



Grade 4: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Grade 4 ELA students with disabilities performed above the state average for SWD on ALL 27 test items	• Challenge areas included writing to compare or explain, and identifying supporting evidence
Math	• Grade 4 students with disabilities performed at or above the state average for SWD on 38 of 40 test questions and below the state average for 2 of 40 test questions	• Challenge areas include perpendicular lines, metric units, product of 2 two-digit numbers, the product of a whole number and a fraction, and interpreting a remainder

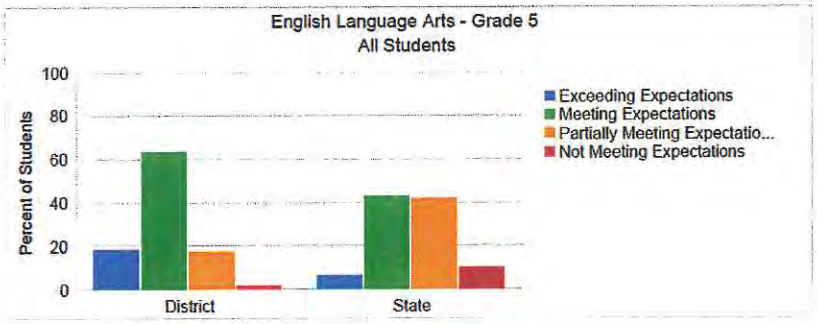


2017 Grade 5 ELA Next-Generation MCAS

Grade 5 ELA MCAS

-- 81% of Hingham Grade 5 ELA students met or exceeded expectations on the new exam

-- Statewide, only 49% of Grade 5 ELA students met or exceeded expectations on the new exam



English Language Arts	N Included	% District	% State
Exceeding Expectations	64	18	6
Meeting Expectations	221	63	43
Partially Meeting Expectations	61	17	42
Not Meeting Expectations	4	1	10
Total Included	350		

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 5

Grade 5 ELA MCAS

-- Hingham Grade 5 ELA students performed 12% higher than the state average in ALL content strands: language, reading, and writing

All Students (349) **Mode:** Paper

Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All items	46	77%	65%	12
Question Type				
Essay	20	65%	52%	13
Selected Response	26	86%	74%	12
Strand / Topic				
Language Anchor Standard	15	76%	62%	14
Conventions of Standard English	10	74%	60%	14
Vocabulary Acquisition and Use	5	79%	66%	13
Reading Anchor Standard	20	88%	76%	12
Craft and Structure	3	87%	73%	14
Integration of Knowledge and Ideas	4	79%	69%	10
Key Ideas and Details	13	91%	79%	12
Writing Anchor Standard	11	59%	47%	12
Text Types and Purposes	11	59%	47%	12

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

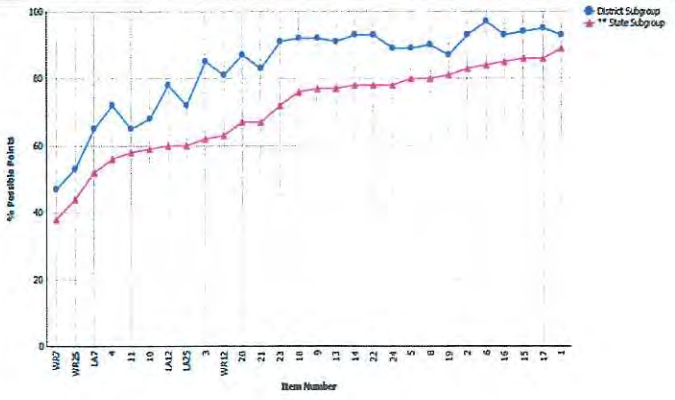
Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
Grade: Grade 5

Grade 5 ELA MCAS

--Hingham Grade 5 ELA students performed ABOVE the state average on all 28 test items

All Students (349) **Mode:** Paper



Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by Disability Status

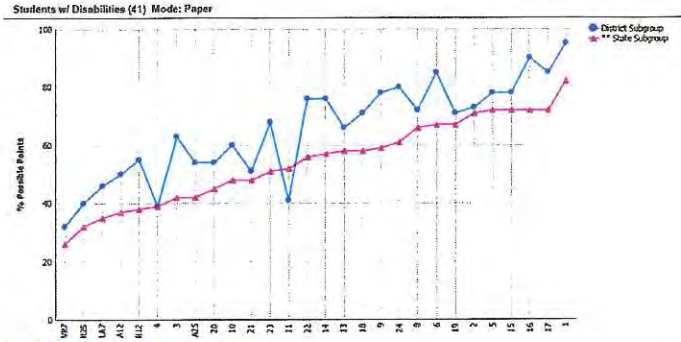
District: Hingham
Grade: Grade 5

Grade 5 ELA MCAS-SWD

-- Grade 5 ELA students with disabilities performed at or above the state average for SWD on 27 of 28 test items

-- Challenge areas included vocabulary in context and speaker's tone and point of view in poetry

Students w/ Disabilities (41) Mode: Paper



Students w/ Disabilities (41) **Standards: MA 2011 Standards Mode: Paper**

Item Information						% Possible Points		
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
7	ES	-	-	Write an essay describing the feelings of the speakers of two poems; use details from the poems as evidence.	7	38%	30%	8
4	SR	RE	CCRA.R. 6	Determine the speaker's point of view based on lines from the poem.	1	39%	39%	0
11	SR	LA	CCRA.L. 4	Identify the meaning of a vocabulary word in context.	2	41%	52%	-11

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

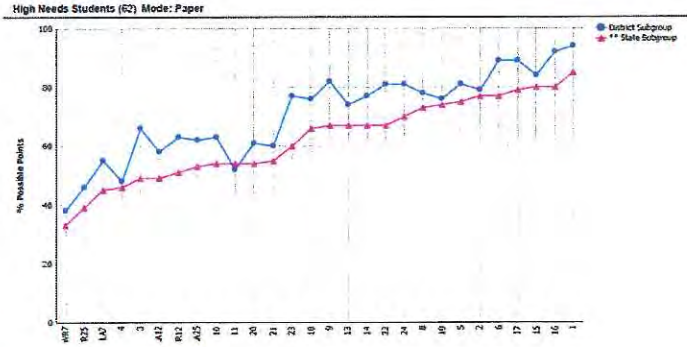
Spring 2017 MCAS District Test Item Analysis Graph
English Language Arts
by High Needs Status

District: Hingham
Grade: Grade 5

Grade 5 ELA MCAS-High Needs

-- Grade 5 ELA students with high needs performed at or above the state average for high needs students on 27 of 28 test items
-- Challenge areas included vocabulary in context, and speaker's tone and point of view in poetry

High Needs Students (62) Mode: Paper



High Needs Students (62) **Standards: MA 2011 Standards Mode: Paper**

Item Information						% Possible Points		
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
7	ES	-	-	Write an essay describing the feelings of the speakers of two poems; use details from the poems as evidence.	7	45%	38%	7
4	SR	RE	CCRA.R. 6	Determine the speaker's point of view based on lines from the poem.	1	48%	46%	2
11	SR	LA	CCRA.L. 4	Identify the meaning of a vocabulary word in context.	2	52%	54%	-2

ELA Areas for Improvement: Grades 3-5

- Writing (idea development, conventions)
- Language (vocabulary-in-context, parts of speech)
- Reading Skills (point of view, main idea, inference, character development, supporting evidence, vocabulary in context, paired passages across genres)

ELA Strategies for Improvement: Grades 3-5

- Targeted implementation of the newly-adopted standards-based reading program, *Journeys* (i.e. lessons focusing on parts of speech)
- District-Wide Professional Development in the *Empowering Writers* program focusing on expository responses to text
- District-Wide small-group tiered instruction K-5
- Regular implementation of standards-based reading assessments
- Incorporation of writing strategies in all content areas
- Direct instruction on responding to questions that compare multiple texts
- Ample opportunities for on-line test-taking practice to ensure familiarity with format, especially with regard to essay-writing in required text boxes
- Include special education teachers in department meetings and ongoing discussions regarding MCAS findings and strategies for improvement

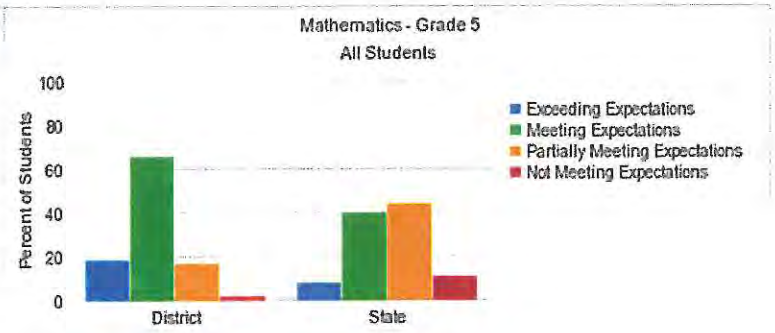
2017 Grade 5 Mathematics MCAS

Grade 5 Mathematics MCAS

-99% of Grade 5 students earned a passing score with **82% of students earning a score of meeting expectations or higher.**

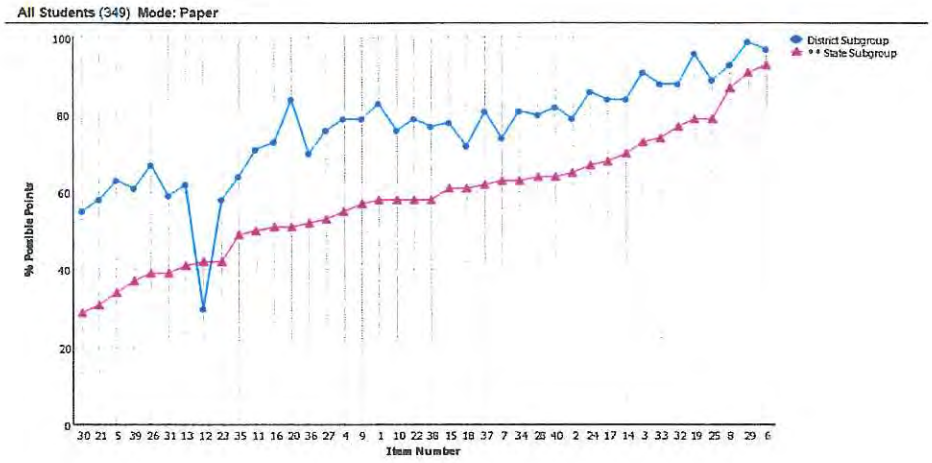
-**Statewide** only 46% of Grade 5 students earned a score of meeting expectations or higher.

Mathematics	N Included	% District	% State
Exceeding Expectations	61	17	7
Meeting Expectations	229	65	39
Partially Meeting Expectations	57	16	44
Not Meeting Expectations	3	1	10
Total Included	350		



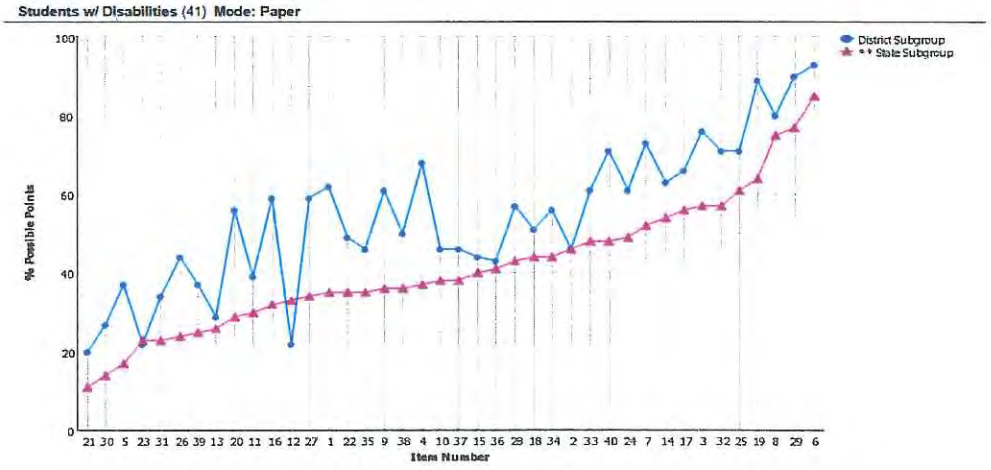
Grade 5 Math MCAS

-Grade 5 students performed **above the state average** on 39 of 40 test questions.



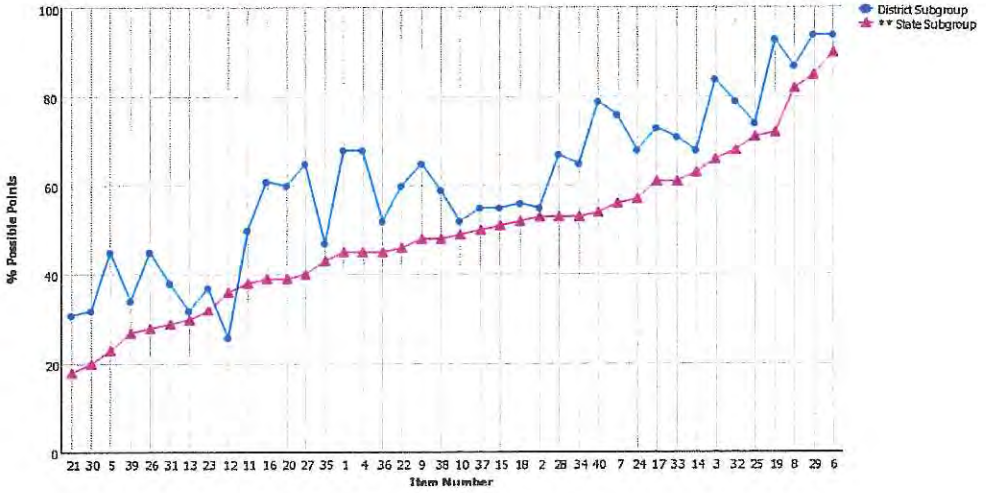
Grade 5 Math MCAS-SWD

-Results reveal that grade 5 students with disabilities performed **at or above the state average** for SWD on 38 of 40 test questions and **below the state average** for 2 of 40 test questions.



Grade 5 Math MCAS- High Needs

-Grade 5 High Needs students performed **at or above the state average** on 39 of 40 test questions and **below the state average** for 1 of 40 test questions.



Grade 5 Math MCAS

-Grade 5 students performed **between 10-24 points above the state average** for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
Mathematics
All Students

District: Hingham
Grade: Grade 5

All Students (349) Mode: Paper
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/ State Diff
Mathematics				
All Items	54	75%	57%	18
Question Type				
Constructed Response	14	69%	47%	22
Short Answer	11	74%	53%	21
Selected Response	29	78%	63%	15
Strand / Topic				
Geometry	6	90%	73%	17
Classify two-dimensional figures into categories based on their properties.	1	76%	53%	23
Graph points on the coordinate plane to solve real-world and mathematical problems.	5	92%	78%	14
Measurement and Data	11	63%	39%	24
Convert like measurement units within a given measurement system	1	63%	34%	29
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	9	61%	38%	23
Represent and interpret data.	1	79%	55%	24
Number and Operations in Base Ten	13	76%	55%	21
Perform operations with multi-digit whole numbers and with decimals to hundredths.	9	80%	58%	22
Understand the place value system.	4	68%	47%	21
Number and Operations—Fractions	14	76%	57%	19
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	9	78%	59%	19
Use equivalent fractions as a strategy to add and subtract fractions.	5	74%	55%	19
Operations and Algebraic Thinking	10	76%	66%	10
Analyze patterns and relationships.	3	78%	66%	12
Write and interpret numerical expressions.	7	75%	67%	8

2017 Grade 5 Science MCAS

Grade 5 Science MCAS

-99% of Hingham Grade 5 science students earned a passing score on science MCAS with **86% of students earning a score of proficient or higher.**

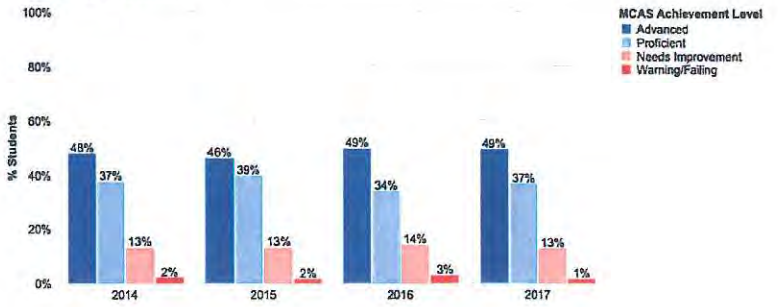
-**Statewide**, only 46% of Grade 5 students earned a score of proficient or higher on science MCAS.

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

District Achievement Distribution by Year
Science and Technology/Engineering

Hingham
Grade: 05

Student Group: All Students



	2014		2015		2016		2017	
	District	State	District	State	District	State	District	State
CPI	94.5	79.0	94.7	78.2	94.7	76.4	95.1	75.3
Advanced	48%	20%	46%	16%	49%	16%	49%	17%
Proficient	37%	33%	39%	35%	34%	31%	37%	29%
Needs Improvement	13%	34%	13%	37%	14%	38%	13%	39%
Warning/Failing	2%	13%	2%	13%	3%	14%	1%	15%
N Students	392	70,994	385	70,861	364	69,681	350	70,312
Median SGP								

Grade 5 Science MCAS

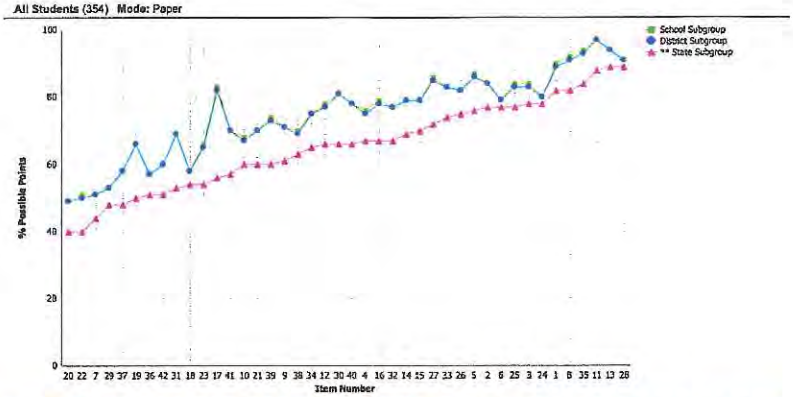
-Hingham Grade 5 students performed at or **above the state average** on all 42 test questions.

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
Science and Technology/Engineering
by All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 8

All Students (354) Mode: Paper



20 22 7 29 37 19 36 42 31 18 23 17 41 10 21 39 9 38 34 12 30 40 4 16 32 14 15 27 33 26 5 2 6 25 3 24 1 8 35 11 13 28

Grade 5 Science MCAS

-Hingham Grade 5 students performed **15 points above the state average** for all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
Science and Technology/Engineering
All Students

District: Hingham
Grade: Grade 5

All Students (349) Mode: Paper
Standards: Tested Standard

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
Science and Technology/Engineering				
All Items	54	80%	65%	15
Question Type				
Multiple Choice	38	87%	72%	15
Open Response	16	65%	49%	16
Strand / Topic				
Earth and Space Science (prek-8)	15	89%	81%	18
Earth's History	1	83%	70%	13
Rocks and Their Properties	3	80%	61%	20
Soil	2	90%	74%	16
The Earth in the Solar System	2	86%	68%	18
The Water Cycle	2	82%	59%	23
Weather	6	78%	64%	18
Life Science (prek-8)	16	81%	67%	14
Adaptations of Living Things	2	90%	79%	11
Characteristics of Plants and Animals	1	90%	87%	3
Energy and Living Things	1	93%	73%	20
Structures and Functions	7	69%	50%	19
Physical Sciences (prek-8)	14	80%	69%	12
Electrical Energy	2	90%	71%	19
Forms of Energy	3	84%	71%	13
Light Energy	1	80%	71%	17
Magnetic Energy	1	89%	68%	10
Properties of Objects and Materials	1	89%	72%	17
States of Matter	6	76%	63%	7
Technology/Engineering (prek-8)	8	78%	64%	15
Engineering Design	6	75%	58%	18
Materials and Tools	2	89%	81%	8

NOTE: MCAS results are suppressed for group counts of less than 10.
For open-response (OR), short-response (SR), short-answer (SA), and writing prompt (WP) items, values in the School % Possible Points, District % Possible Points and State % Possible Points columns represent the average percentage of possible points earned for these items.

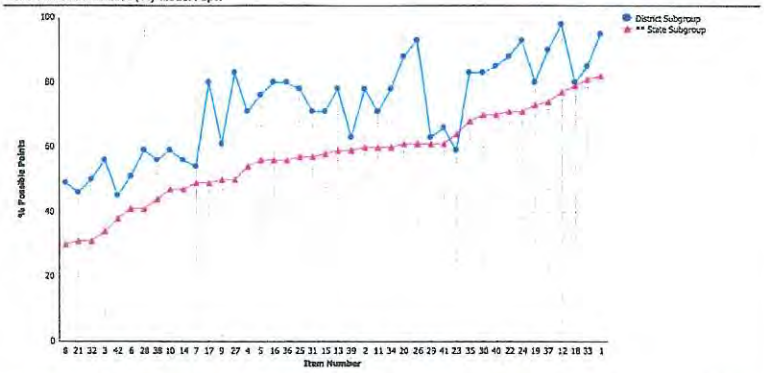
Grade 5 Science MCAS-SWD

-Grade 5 students with disabilities performed **above the state average** for SWD on 41 of 42 test questions.

Spring 2017 MCAS District Test Item Analysis Graph
Science and Technology/Engineering
by Disability Status

District: Hingham
Grade: Grade 5

Students w/ Disabilities (41) Mode: Paper



8 21 32 3 42 6 28 38 10 14 7 17 9 27 4 5 16 36 25 31 15 13 39 2 11 34 20 26 29 41 23 35 30 40 22 24 19 37 12 18 33 1

Grade 5 Science MCAS-SWD

-Hingham Grade 5 students with disabilities performed **15 points above the state average** for SWD on all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*

Spring 2017 MCAS District Results by Standards
Science and Technology/Engineering
by Disability Status

District: Hingham
Grade: Grade 5

Students w/ Disabilities (41) Mode: Paper
Standards: Tested Standard

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
Science and Technology/Engineering				
All Items	54	67%	52%	15
Question Type				
Multiple Choice	38	75%	60%	15
Open Response	16	47%	32%	15
Strand / Topic				
Earth and Space Science (preK-8)	16	67%	47%	20
Earth's History	1	78%	57%	21
Rocks and Their Properties	3	65%	45%	20
Soil	2	82%	60%	22
The Earth in the Solar System	2	79%	54%	25
The Water Cycle	2	65%	48%	17
Weather	6	58%	41%	17
Life Science (preK-8)	18	69%	54%	15
Adaptations of Living Things	7	78%	67%	11
Characteristics of Plants and Animals	1	80%	79%	1
Energy and Living Things	1	76%	60%	16
Structures and Functions	7	56%	37%	19
Physical Sciences (preK-8)	14	67%	55%	12
Electrical Energy	2	82%	63%	19
Forms of Energy	3	72%	59%	13
Light Energy	1	78%	60%	18
Magnetic Energy	1	98%	77%	21
Properties of Objects and Materials	1	76%	56%	20
States of Matter	6	51%	46%	5
Technology/Engineering (preK-8)	8	60%	48%	12
Engineering Design	6	52%	40%	12
Materials and Tools	2	88%	72%	15

NOTE: MCAS results are suppressed for group counts of less than 10.
For open-response (OR), short-response (SR), short-answer (SA), and writing prompt (WP) items, values in the School % Possible Points, District % Possible Points and State % Possible Points columns represent the average percentage of possible points earned for these items.

Grade 5 Science MCAS

-Analysis of aggregate results and results for SWD indicate that HMS students **perform above state level peers on multi-choice and open response questions**.

-Open response questions remains an **area for continued focus** for all students.

All Students (349) Mode: Paper

Standards: Tested Standard

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
Science and Technology/Engineering				
All items	54	80%	65%	15
Question Type				
Multiple Choice	38	87%	72%	15
Open Response	16	65%	48%	16

Students w/ Disabilities (41) Mode: Paper

Standards: Tested Standard

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
Science and Technology/Engineering				
All items	54	67%	52%	15
Question Type				
Multiple Choice	38	75%	60%	15
Open Response	16	47%	32%	15

Strategies for Improvement

Grade 5 Science MCAS

- Strategies for improvement on **open response questions** include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.
- Further **integration of engineering** needed throughout K-5 science content.

SAMPLE OPEN RESPONSE QUESTION

Science and Technology/Engineering **Session 2**

Question 21 is an open-response question.

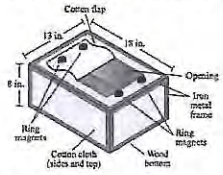
- **BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.**
- **Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.**
- **If you do the work in your head, explain in writing how you did the work.**

Write your answer to question 21 in the space provided in your Student Answer Booklet.

21 A student is designing a cat carrier that can be placed under a seat on an airplane. The carrier must meet the following requirements:

- The maximum carrier size is 18 in. long by 13 in. wide by 8 in. high.
- The carrier must be lightweight.
- Air must be able to flow easily through the carrier.
- The carrier must have soft sides.
- The bottom of the carrier must be waterproof.
- The carrier must be able to be folded for storage.
- The carrier must have space for the cat to turn around and lie down.

The diagram below shows the design features of a prototype that the student built.



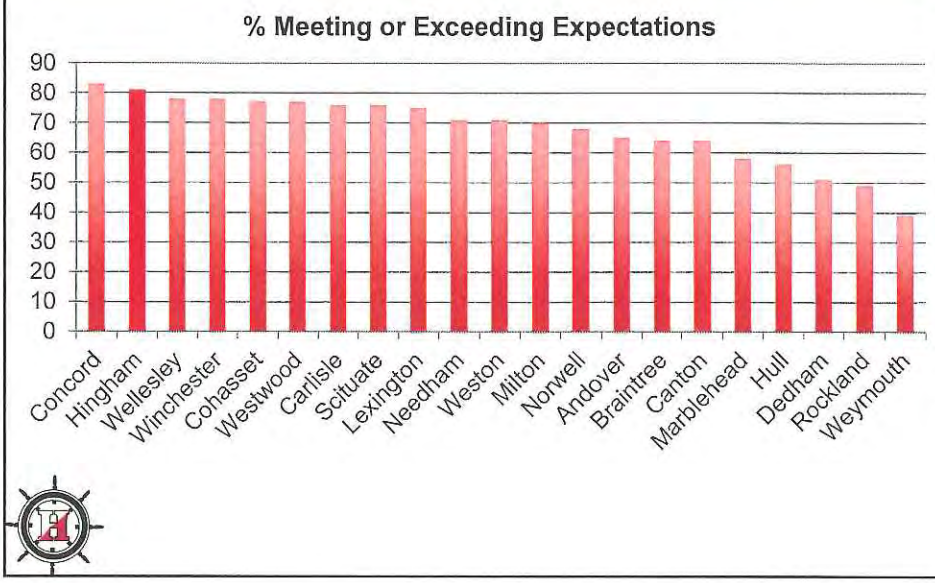
a. Identify two requirements the student was trying to meet by using cotton cloth for the sides and top of the carrier.

b. Identify two design features (characteristics) of the prototype that do not meet the requirements. Explain how you know each feature does not meet the requirements.

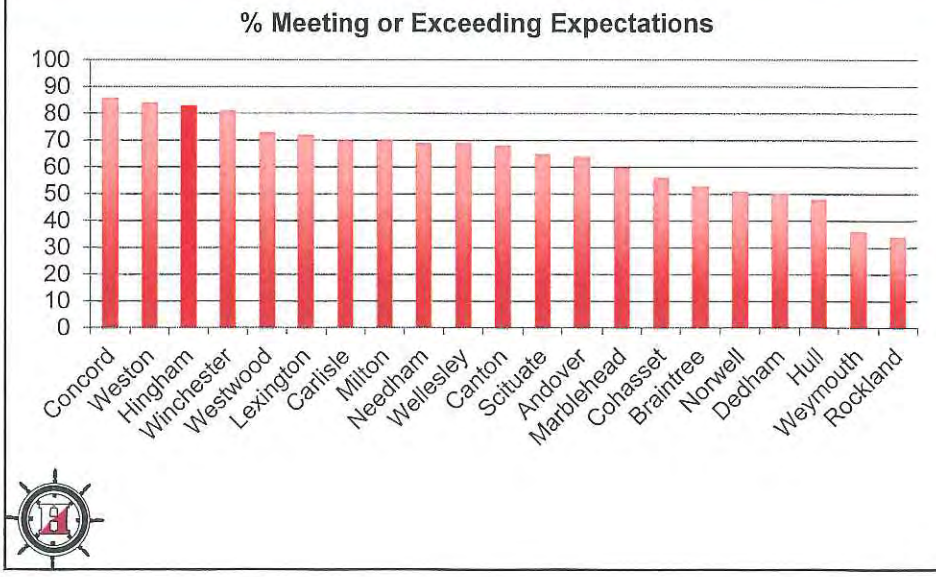
The student included a flap in the prototype so a cat could be easily moved in and out. When the flap is closed, the magnets on the flap should be attracted to the magnets on the top of the carrier. However, when the student tried to close the flap, the magnets on the top of the carrier pushed the flap away.

c. Explain why the magnets pushed the flap away and how the magnets could be fixed.

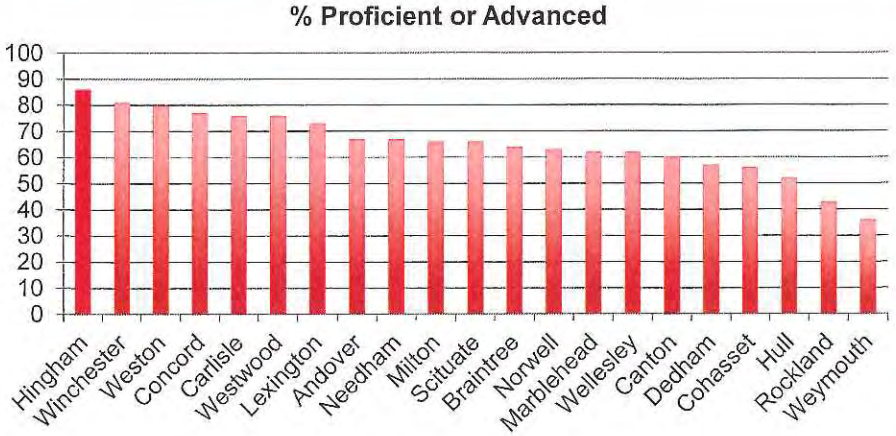
Benchmark Comparison: Grade 5 ELA



Benchmark Comparison: Grade 5 Math



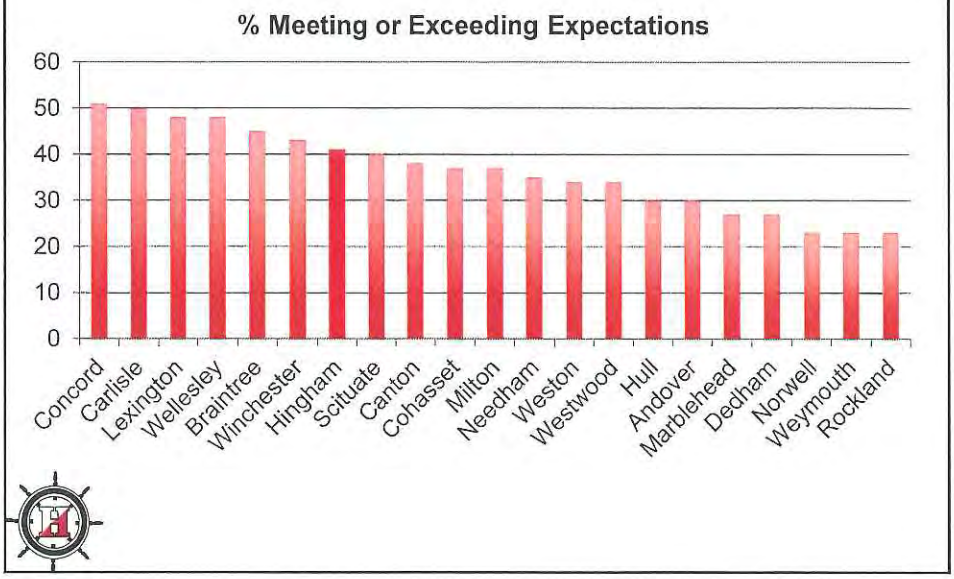
Benchmark Comparison: Grade 5 STE



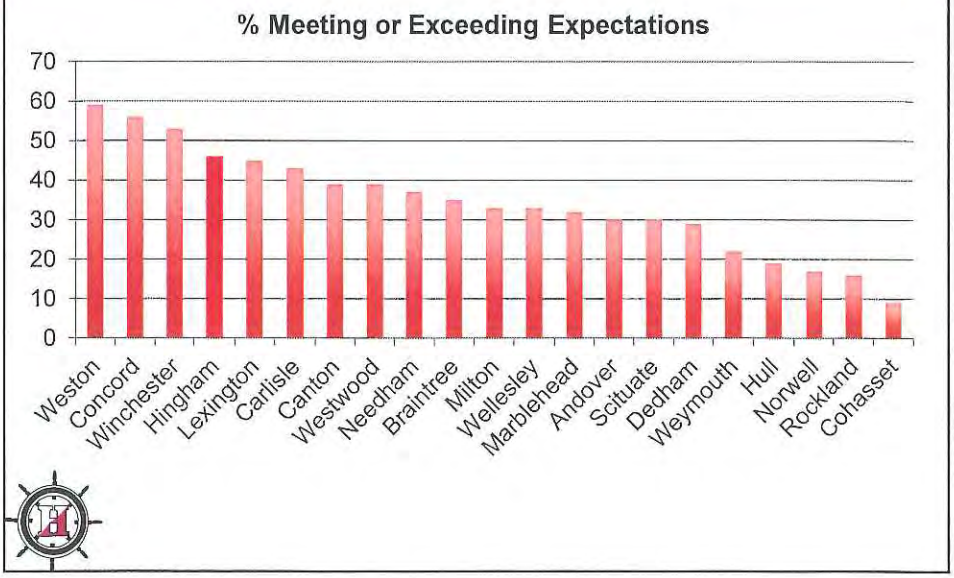
Grade 5: Performance Summary

Subject	Summary
ELA	• 81% of Hingham Grade 5 ELA students met or exceeded expectations on the new exam; performed ABOVE the state average on all 28 test items • Performed 12% higher than the state average in ALL content strands: language, reading, and writing
Math	• 82% of students earning a score of meeting expectations or higher. performed above the state average on 39 of 40 test questions • Performed between 10-24 points above the state average for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking.*
Science	• 99% earned a passing score on science MCAS with 86% proficient or higher. • Performed at or above the state average on all 42 test questions. • 15 points above the state average for all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*

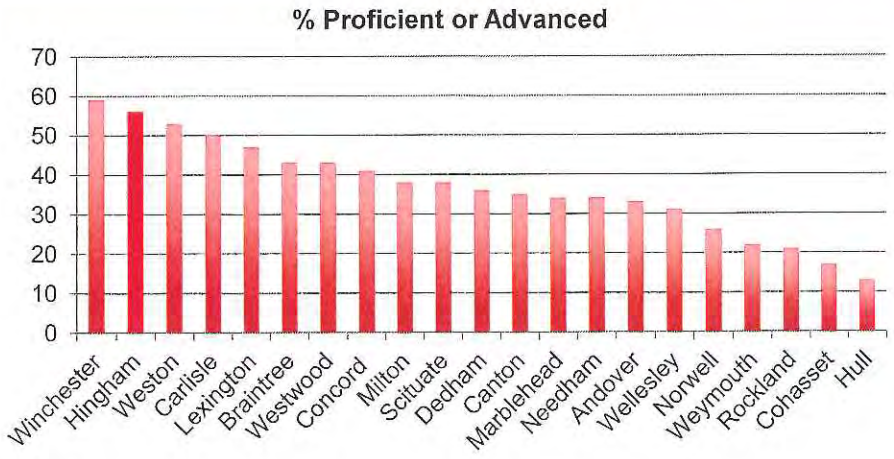
High Needs: Grade 5 ELA



High Needs: Grade 5 Math



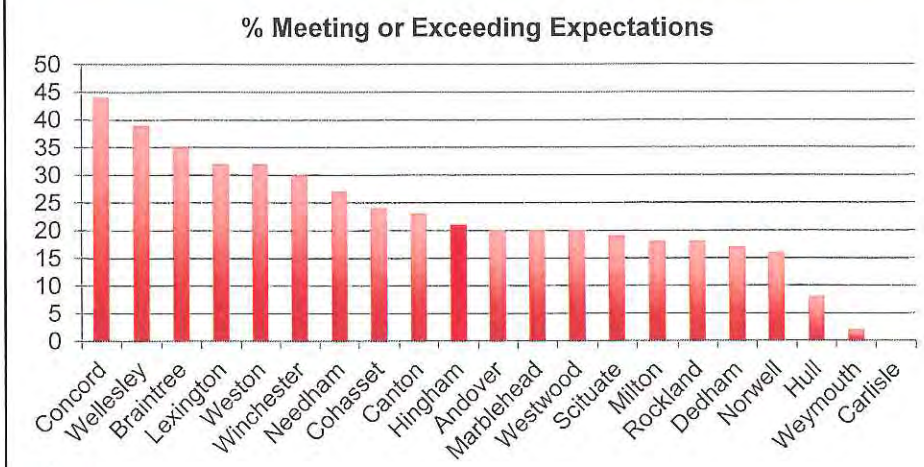
High Needs: Grade 5 STE



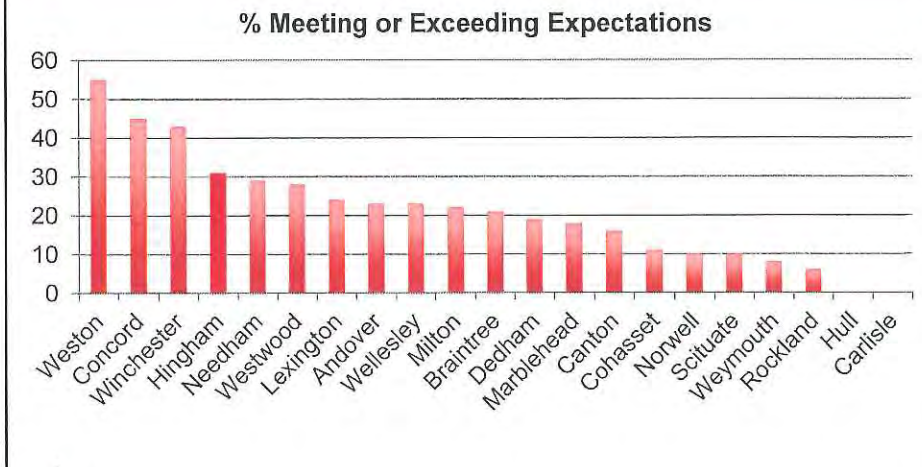
Grade 5: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 27 of 28 test items	• Challenge areas included vocabulary in context, and speaker's tone and point of view in poetry
Math	• Performed at or above the state average on 39 of 40 test questions and below the state average for 1 of 40 test questions	• Challenge areas include order of operations with grouping symbols, comparing mixed numbers and decimals, and subtraction of decimals with unlike denominators
Science		

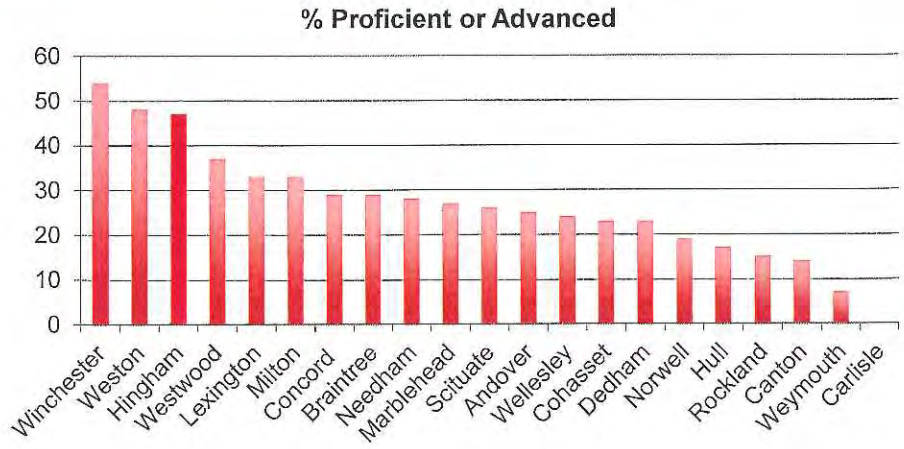
Students with Disabilities: Grade 5 ELA



Students with Disabilities: Grade 5 Math



Students with Disabilities: Grade 5 STE



Grade 5: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Grade 5 ELA students with disabilities performed at or above the state average for SWD on 27 of 28 test items	• Challenge areas included vocabulary in context and speaker's tone and point of view in poetry
Math	• performed at or above the state average for SWD on 38 of 40 test questions and below the state average for 2 of 40 test questions	• Challenge areas include order of operations with grouping symbols, comparing mixed numbers and decimals, and expressions and their written equivalent
Science	• SWD performed above the state average for SWD on 41 of 42 test questions. • SWD performed 15 points above the state average for SWD on all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering*	• Open response questions remains an area for continued focus for all students

Areas for Improvement: Elementary ELA

- Writing (idea development, conventions)
- Language (vocabulary-in-context, parts of speech)
- Reading Skills (point of view, main idea, inference, character development, supporting evidence, vocabulary in context, paired passages across genres)

Strategies for Improvement: Elementary ELA

- Targeted implementation of *Journeys* - parts of speech lessons
- *Empowering Writers* program PD - expository responses to text; incorporation of writing strategies in all content areas
- Regular implementation of standards-based reading assessments
- Direct instruction - responding to questions that compare multiple texts
- On-line test-taking practice to ensure familiarity with format (e.g., essay-writing in text boxes)
- Include special education teachers in department meetings and ongoing discussions regarding MCAS findings and strategies for improvement

Areas for Improvement: Elementary Math

- Curricular areas that were less successful:
  - –Grade 3: Geometry and Measurement with area and perimeter
  - –Grade 4: Solving multi-step problems with all operations
  - –Grade 5: Increase rigor of order of operation problems
- New question types
  - –Selected Response Questions
  - –Constructed Response
- Over half of the problems in our "relative weakness" area involves applying math to real world situations

Strategies for Improvement: Elementary Math

- District-wide Tier 1 instructional coaching for all classroom teachers with a particular focus on differentiated instruction using Math Workshop Model
- District-wide instructional coaching on Number Talks to help classroom teachers promote flexible thinking with Base-Ten arithmetic
- Increase practice modules on new question types
- More coordination between Math Department and special education department to discuss areas for improvement
- Development of Power Standards and elementary progression of standards through multiple grades
- Review the depth and rigor of EM4 units of study and add supplementary materials as needed.
  - –Grade 3: Geometry and Measurement with Area and Perimeter
  - –Grade 4: Solving multi-step problems with all operations
  - –Grade 5: Increase rigor of Order of Operation problems
- Maintain a focus on Everyday Math 1 and 2-day Open Response units

Strategies for Improvement: Grade 5 Science

- Strategies for improvement on **open response questions** include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.
- Further **integration of engineering** needed.

SAMPLE OPEN RESPONSE QUESTION

Science and Technology/Engineering **Session 2**

Question 21 is an open-response question.

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- The carrier must have soft sides.
- The bottom of the carrier must be waterproof.
- The carrier must be able to be folded for storage.
- The carrier must have space for the cat to turn around and lie down.

The diagram below shows the design features of a prototype that the student built.

a. Identify two requirements the student was trying to meet by using cotton cloth for the sides and top of the carrier.

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The student included a flap in the prototype so a cat could be easily moved in and out. When the flap is closed, the magnets on the flap should be attracted to the magnets on the top of the carrier. However, when the student tried to close the flap, the magnets on the top of the carrier pushed the flap away.

c. Explain why the magnets pushed the flap away and how the magnets could be fixed.

238

SECTION II

Report of Middle School Performance on the ELA, Mathematics, and Science, Technology, and Engineering MCAS Examinations

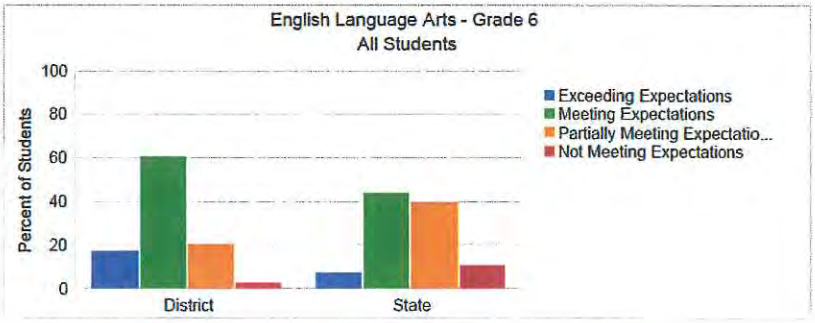
(All Students, High Needs Students, and Students with Disabilities)

2017 Grade 6 ELA Next-Generation MCAS

Grade 6 ELA MCAS

-- 78% of Hingham Grade 6 ELA students met or exceeded expectations on the new exam

--Statewide, only 50% of Grade 6 ELA students met or exceeded expectations on the new exam



English Language Arts	N Included	% District	% State
Exceeding Expectations	61	17	7
Meeting Expectations	221	61	43
Partially Meeting Expectations	74	20	39
Not Meeting Expectations	9	2	10
Total Included	365		

Grade 6 ELA MCAS

-- Hingham Grade 6 ELA students performed 13% higher than the state average in ALL content strands: language, reading, and writing

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 6

All Students (361) **Mode:** Paper
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All Items	49	70%	57%	13
Question Type				
Essay	23	63%	47%	16
Selected Response	26	77%	66%	11
Strand / Topic				
Language Anchor Standard	11	77%	61%	16
Conventions of Standard English	10	75%	59%	16
Vocabulary Acquisition and Use	1	90%	79%	11
Reading Anchor Standard	24	77%	66%	11
Craft and Structure	7	67%	56%	11
Integration of Knowledge and Ideas	4	73%	64%	9
Key Ideas and Details	13	83%	72%	11
Writing Anchor Standard	14	53%	39%	14
Text Types and Purposes	14	53%	39%	14

Grade 6 ELA MCAS

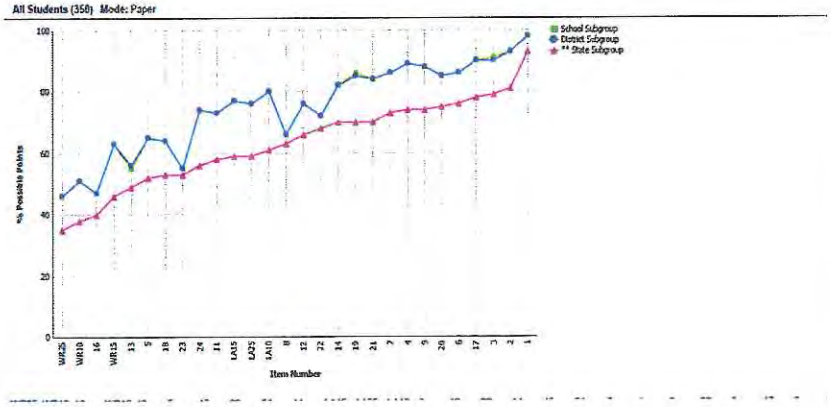
--Hingham Grade 6 ELA students performed ABOVE the state average on all 28 test items

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 6

All Students (350) Mode: Paper



Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

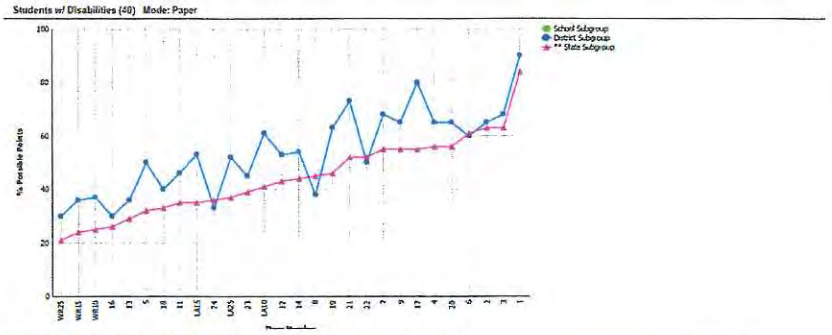
Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by Disability Status

District: Hingham
School: Hingham Middle School
Grade: Grade 6

Grade 6 ELA MCAS-SWD

-- Grade 6 ELA students with disabilities performed at or above the state average for SWD on 24 of 28 test items

-- Challenge areas included identifying author's purpose, connecting story elements to theme, and finding supporting evidence



Students w/ Disabilities (40) **Standards: MA 2011 Standards Mode: Paper**

Item Information					% Possible Points			
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
16	SR	RE	CCRA.R.5	Analyze why an author includes a sentence in a passage.	1	30%	26%	4
24	SR	RE	CCRA.R.4	Analyze the impact of an author's word choice on meaning of a passage.	1	33%	36%	-3
13	SR	RE	CCRA.R.5	Analyze how a scene contributes to the theme of a text and choose supporting evidence.	2	36%	29%	7
8	SR	RE	CCRA.R.8	Evaluate how evidence from an article supports a claim in a passage.	1	38%	45%	-7

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

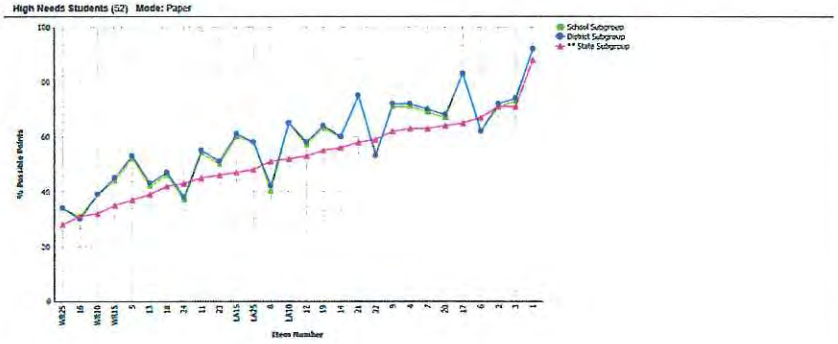
Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by High Needs Status

District: Hingham
School: Hingham Middle School
Grade: Grade 6

Grade 6 ELA MCAS-High Needs

-- Grade 6 ELA students with high needs performed at or above the state average for high needs students on 24 of 28 test items

-- Challenge areas included identifying author's purpose, analyzing word choice, and evaluating supporting evidence



High Needs Students (52) **Standards: MA 2011 Standards Mode: Paper**

Item Information					% Possible Points				
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	School	District	State	School-State Diff.
16	SR	RE	CCRA.R.5	Analyze why an author includes a sentence in a passage.	1	31%	30%	31%	0
24	SR	RE	CCRA.R.4	Analyze the impact of an author's word choice on meaning of a passage.	1	37%	38%	43%	-6
8	SR	RE	CCRA.R.8	Evaluate how evidence from an article supports a claim in a passage.	1	40%	42%	51%	-11

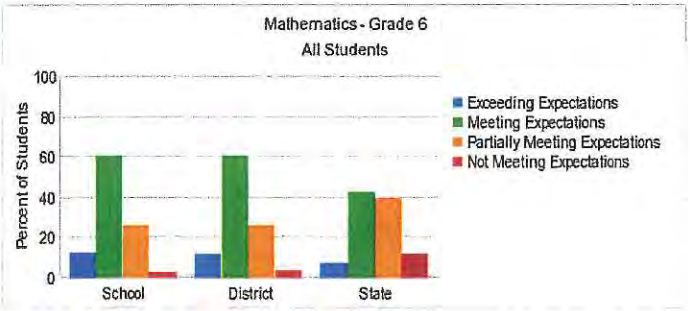
2017 Grade 6 Mathematics MCAS

Grade 6 Mathematics MCAS

-97% of Grade 6 students earned a passing score with **72% of students earning a score of meeting expectations or higher.**

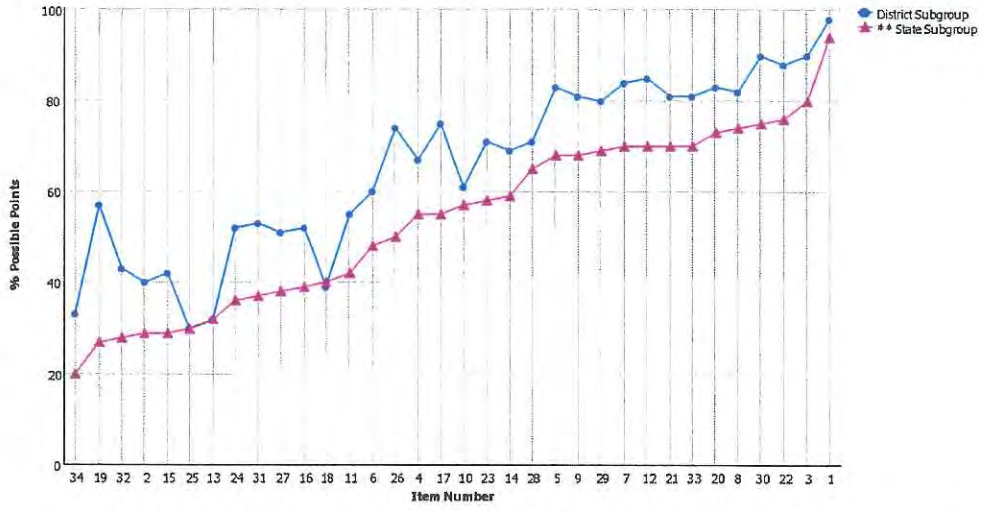
-**Statewide** only 49% of Grade 6 students earned a score of meeting expectations or higher.

Mathematics	N Included	% School	% District	% State
Exceeding Expectations	42	12	12	7
Meeting Expectations	216	60	60	42
Partially Meeting Expectations	91	25	25	39
Not Meeting Expectations	9	3	3	11
Total Included	358			



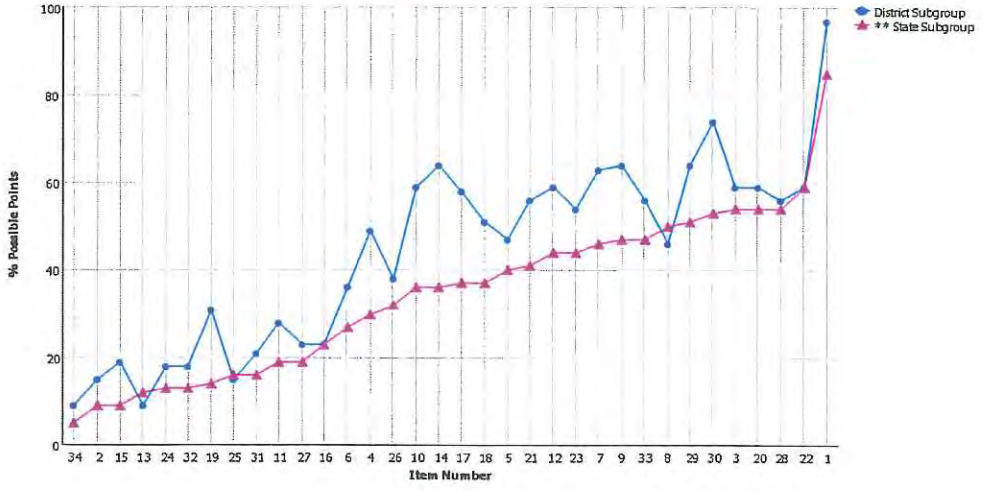
Grade 6 Math MCAS

-Grade 6 students performed **at or above the state average** on 39 of 40 test questions.



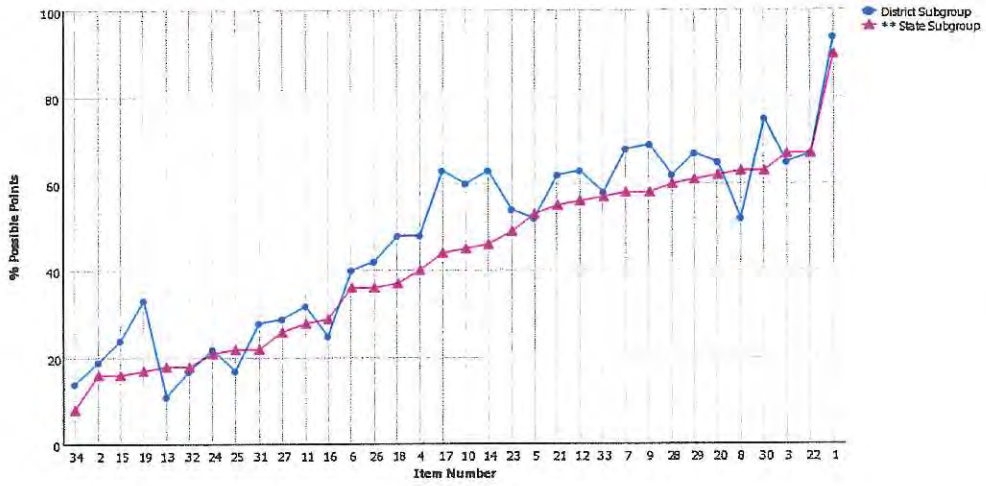
Grade 6 Math MCAS-SWD

-Grade 6 students with disabilities performed **at or above the state average** for SWD on 37 of 40 test questions and **below the state average** for 3 of 40 test questions.



Grade 6 Math MCAS- High Needs

-Grade 6 High Needs students performed **at or above the state average** on 33 of 40 test questions and **below the state average** for 7 of 40 test questions.



Grade 6 Math MCAS

-Grade 6 students performed **between 11-17 points above the state average** for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System* **and 6 points above for** *Geometry.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Results by
Standards
Mathematics
All Students

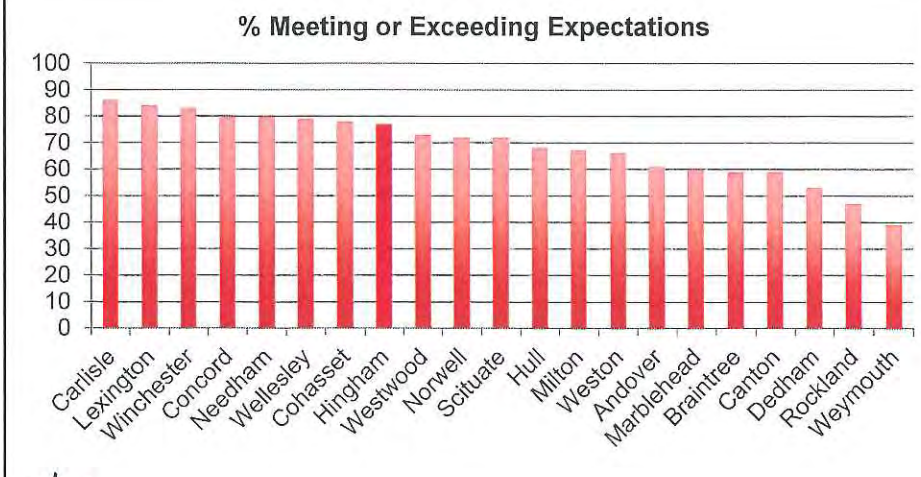
District: Hingham
School: Hingham Middle School
Grade: Grade 6

All Students Students (356)

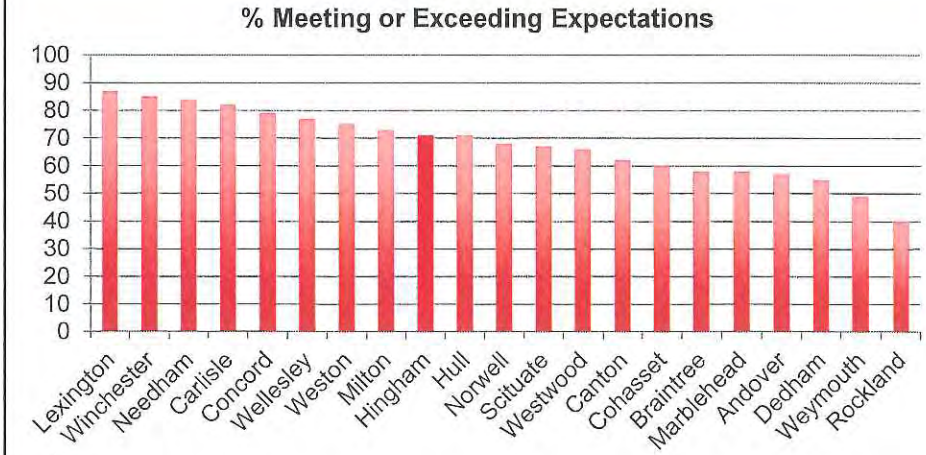
Standards: MA 2011 Standards **Mode:** Paper

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/ State Diff
Mathematics					
All items	54	61%	61%	49%	12
Question Type					
Constructed Response	14	49%	49%	39%	10
Short Answer	22	61%	61%	48%	13
Selected Response	18	71%	71%	59%	13
Strand / Topic					
Expressions and Equations	16	68%	68%	58%	11
Apply and extend previous understandings of arithmetic to algebraic expressions.	3	47%	47%	45%	2
Reason about and solve one-variable equations and inequalities.	8	70%	70%	58%	12
Represent and analyze quantitative relationships between dependent and independent variables.	5	79%	79%	64%	14
Geometry	8	47%	47%	41%	6
Solve real-world and mathematical problems involving area, surface area, and volume.	8	47%	47%	41%	6
Ratios and Proportional Relationships	11	55%	55%	40%	15
Understand ratio concepts and use ratio reasoning to solve problems.	11	55%	55%	40%	15
Statistics and Probability	9	80%	80%	63%	17
Develop understanding of statistical variability.	1	88%	88%	76%	11
Summarize and describe distributions.	8	79%	79%	62%	17
The Number System	10	52%	52%	41%	11
Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	6	38%	38%	25%	13
Apply and extend previous understandings of numbers to the system of rational numbers.	1	83%	83%	73%	10
Compute fluently with multi-digit numbers and find common factors and multiples.	3	71%	71%	63%	8

Benchmark Comparison: Grade 6 ELA



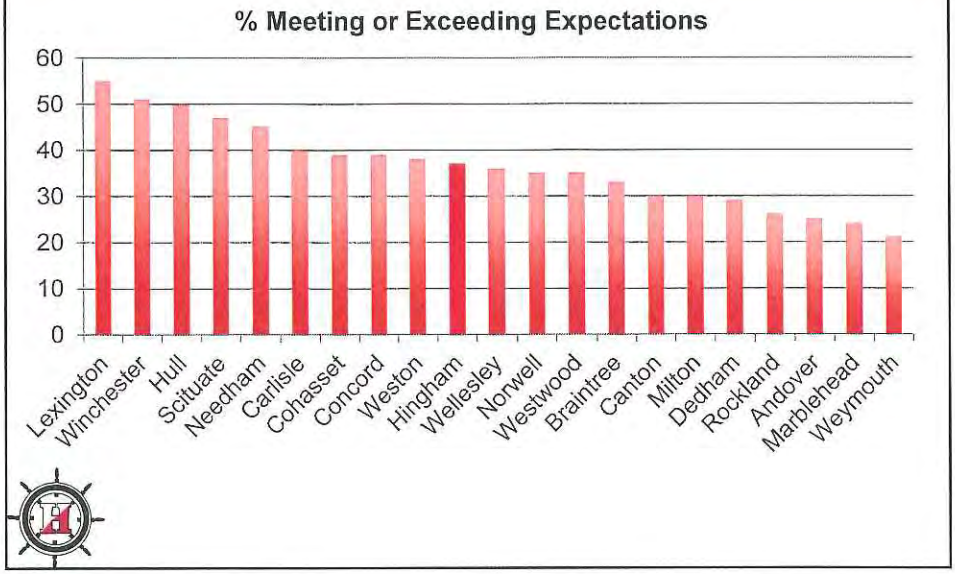
Benchmark Comparison: Grade 6 Math



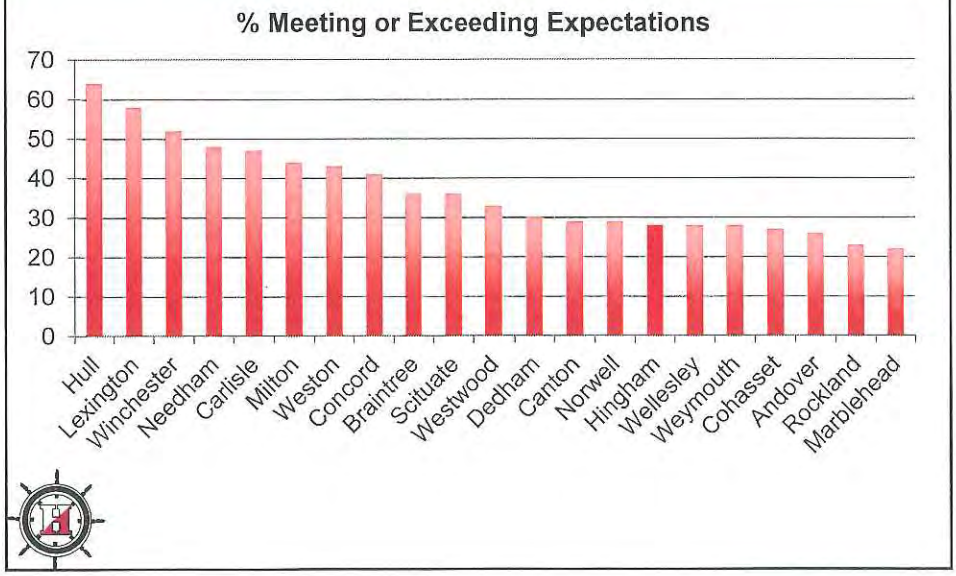
Grade 6: Performance Summary

Subject	Summary
ELA	• 78% of Hingham Grade 6 ELA students met or exceeded expectations on the new exam; performed ABOVE the state average on all 28 test items • Performed 13% higher than the state average in ALL content strands: language, reading, and writing
Math	• 72% of students earning a score of meeting expectations or higher. • Performed at or above the state average on 39 of 40 test questions • Performed between 11-17 points above the state average for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System* and 6 points above for *Geometry*.

High Needs: Grade 6 ELA



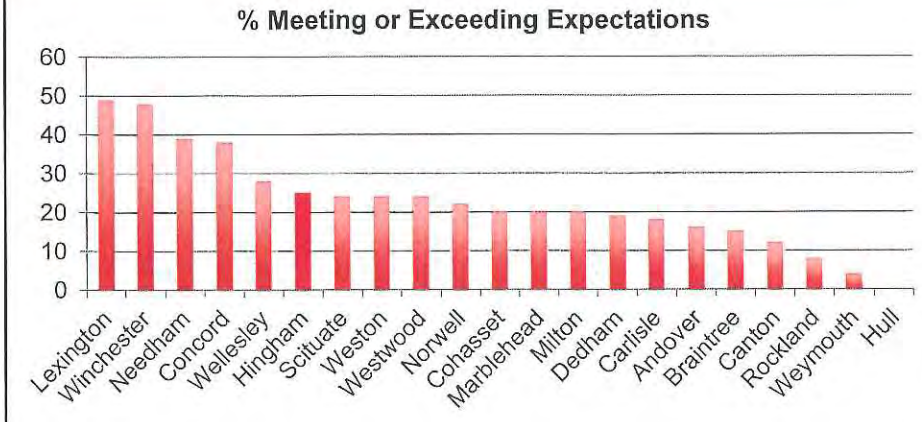
High Needs: Grade 6 Math



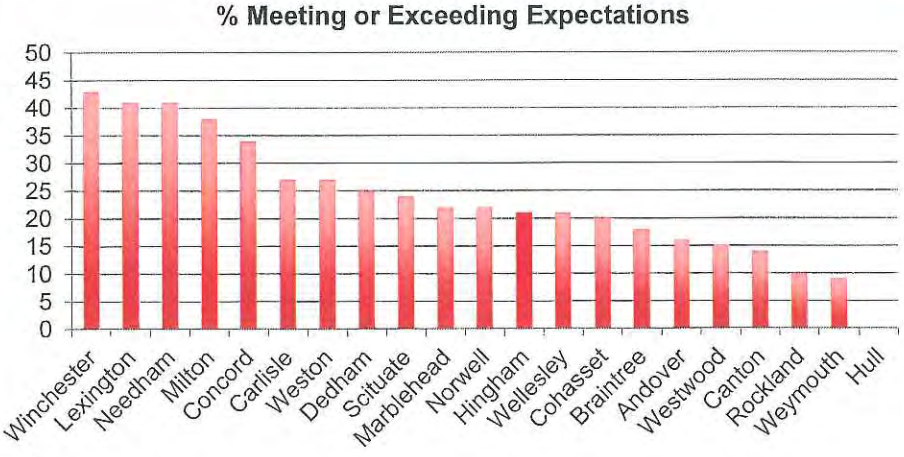
Grade 6: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 24 of 28 test items	• Challenge areas included identifying author's purpose, analyzing word choice, and evaluating supporting evidence
Math	• Performed at or above the state average on 33 of 40 test questions and below the state average for 7 of 40 test questions	• Challenge areas include area of a circle, volume of a prism, and equations in a real world context

Students with Disabilities: Grade 6 ELA



Students with Disabilities: Grade 6 Math



Grade 6: Areas of Strength & Opportunity

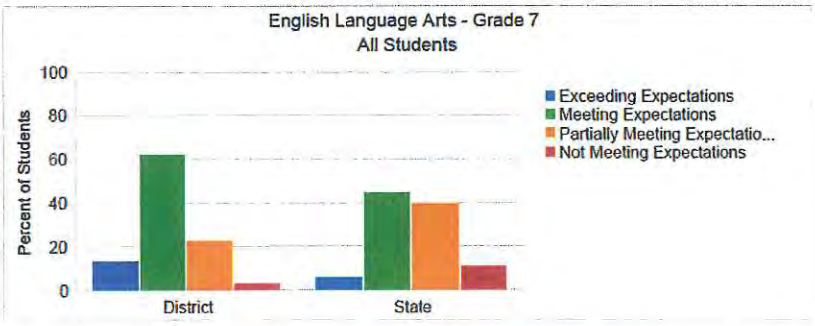
Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 24 of 28 test items	• Challenge areas included identifying author's purpose, connecting story elements to theme, and finding supporting evidence
Math	• Performed at or above the state average for SWD on 37 of 40 test questions and below the state average for 3 of 40 test questions	• Challenge areas include measurement of circles, distributive property, and equations in a real world context

2017 Grade 7 ELA Next-Generation MCAS

Grade 7 ELA MCAS

-- 75% of Hingham Grade 7 ELA students met or exceeded expectations on the new exam

-- Statewide, only 50% of Grade 7 ELA students met or exceeded expectations on the new exam



English Language Arts	N Included	% District	% State
Exceeding Expectations	48	13	6
Meeting Expectations	229	62	44
Partially Meeting Expectations	84	23	39
Not Meeting Expectations	10	3	11
Total Included	371		

Grade 7 ELA MCAS

-- Hingham Grade 7 ELA students performed 11% higher than the state average in ALL content strands: language, reading, and writing

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 7

All Students (370) **Mode:** Paper
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All Items	49	73%	62%	11
Question Type				
Essay	23	67%	56%	11
Selected Response	26	78%	68%	10
Strand / Topic				
Language Anchor Standard	20	78%	66%	12
Conventions of Standard English	15	76%	64%	12
Knowledge of Language	2	89%	79%	10
Vocabulary Acquisition and Use	3	80%	67%	13
Reading Anchor Standard	15	80%	69%	11
Craft and Structure	8	77%	68%	9
Integration of Knowledge and Ideas	1	82%	64%	18
Key Ideas and Details	6	83%	72%	11
Writing Anchor Standard	14	59%	49%	10
Text Types and Purposes	14	59%	49%	10

Grade 7 ELA MCAS

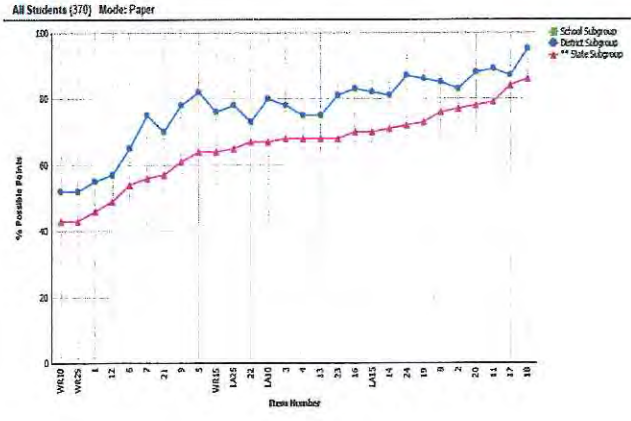
--Hingham Grade 7 ELA students performed ABOVE the state average on all 28 test items

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 7

All Students (370) **Mode:** Paper



ELEMENTARY & SECONDARY EDUCATION

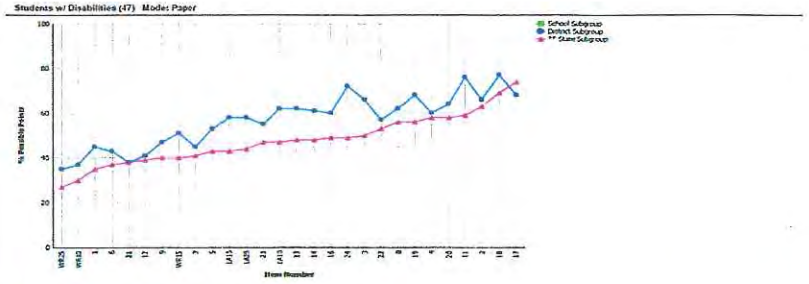
Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by Disability Status

District: Hingham
School: Hingham Middle School
Grade: Grade 7

Grade 7 ELA MCAS-SWD

-- Grade 7 ELA students with disabilities performed at or above the state average for SWD on 27 of 28 test items

-- Challenge areas included drawing inferences, determining theme, and identifying punctuation function



Students w/ Disabilities (47) **Standards: MA 2011 Standards Mode: Paper**

Item Information					% Possible Points			
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
21	SR	RE	CCRA.R.1	Make an inference about a character based on information from the passage.	1	36%	36%	0
12	SR	RE	CCRA.L.2	Determine a theme of the passage.	2	41%	39%	2
6	SR	LA	CCRA.L.1	Determine the function of punctuation used in a sentence.	1	43%	37%	6
17	SR	RE	CCRA.R.4	Determine the meaning of a phrase, based on analysis of the passage.	1	68%	74%	-6

ELEMENTARY & SECONDARY EDUCATION

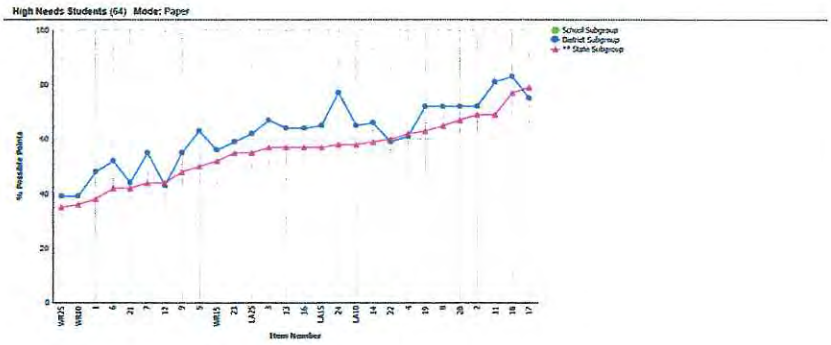
Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by High Needs Status

District: Hingham
School: Hingham Middle School
Grade: Grade 7

Grade 7 ELA MCAS-High Needs

-- Grade 7 ELA students with high needs performed at or above the state average for high needs students on 24 of 28 test items

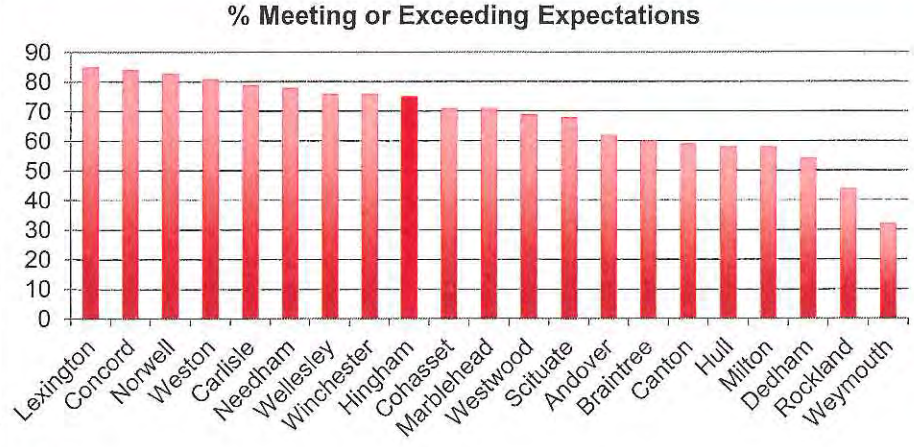
-- Challenge areas included drawing inferences, determining theme, and identifying the purpose of poetic form



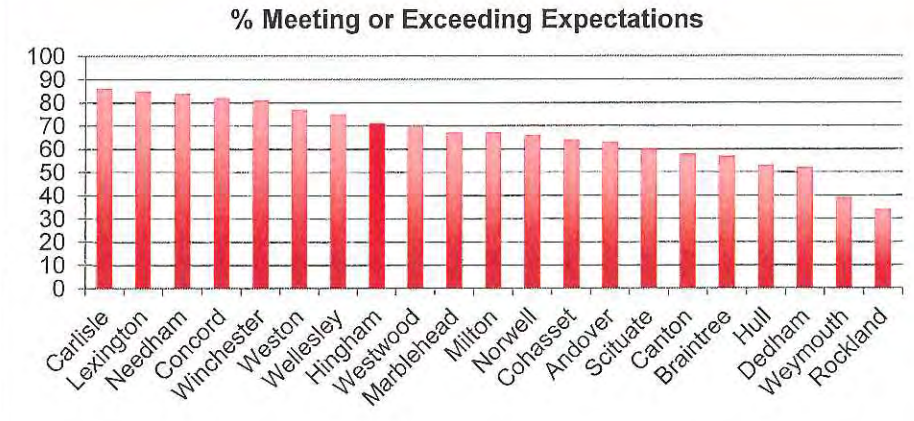
High Needs Students (64) **Standards: MA 2011 Standards Mode: Paper**

Item Information					% Possible Points				
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	School	District	State	School-State Diff.
12	SR	RE	CCRA.L.2	Determine a theme of the passage.	2	43%	43%	44%	-1
21	SR	RE	CCRA.R.1	Make an inference about a character based on information from the passage.	1	44%	44%	42%	2
1	SR	RE	CCRA.R.5	Analyze the purpose of a poem's form.	1	48%	48%	38%	10

Benchmark Comparison: Grade 7 ELA



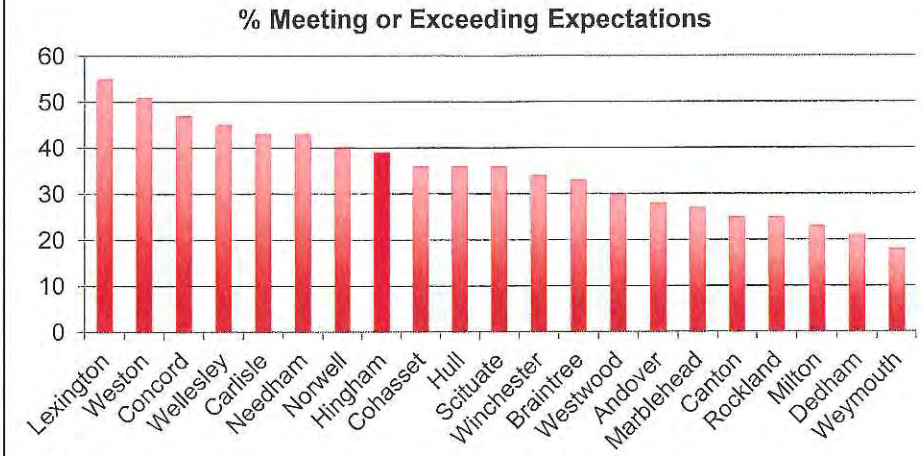
Benchmark Comparison: Grade 7 Math



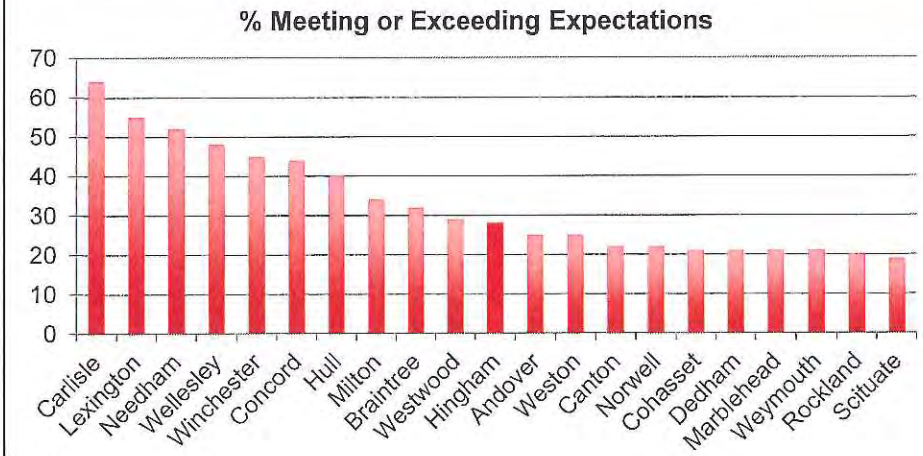
Grade 7: Performance Summary

Subject	Summary
ELA	• 75% of Hingham Grade 7 ELA students met or exceeded expectations on the new exam; performed ABOVE the state average on all 28 test items • Performed 11% higher than the state average in ALL content strands: language, reading, and writing
Math	• 71% of students earning a score of meeting expectations or higher. • Performed at or above the state average on 39 of 40 test questions. • Performed between 10-15 points above the state average for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System, and Geometry.*

High Needs: Grade 7 ELA



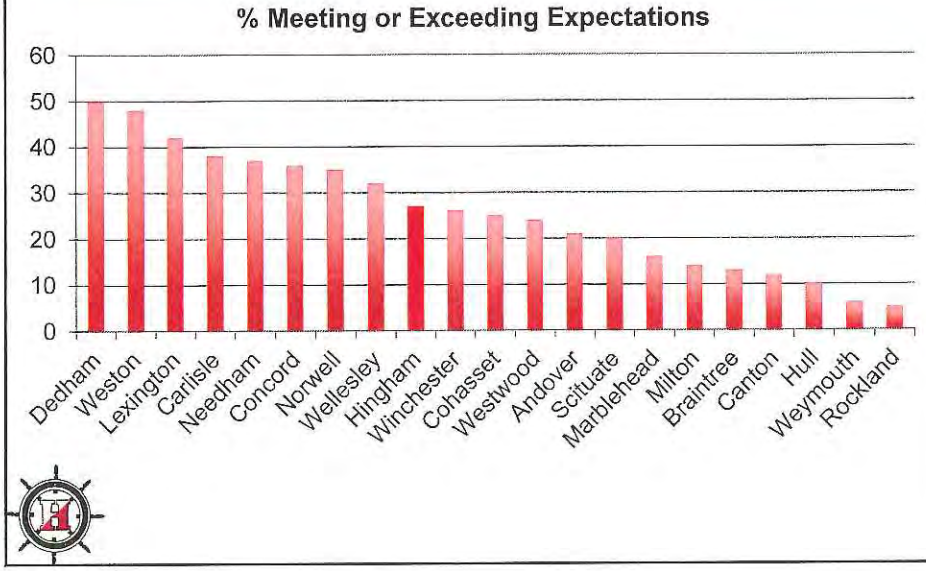
High Needs: Grade 7 Math



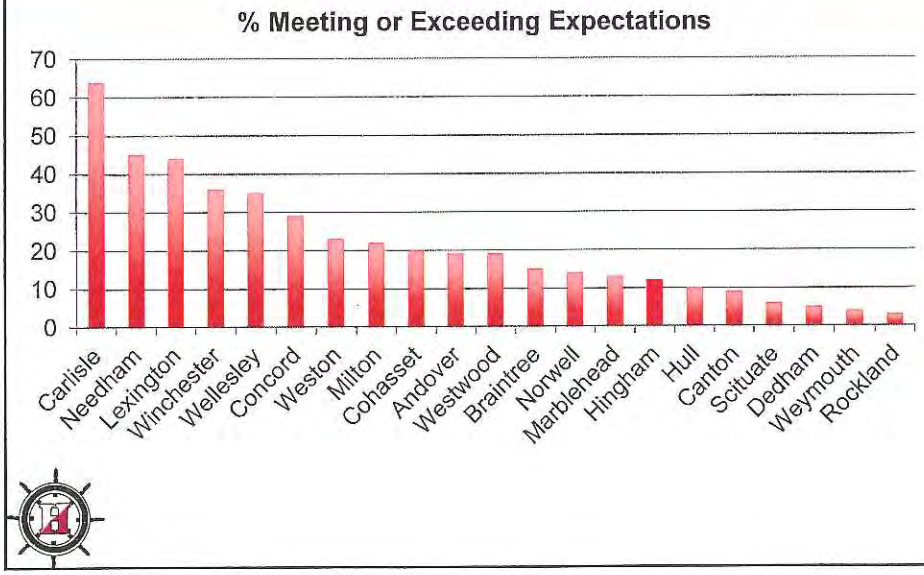
Grade 7: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 24 of 28 test items	• Challenge areas included drawing inferences, determining theme, and identifying the purpose of poetic form
Math	• Performed at or above the state average on 34 of 40 test questions and below the state average for 6 of 40 test questions.	• Challenge areas include multi-step real-world problems involving ratios, real world problems involving angle properties, equivalent expressions

Students with Disabilities: Grade 7 ELA



Students with Disabilities: Grade 7 Math



Grade 7: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 27 of 28 test items	• Challenge areas included drawing inferences, determining theme, and identifying punctuation function
Math	• Performed at or above the state average for SWD on 34 of 40 test questions and below the state average for 6 of 40 test questions	• Challenge areas include multi-step real-world problems involving ratios, real world problems involving angle properties, equivalent expressions

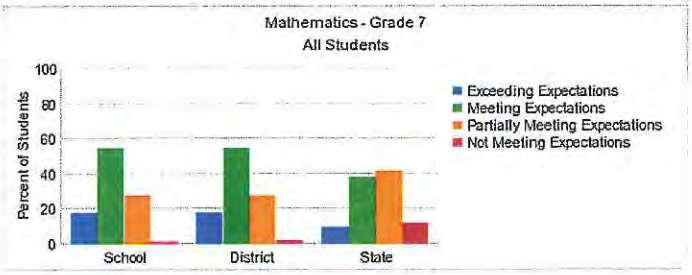
2017 Grade 7 Mathematics MCAS

Grade 7 Mathematics MCAS

-99% of Grade 7 students earned a passing score with **71% of students earning a score of meeting expectations or higher.**

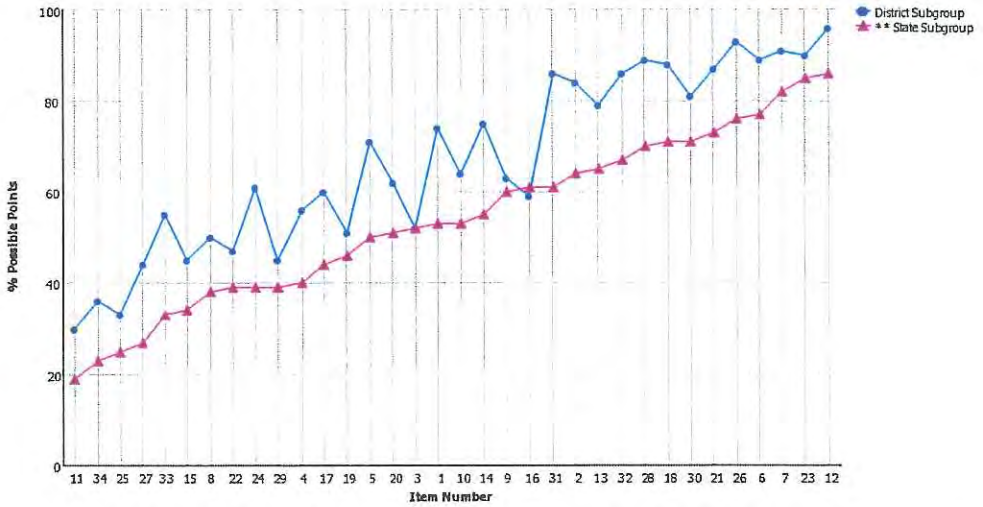
-**Statewide** only 47% of Grade 7 students earned a score of meeting expectations or higher.

Mathematics	N Included	% School	% District	% State
Exceeding Expectations	64	17	17	9
Meeting Expectations	201	54	54	38
Partially Meeting Expectations	101	27	27	42
Not Meeting Expectations	4	1	1	12
Total Included	370			



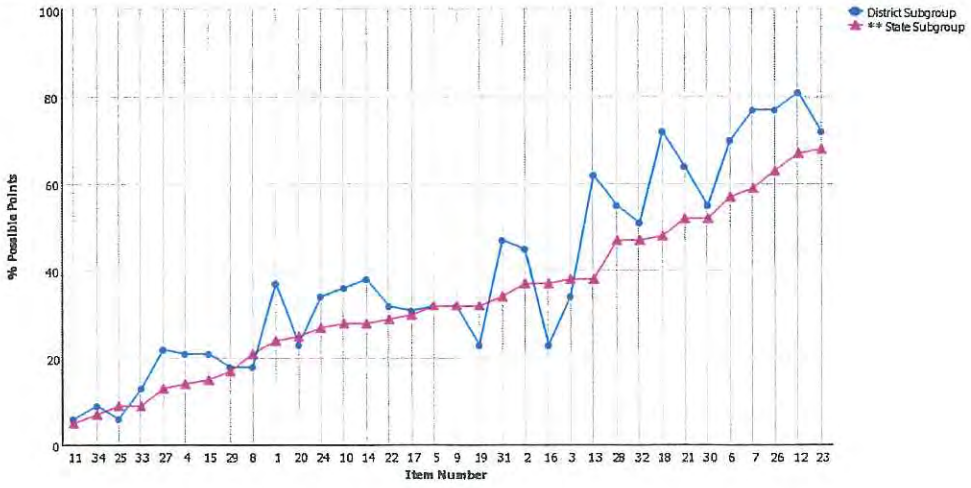
Grade 7 Math MCAS

-Grade 7 students performed **at or above the state average** on 39 of 40 test questions.



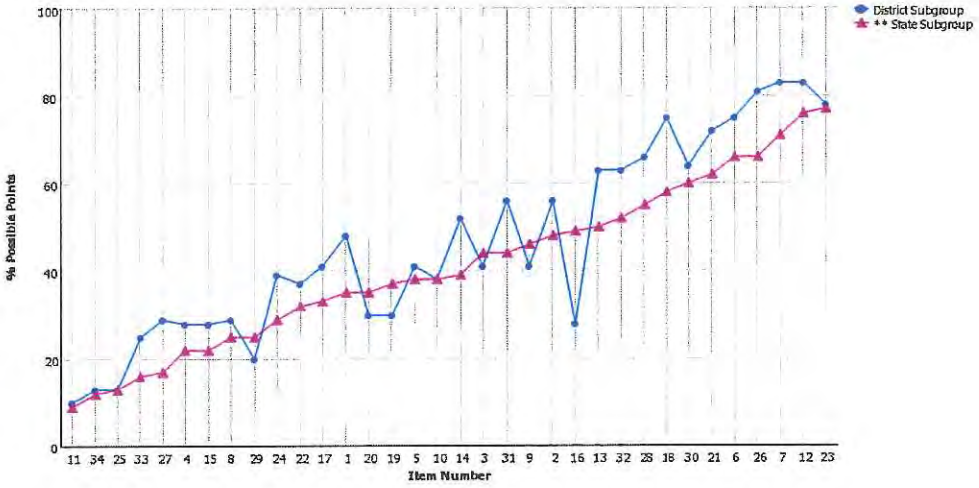
Grade 7 Math MCAS-SWD

-Grade 7 students with disabilities performed **at or above the state average** for SWD on 34 of 40 test questions and **below the state average** for 6 of 40 test questions.



Grade 7 Math MCAS-High Needs

-Grade 7 High Needs students performed **at or above the state average** on 34 of 40 test questions and **below the state average** for 6 of 40 test questions.



Grade 7 Math MCAS

-Grade 7 students performed **between 10-15 points above the state average** for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System, and Geometry.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Results by Standards
Mathematics
All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 7

All Students Students (370)

Standards: MA 2011 Standards **Mode:** Paper

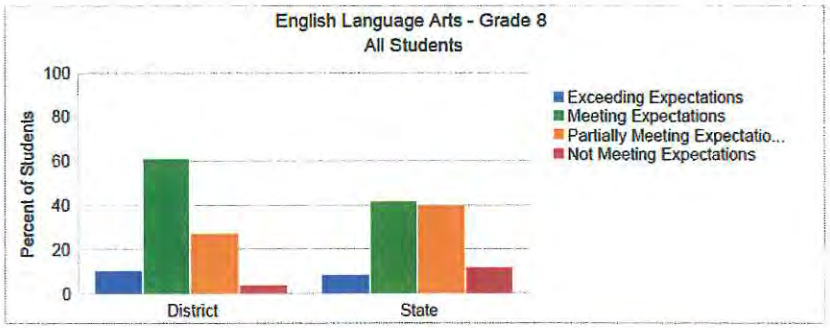
	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/ State Diff
Mathematics					
All items	54	59%	59%	46%	13
Question Type					
Constructed Response	14	51%	51%	35%	16
Short Answer	20	50%	50%	38%	12
Selected Response	20	73%	73%	61%	12
Strand / Topic					
Expressions and Equations	11	54%	54%	44%	10
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	8	50%	50%	38%	12
Use properties of operations to generate equivalent expressions.	3	62%	62%	58%	4
Geometry	11	56%	56%	41%	15
Draw, construct, and describe geometrical figures and describe the relationships between them.	3	63%	63%	50%	13
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	8	53%	53%	37%	15
Ratios and Proportional Relationships	11	47%	47%	37%	10
Analyze proportional relationships and use them to solve real-world and mathematical problems.	11	47%	47%	37%	10
Statistics and Probability	9	72%	72%	57%	15
Draw informal comparative inferences about two populations.	2	72%	72%	61%	11
Investigate chance processes and develop, use, and evaluate probability models.	4	77%	77%	62%	15
Use random sampling to draw inferences about a population.	3	66%	66%	47%	19
The Number System	12	68%	68%	52%	15
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	12	68%	68%	52%	15

2017 Grade 8 ELA Next-Generation MCAS

Grade 8 ELA MCAS

-- 70% of Hingham Grade 8 ELA students met or exceeded expectations on the new exam

-- Statewide, only 49% of Grade 8 ELA students met or exceeded expectations on the new exam



English Language Arts	N Included	% District	% State
Exceeding Expectations	35	10	8
Meeting Expectations	218	60	41
Partially Meeting Expectations	96	27	39
Not Meeting Expectations	12	3	11
Total Included	361		

Grade 8 ELA MCAS

-- Hingham Grade 8 ELA students performed 8% higher than the state average in ALL content strands: language, reading, and writing

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 8

All Students (357) Mode: Online
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All Items	49	70%	62%	8
Question Type				
Essay	23	60%	52%	8
Selected Response	26	78%	70%	8
Strand / Topic				
Language Anchor Standard	19	71%	62%	9
Conventions of Standard English	13	73%	62%	11
Knowledge of Language	2	58%	50%	8
Vocabulary Acquisition and Use	4	71%	66%	5
Reading Anchor Standard	16	85%	77%	8
Craft and Structure	5	80%	72%	8
Integration of Knowledge and Ideas	1	77%	66%	11
Key Ideas and Details	10	89%	81%	8
Writing Anchor Standard	14	50%	44%	6
Text Types and Purposes	14	50%	44%	6

Grade 8 ELA MCAS

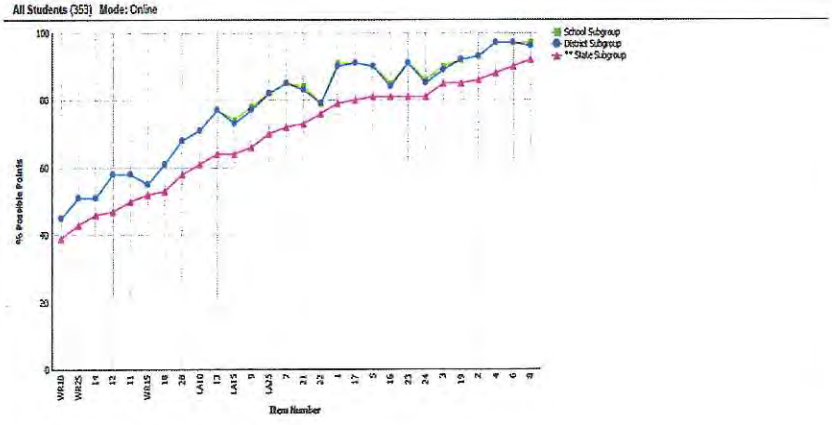
--Hingham Grade 8 ELA students performed ABOVE the state average on all 28 test items

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 8

All Students (353) Mode: Online



ELEMENTARY & SECONDARY EDUCATION

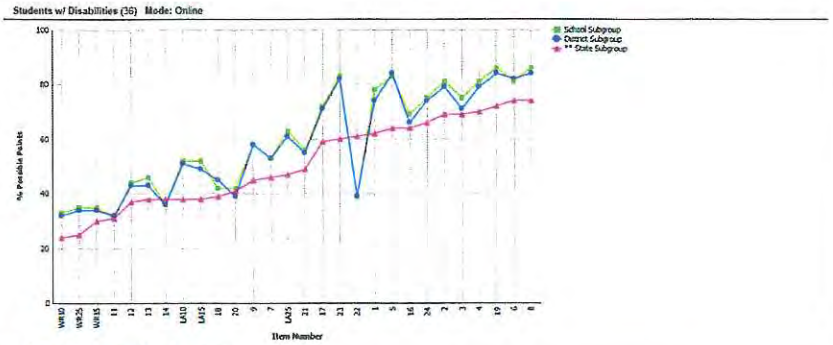
Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by Disability Status

District: Hingham
School: Hingham Middle School
Grade: Grade 8

Grade 8 ELA MCAS-SWD

– Grade 8 ELA students with disabilities performed at or above the state average for SWD on 26 of 28 test items

– Challenge areas included identifying supporting evidence, determining point of view, and analyzing the development of a central idea



Students w/ Disabilities (38) **Standards: MA 2011 Standards Mode: Online**

Item Information					% Possible Points			
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	District	State**	District - State Diff
11	SR	RE	CCRA.L.3	Analyze how lines in a passage reveal character and identify supporting evidence.	2	32%	31%	1
14	SR	LA	CCRA.L.4	Determine the meaning of a phrase in a passage and identify supporting evidence.	2	36%	38%	-2
10	ES	-	-	Write an essay explaining similarities between characters from two different excerpts; use information from both excerpts to support the explanation.	8	39%	29%	10
20	SR	RE	CCRA.R.6	Determine the author's point of view.	1	39%	41%	-2
22	SR	RE	CCRA.R.2	Analyze the development of a central idea over the course of an excerpt and commentary.	1	39%	61%	-22

ELEMENTARY & SECONDARY EDUCATION

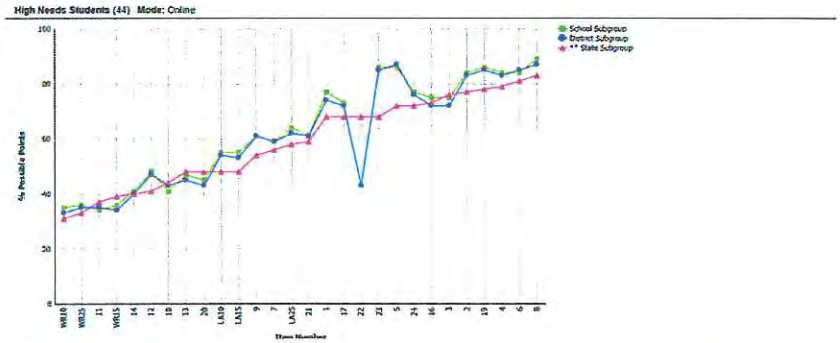
Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by High Needs Status

District: Hingham
School: Hingham Middle School
Grade: Grade 8

Grade 8 ELA MCAS-High Needs

-- Grade 8 ELA students with high needs performed at or above the state average for high needs students on 22 of 28 test items

-- Challenge areas included identifying supporting evidence, determining point of view, analyzing word choice and the development of a central idea



High Needs Students (44) **Standards: MA 2011 Standards Mode: Online**

Item Information					% Possible Points				
Item No.	Item Type	Reporting Category	Standard	Item Description	Possible Points	School	District	State	School-State Diff.
11	SR	RE	CCRA.L.3	Analyze how lines in a passage reveal character and identify supporting evidence.	2	34%	35%	37%	-3
14	SR	LA	CCRA.L.4	Determine the meaning of a phrase in a passage and identify supporting evidence.	2	41%	40%	40%	1
10	ES	-	-	Write an essay explaining similarities between characters from two different excerpts; use information from both excerpts to support the explanation.	8	42%	41%	37%	5
15	ES	-	-	Rewrite the passage from another character's point of view.	7	44%	42%	43%	1
18	SR	RE	CCRA.R.4	Analyze the technical use of word choice in the excerpt.	1	41%	43%	44%	-3
20	SR	RE	CCRA.R.6	Determine the author's point of view.	1	45%	43%	48%	-3
22	SR	RE	CCRA.R.2	Analyze the development of a central idea over the course of an excerpt and commentary.	1	43%	43%	68%	-25

ELA Areas for Improvement: Grades 6-8

- Writing (idea development, conventions)
- Language (word choice, punctuation function, mechanics, vocabulary in-context)
- Reading Skills (point of view, development of a central idea, inferences, determining theme, supporting evidence, author's purpose, poetic form)

ELA Strategies for Improvement: Grades 6-8

- Adoption of department-wide goal to implement strategies from *Notice and Note* in efforts to promote improved reading comprehension
- Small-group instruction in reading labs for students demonstrating need for additional reading support
- Incorporation of current events articles for expository, non-fiction practice
- Targeted grammar instruction through *Language Network* and other resources
- Direct vocabulary instruction using *Classical Roots* program
- Direct instruction on responding to questions that compare multiple texts
- Ample opportunities for on-line test-taking practice to ensure familiarity with format, especially with regard to essay-writing in required text boxes
- Include special education teachers in department meetings and ongoing discussions regarding MCAS findings and strategies for improvement

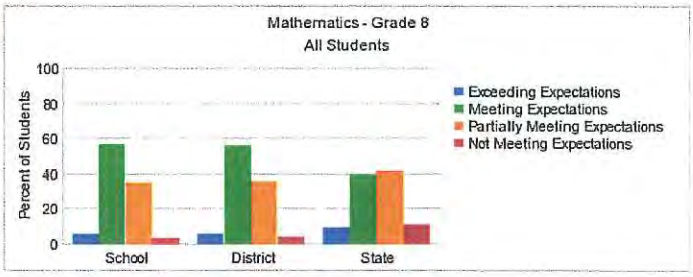
2017 Grade 8 Mathematics MCAS

Grade 8 Mathematics MCAS

-97% of Grade 8 students earned a passing score with **62% of students earning a score of meeting expectations or higher.**

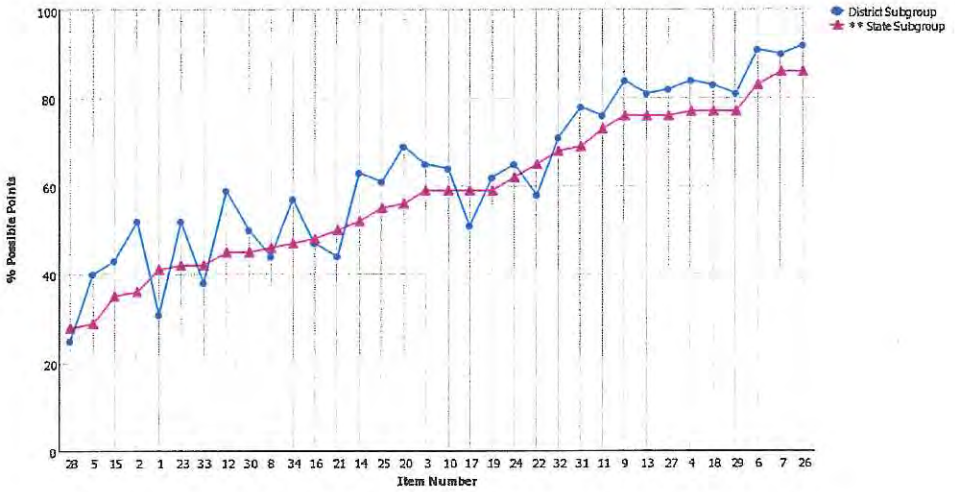
-**Statewide** only 48% of Grade 6 students earned a score of meeting expectations or higher.

Mathematics	N Included	% School	% District	% State
Exceeding Expectations	18	5	5	9
Meeting Expectations	201	57	56	39
Partially Meeting Expectations	124	35	35	42
Not Meeting Expectations	12	3	4	11
Total Included	355			



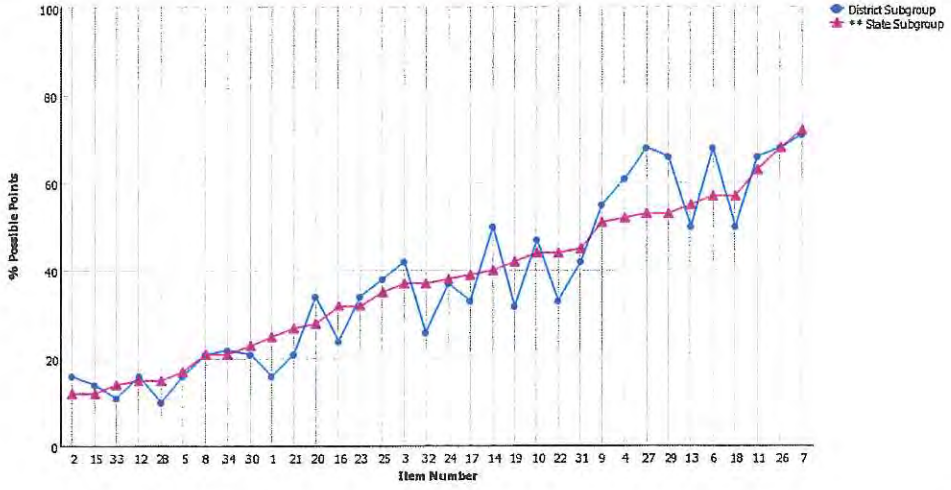
Grade 8 Math MCAS

-Grade 8 students performed **at or above the state average** on 32 of 40 test questions.



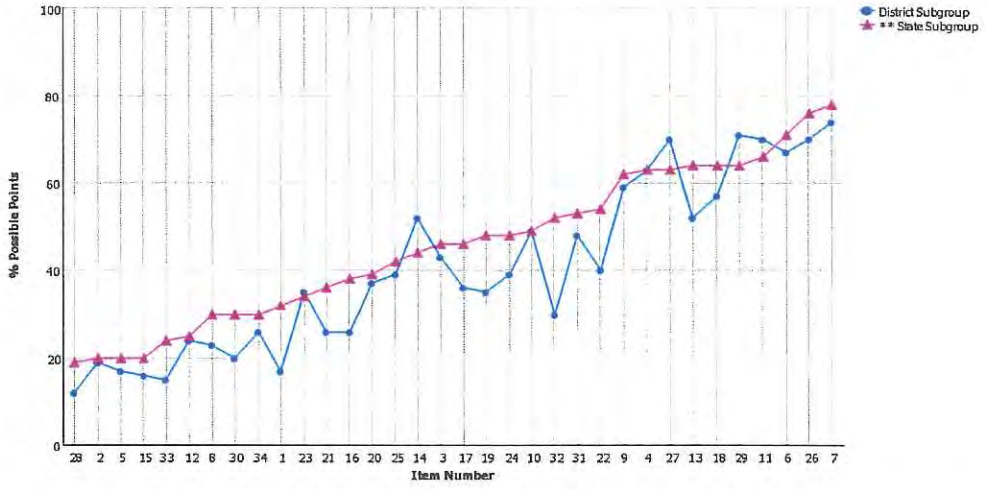
Grade 8 Math MCAS-SWD

-Grade 8 students with disabilities performed **at or above the state average** for SWD on 25 of 40 test questions and **below the state average** for 15 of 40 test questions.



Grade 8 Math MCAS-High Needs

-Grade 8 High Needs students performed **at or above the state average** on 13 of 40 test questions and **below the state average** for 27 of 40 test questions.



Grade 8 Math MCAS

-Grade 8 students performed **between 5-9 points above the state average** for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System* **and 1 points above for** *Geometry.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Results by
Standards
Mathematics
All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 8

All Students Students (352)

Standards: MA 2011 Standards **Mode:** Online

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/ State Diff
Mathematics					
All Items	54	60%	59%	55%	5
Question Type					
Constructed Response	14	46%	46%	37%	9
Short Answer	8	51%	51%	48%	3
Selected Response	32	68%	67%	64%	4
Strand / Topic					
Expressions and Equations	16	53%	53%	44%	9
Analyze and solve linear equations and pairs of simultaneous linear equations.	4	34%	34%	32%	2
Understand the connections between proportional relationships, lines, and linear equations.	6	58%	57%	49%	9
Work with radicals and integer exponents.	6	61%	61%	47%	14
Functions	14	58%	57%	53%	5
Define, evaluate, and compare functions.	4	44%	44%	45%	-1
Use functions to model relationships between quantities.	10	63%	63%	56%	7
Geometry	16	61%	60%	59%	1
Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.	4	61%	61%	55%	7
Understand and apply the Pythagorean Theorem.	2	62%	61%	59%	2
Understand congruence and similarity using physical models, transparencies, or geometry software.	10	60%	60%	61%	-1
Statistics and Probability	5	81%	80%	75%	5
Investigate patterns of association in bivariate data.	5	81%	80%	75%	5
The Number System	3	67%	67%	59%	8
Know that there are numbers that are not rational, and approximate them by rational numbers.	3	67%	67%	59%	8

2017 Grade 8 Science MCAS

Grade 8 Science MCAS

-94% of HMS students earned a passing score with **61% of students earning a score of proficient or higher.**

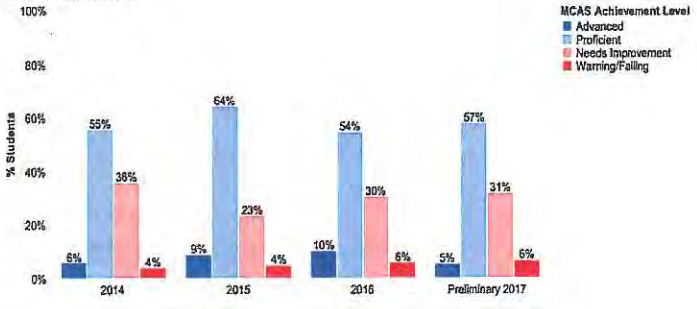
-**Statewide** only 40% of Grade 8 students earned a score of proficient or higher.

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

School Achievement Distribution by Year
Science and Technology/Engineering

District: Hingham
School: Hingham Middle School
Grade: Grade 8

Student Group: All Students



	2014			2015			2016			Preliminary 2017		
	School	District	State	School	District	State	School	District	State	School	District	State
Advanced	6%	6%	4%	9%	8%	3%	10%	10%	6%	5%	5%	
Proficient	55%	54%	38%	64%	63%	39%	54%	54%	35%	57%	57%	
Needs Improvement	36%	36%	41%	23%	23%	40%	30%	30%	40%	31%	32%	
Warning/Failing	4%	4%	18%	4%	5%	18%	6%	6%	19%	6%	7%	
N Students	335	342	71,951	294	298	71,850	323	329	70,540	356	351	
CPI	85.5	85.5	72.4	89.3	89.0	72.4	84.9	84.7	71.3			
Median SGP												

NOTE: Achievement level percentages are not calculated for student groups of less than 10.

Grade 8 Science MCAS

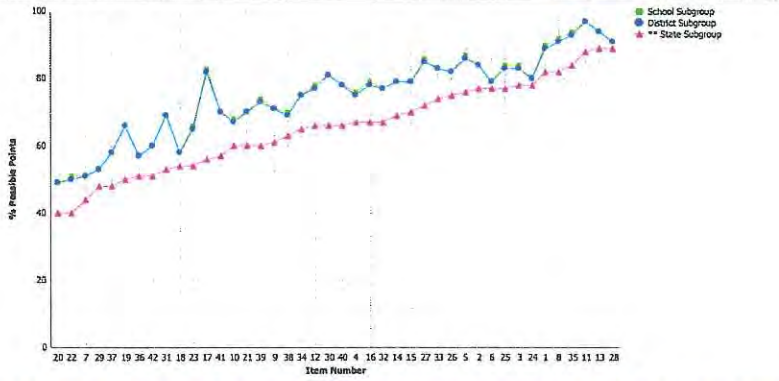
-HMS students performed **above the state average** on all 42 test questions.

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
Science and Technology/Engineering
by All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 8

All Students (354) Mode: Paper



20 22 7 29 37 19 36 42 31 18 23 17 41 10 21 39 9 38 34 12 30 40 4 16 32 14 15 27 33 26 5 2 6 25 3 24 1 8 35 11 13 28

Grade 8 Science MCAS

-HMS students performed **10 points above the state average** for all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Preliminary Spring 2017 MCAS School Results by Standards
Science and Technology/Engineering
All Students

District: Hingham
School: Hingham Middle School
Grade: Grade 8

All Students Students (354)
Standards: Tested Standard **Mode: Paper**

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
Science and Technology/Engineering					
All Items	54	72%	72%	62%	10
Question Type					
Multiple Choice	39	70%	70%	61%	9
Open Response	15	62%	61%	51%	11
Strand / Topic					
Earth and Space Science (prek-8)	14	68%	68%	58%	10
Earth's History	6	64%	63%	54%	10
Earth's Structure	1	65%	65%	54%	12
Heat Transfer in the Earth System	2	68%	68%	54%	14
The Earth in the Solar System	5	74%	73%	65%	9
Life Science (prek-8)	14	73%	73%	62%	11
Changes in Ecosystems Over Time	5	65%	65%	56%	9
Energy and Living Things	1	71%	71%	61%	10
Evolution and Biodiversity	2	76%	75%	63%	13
Reproduction and Heredity	2	86%	86%	77%	10
Structure and Function of Cells	3	70%	70%	56%	14
Systems in Living Things	1	92%	91%	82%	10
Physical Sciences (prek-8)	13	73%	73%	63%	10
Elements, Compounds, and Mixtures	7	71%	70%	58%	13
Forms of Energy	1	70%	69%	63%	7
Heat Energy	2	82%	82%	73%	8
Motion of Objects	1	84%	83%	78%	6
Properties of Matter	2	69%	69%	66%	3
Technology/Engineering (prek-8)	13	74%	74%	66%	8
Communication Technologies	2	68%	68%	58%	10
Construction Technologies	2	71%	71%	66%	4
Engineering Design	5	72%	72%	64%	8
Manufacturing Technologies	1	81%	81%	66%	15
Materials, Tools, and Machines	1	79%	79%	77%	2
Transportation Technologies	2	85%	84%	74%	10

Grade 8 Science MCAS-SWD

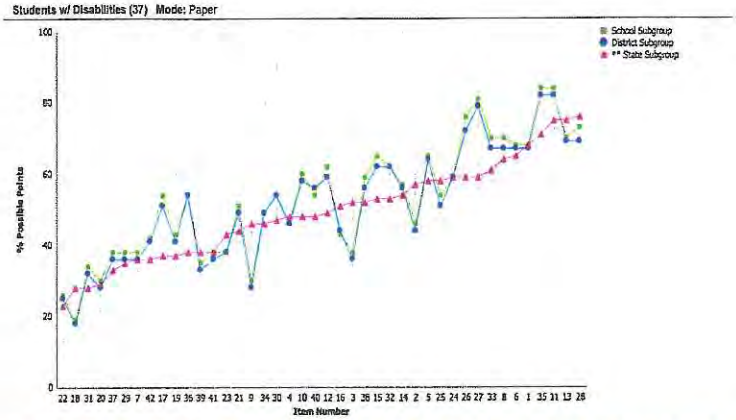
-Results indicate that HMS students with disabilities performed **below the state average** for 11 of 42 test questions and **at or above the state average** for SWD on 31 of 42 test questions.

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
Science and Technology/Engineering
by Disability Status

District: Hingham
School: Hingham Middle School
Grade: Grade 8

Students w/ Disabilities (37) Mode: Paper



22 18 31 20 37 29 7 42 17 19 36 39 41 23 21 9 34 30 4 10 40 12 16 3 38 15 32 14 2 5 25 24 26 27 33 8 6 1 35 11 13 28

Grade 8 Science MCAS-SWD

-HMS students with disabilities performed an average of **9 points above the state average** for SWD on all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Preliminary Spring 2017 MCAS School Results by Standards
Science and Technology/Engineering
by Disability Status

District: Hingham
School: Hingham Middle School
Grade: Grade 8

Non-Disabled Students (317)
Standards: Tested Standard **Mode: Paper**

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
Science and Technology/Engineering					
All Items	54	75%	75%	66%	9
Question Type					
Multiple Choice	38	79%	79%	70%	9
Open Response	16	64%	64%	54%	10
Strand / Topic					
Earth and Space Science (prek-8)	14	71%	71%	61%	10
Earth's History	6	66%	66%	57%	9
Earth's Structure	1	69%	69%	57%	12
Heat Transfer in the Earth System	2	72%	72%	57%	14
The Earth in the Solar System	5	76%	76%	68%	8
Life Science (prek-8)	14	76%	75%	66%	10
Changes in Ecosystems Over Time	5	67%	67%	59%	8
Energy and Living Things	1	76%	76%	65%	11
Evolution and Biodiversity	2	80%	79%	67%	12
Reproduction and Heredity	3	68%	68%	60%	8
Structure and Function of Cells	3	72%	72%	59%	14
Systems in Living Things	1	84%	84%	66%	8
Physical Sciences (prek-8)	13	76%	76%	68%	9
Elements, Compounds, and Mixtures	7	74%	74%	62%	12
Forms of Energy	1	71%	71%	66%	5
Heat Energy	2	86%	86%	76%	9
Motion of Objects	1	69%	69%	63%	6
Properties of Matter	2	72%	72%	70%	2
Technology/Engineering (prek-8)	13	76%	76%	69%	7
Communication Technologies	2	70%	70%	60%	10
Construction Technologies	2	73%	73%	69%	4
Engineering Design	5	73%	73%	66%	7
Manufacturing Technologies	1	84%	84%	70%	14
Materials, Tools, and Machines	1	80%	80%	79%	1
Transportation Technologies	2	86%	86%	76%	9

Grade 8 Science MCAS

-Analysis of aggregate results and results for SWD indicate that HMS students **perform above state level peers on multi-choice and open response questions**.

-Open response questions remains an **area for continued focus** for all students and multiple choice are an area of focus for SWD.

All Students Students (354)

Standards: Tested Standard **Mode:** Paper

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
Science and Technology/Engineering					
All items	54	72%	72%	62%	10
Question Type					
Multiple Choice	38	76%	76%	67%	9
Open Response	16	62%	61%	51%	11

Students w/ Disabilities Students (37)

Standards: Tested Standard **Mode:** Paper

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
Science and Technology/Engineering					
All items	54	50%	49%	46%	4
Question Type					
Multiple Choice	38	54%	53%	51%	3
Open Response	16	40%	39%	34%	7

Strategies for Improvement

Grade 8 Science MCAS

- Strategies for improvement on multiple choice include incorporating additional data-rich **case studies** and practice interpreting **graphs & diagrams**.
- Strategies for improvement on **open response questions** include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.
- Further **integration of engineering** is needed throughout Gr. 6-8 science content.

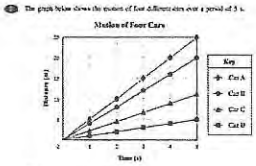
SAMPLE MULTIPLE CHOICE QUESTIONS

19 The paths of two air masses, X and Y, are shown in the diagram below.

Air mass X is a cold air mass. Air mass Y is a warm air mass. When the air masses meet, winter storms may be produced.

Which of the following **most likely** contributes to the formation of these storms?

A. Cold air mass X moves over warm air mass Y, and evaporation occurs.
B. Warm air mass Y moves over cold air mass X, and condensation occurs.
C. Cold air mass X mixes with warm air mass Y, and the overall temperature increases.
D. Warm air mass Y mixes with cold air mass X, and the overall temperature decreases.



Which car had an average speed of 4 m/s?

A. car A
B. car B
C. car C
D. car D

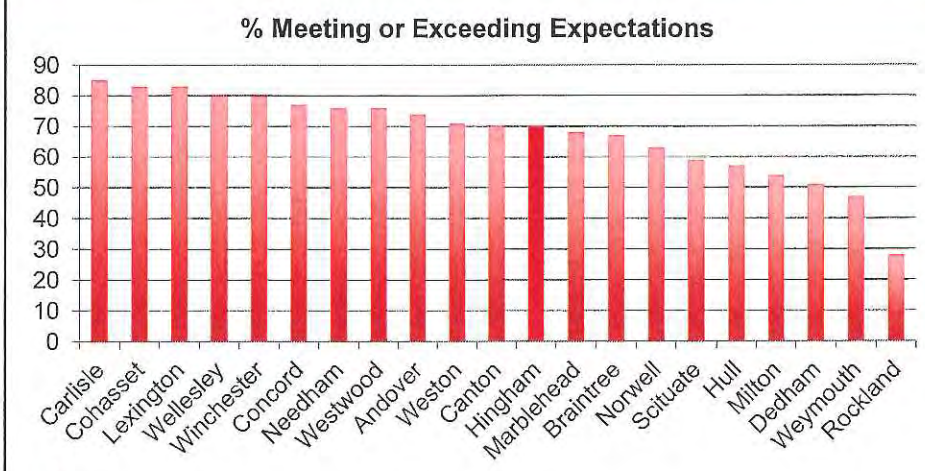
18 The table below shows the masses and volumes of four cubes made of different materials.

	Mass (g)	Volume (cm^3)
Cube 1	8.0	1.0
Cube 2	1.0	8.0
Cube 3	1.0	1.0
Cube 4	8.0	8.0

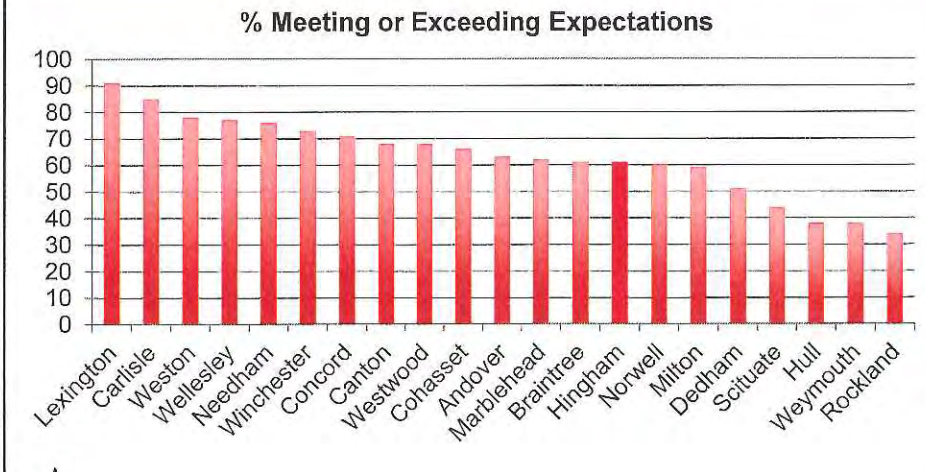
Which cube has the greatest density?

A. cube 1
B. cube 2
C. cube 3
D. cube 4

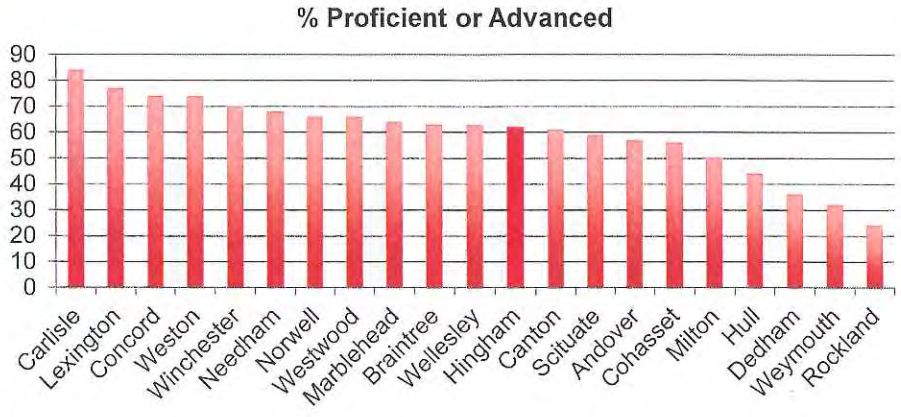
Benchmark Comparison: Grade 8 ELA



Benchmark Comparison: Grade 8 Math



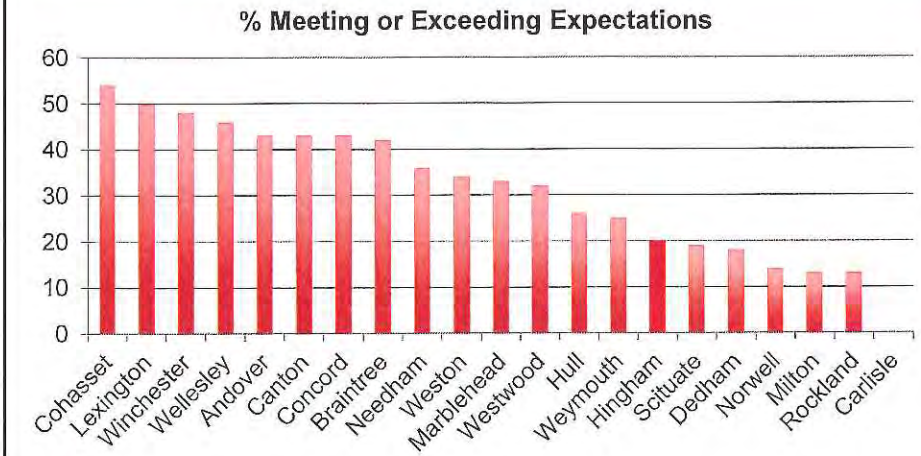
Benchmark Comparison: Grade 8 STE



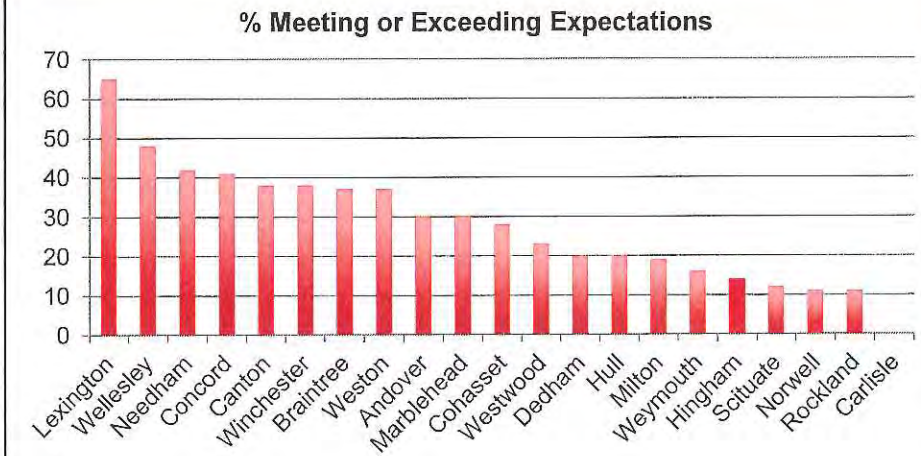
Grade 8: Performance Summary

Subject	Summary
ELA	• 70% of Hingham Grade 8 ELA students met or exceeded expectations on the new exam; performed ABOVE the state average on all 28 test items • Performed 8% higher than the state average in ALL content strands: language, reading, and writing;
Math	• 62% of students earning a score of meeting expectations or higher. • Performed at or above the state average on 32 of 40 test questions.
Science	• 94% earned a passing score with 61% of students earning a score of proficient or higher. • Performed above the state average on all 42 test questions. • Performed 10 points above the state average for all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*

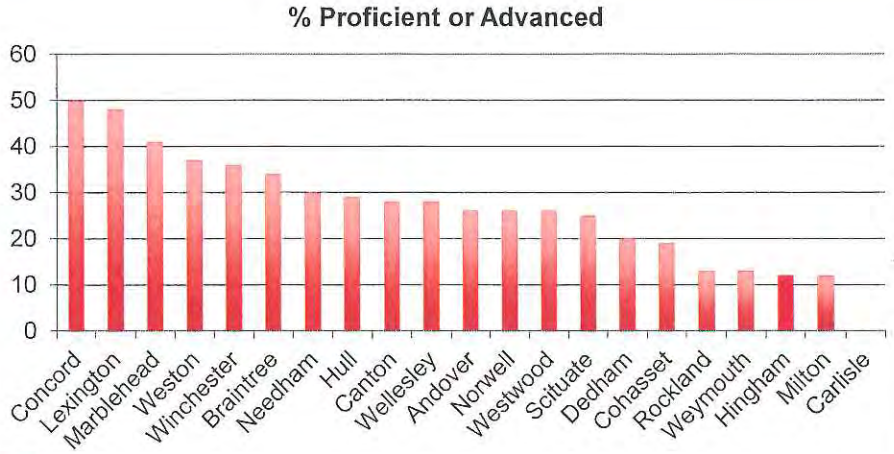
High Needs: Grade 8 ELA



High Needs: Grade 8 Math



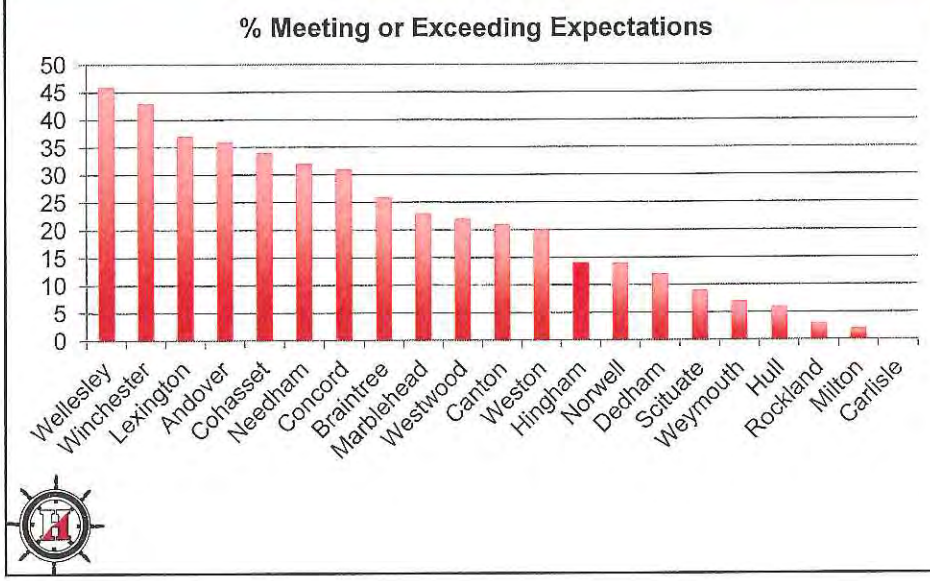
High Needs: Grade 8 STE



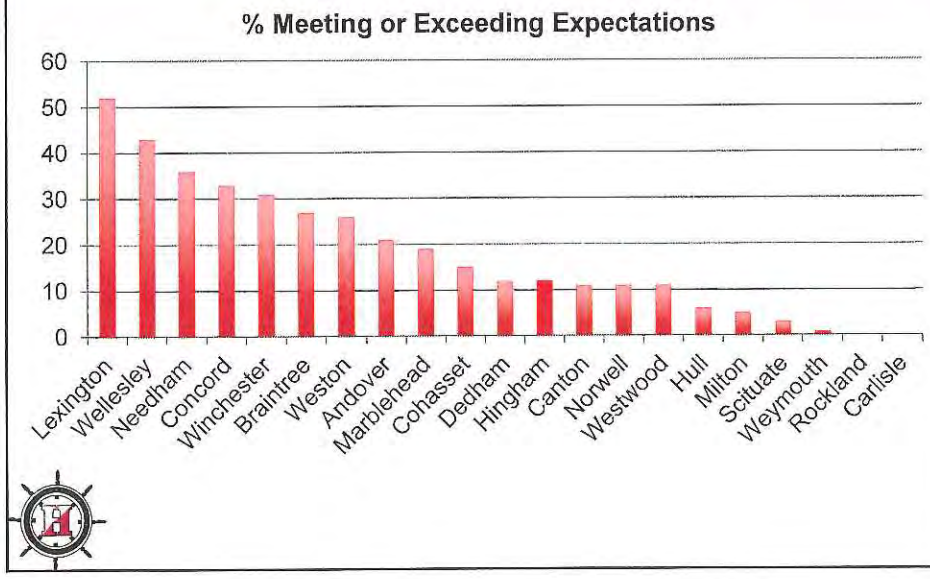
Grade 8: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 22 of 28 test items	• Challenge areas included identifying supporting evidence, determining point of view, analyzing word choice and the development of a central idea
Math	• Performed at or above the state average on 13 of 40 test questions and below the state average for 27 of 40 test questions. • Performed between 5-9 points above the state average for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System* and 1 points above for *Geometry.*	• Challenge areas include determining functions from tables and ordered pairs, angle rotations, and using tables to solve problems
Science	• 94% earned a passing score with 61% of students earning a score of proficient or higher. • Performed above the state average on all 42 test questions. • Performed 10 points above the state average for all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*	

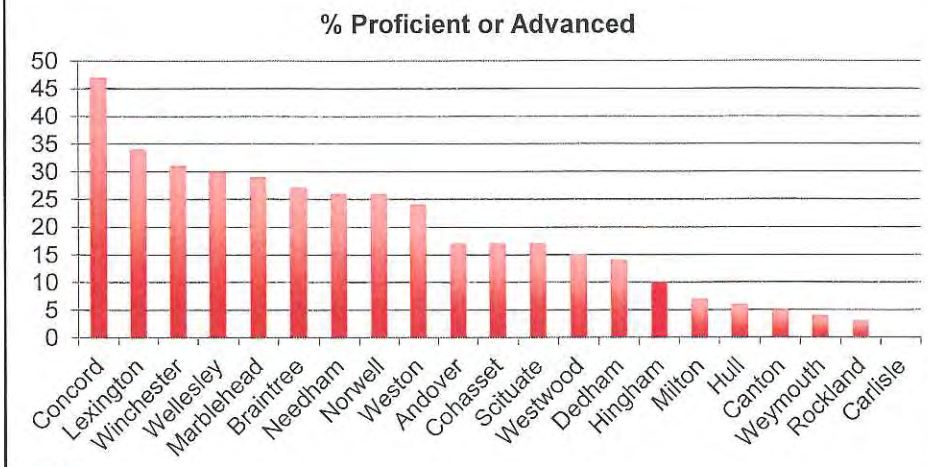
Students with Disabilities: Grade 8 ELA



Students with Disabilities: Grade 8 Math



Students with Disabilities: Grade 8 STE



Grade 8: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 26 of 28 test items	• Challenge areas included identifying supporting evidence, determining point of view, and analyzing the development of a central idea
Math	• Performed at or above the state average for SWD on 25 of 40 test questions and below the state average for 15 of 40 test questions	• Challenge areas include determining functions from tables and ordered pairs, angle rotations, and using tables to solve problems
Science	• SWD performed below the state average for 11 of 42 test questions and at or above the state average on 31 of 42 test questions • SWD performed an average of 9 points above the state average for SWD on all content strands: *Earth and Space Science, Life Science, Physical Science, Technology & Engineering.*	• Open response questions and multiple choice are an area of focus

Areas for Improvement: Middle School English

- Writing (idea development, conventions)
- Language (word choice, punctuation function, mechanics, vocabulary in-context)
- Reading Skills (point of view, development of a central idea, inferences, determining theme, supporting evidence, author's purpose, poetic form)

Strategies for Improvement: Middle School English

- Adoption of department-wide goal to implement strategies from *Notice and Note* in efforts to promote improved reading comprehension
- Small-group instruction in reading labs for students demonstrating need for additional reading support
- Incorporation of current events articles for expository, non-fiction practice
- Targeted grammar instruction through *Language Network* and other resources
- Direct vocabulary instruction using *Classical Roots* program
- Direct instruction on responding to questions that compare multiple texts
- Ample opportunities for on-line test-taking practice to ensure familiarity with format, especially with regard to essay-writing in required text boxes
- Include special education teachers in department meetings and ongoing discussions regarding MCAS findings and strategies for improvement

Areas for Improvement: Middle School Math

- Curriculum Areas
  - Grade 6 – Algebraic expressions and Geometry
    Grade 7 – Using operations to develop equivalent expressions
  - Grade 8 – Geometry, Systems of equations, Comparing functions, Pythagorean Theorem
- Question Types:
  - Constructed Response and Selected Response
- Grade 8 High Needs Student Performance

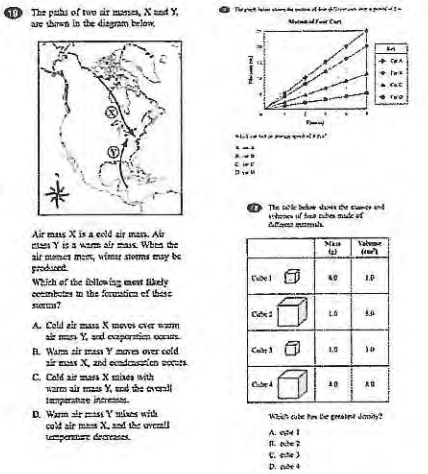
Strategies for Improvement: Middle School Math

- New Title 1 Program – Grade 6
- New Grade 6 Math class – 1 section that runs slightly slower
- IXL adaptive software use in 7th and 8th grade small group instruction course
- Math Plus instruction will provide focus on practicing new question types
- Practice modules on new test types embedded into assessments in regular curriculum
- New after school MCAS preparation program for all 3 grades being added this spring
- More coordination between Math Department and special education department to discuss deficits
- Review of HMS calculator use and reinforcement of fact fluency
- Grade 5/6 teachers: curriculum coordination meeting
- Evaluation of Math 8 curriculum decisions MCAS vs progress towards Algebra 1 proficiency
- Development of Geometry Progression through the middle school grades

Strategies for Improvement: Grade 8 Science

- Strategies for improvement on multiple choice include incorporating additional data-rich **case studies** and practice interpreting **graphs & diagrams**.
- Strategies for improvement on **open response questions** include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.
- Further **integration of engineering** is needed throughout Gr. 6-8 science content.

SAMPLE MULTIPLE CHOICE QUESTIONS



10 The paths of two air masses, X and Y, are shown in the diagram below.

Air mass X is a cold air mass. Air mass Y is a warm air mass. When the air masses meet, winter storms may be produced.

Which of the following most likely contributes to the formation of these storms?

A. Cold air mass X moves over warm air mass Y, and evaporation occurs.
B. Warm air mass Y moves over cold air mass X, and condensation occurs.
C. Cold air mass X mixes with warm air mass Y, and the overall temperature increases.
D. Warm air mass Y mixes with cold air mass X, and the overall temperature decreases.

11 The graph below shows the motion of four different cars moving at a constant speed.

Motion of Four Cars

Which car has the greatest speed?

A. car A
B. car B
C. car C
D. car D

12 The table below shows the masses and volumes of four cubes made of different materials.

	Mass (g)	Volume (cm³)
Cube 1	8.0	1.0
Cube 2	1.0	8.0
Cube 3	1.0	1.0
Cube 4	8.0	8.0

Which cube has the greatest density?

A. cube 1
B. cube 2
C. cube 3
D. cube 4

SECTION III

Report of High School Performance on the ELA, Mathematics, and Science MCAS Examinations

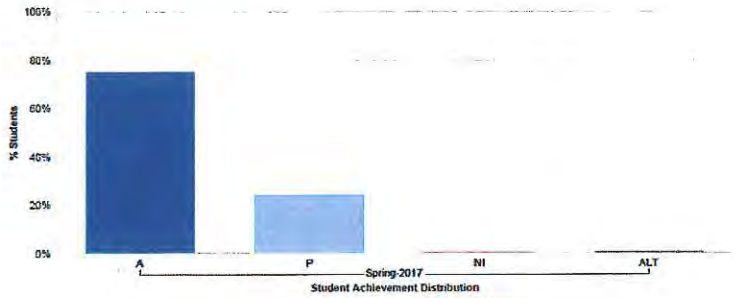
(All Students, High Needs Students, and Students with Disabilities)

2017 Grade 10 ELA Legacy MCAS

Grade 10 ELA MCAS

-- 100% of Grade 10 ELA students earned passing scores, with 99% of students earning a score of proficient or higher

Test: Spring 2017
Subject: English Language Arts Test Status: Tested
Enrollment: On Oct1 Student Grade: ALL



Advanced	Advanced	276-280	14	5%
		270-274	53	19%
		266-268	52	19%
		260-264	91	32%
		Total	210	75%
Proficient	Proficient	258-258	33	11%
		250-254	20	7%
		246-248	10	4%
		240-244	5	2%
		Total	67	24%
Needs Improvement	Needs Improvement-High	230-234	1	0%
		Total	1	0%
ALT	Progressing ALT	PRG	2	1%
		Total	2	1%
		Total	280	100%

Grade 10 ELA MCAS

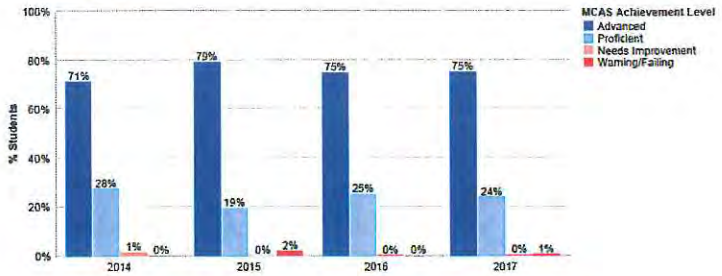
--Aggregate performance results from 2014-2017 indicate a largely consistent achievement of an "advanced" rating by ¾ of the class and a "proficient" rating by the remaining ¼

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

School Achievement Distribution by Year
English Language Arts

District: Hingham
School: Hingham High
Grade: 10

Student Group: All Students



	2014			2015			2016			2017		
	School	District	State	School	District	State	School	District	State	School	District	State
CPI	99.6	99.4	96.0	99.8	99.8	96.7	99.8	99.6	96.7	99.9	99.5	96.5
Advanced	71%	70%	41%	79%	78%	49%	75%	73%	47%	75%	74%	47%
Proficient	28%	28%	48%	19%	20%	42%	25%	25%	45%	24%	24%	44%
Needs Improvement	1%	1%	8%	0%	0%	6%	0%	1%	6%	0%	1%	6%
Warning/Failing	0%	1%	3%	2%	2%	3%	0%	1%	3%	1%	2%	3%
N Students	276	283	70,465	294	300	69,751	333	331	69,937	288	286	70,268
Median SGP	60.0	65.0	50.0	54.0	54.0	51.0	49.0	49.0	50.0	60.0	60.0	50.0

Grade 10 ELA MCAS

-- Hingham Grade 10 ELA students performed 9% higher than the state average in ALL content strands: language, reading, and writing

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS District Results by Standards
English Language Arts
All Students

District: Hingham
Grade: Grade 10

All Students (282) **Mode:** Paper
Standards: MA 2011 Standards

	Possible Points	District % Possible Points	State % Possible Points	District/State Diff
English Language Arts				
All items	72	83%	74%	9
Question Type				
Multiple Choice	36	87%	80%	7
Open Response	16	79%	68%	11
Writing Prompt	20	77%	70%	7
Strand / Topic				
Language Anchor Standard	4	92%	86%	6
Vocabulary Acquisition and Use	4	92%	86%	6
Reading Anchor Standard	48	84%	75%	9
Craft and Structure	22	87%	79%	8
Integration of Knowledge and Ideas	7	77%	66%	11
Key Ideas and Details	19	83%	74%	9
Writing Anchor Standard	20	77%	70%	7
Production and Distribution of Writing	8	95%	87%	8
Text Types and Purposes	12	66%	59%	7

Grade 10 ELA MCAS

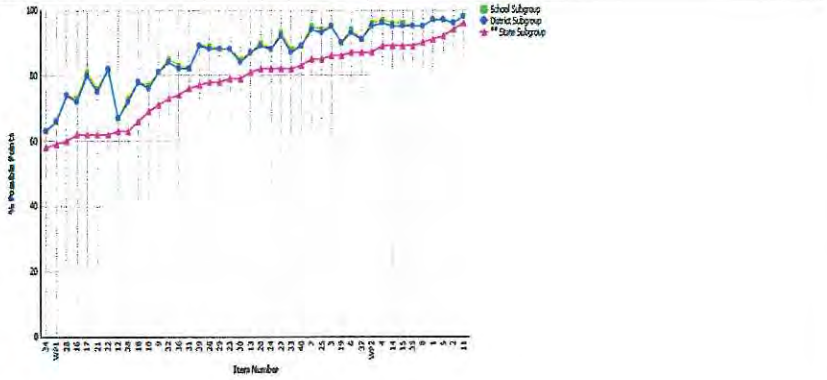
--Hingham Grade 10 ELA students performed ABOVE the state average on all 42 test items

ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by All Students

District: Hingham
School: Hingham High
Grade: Grade 10

All Students (278) Mode: Paper



Grade 10 ELA MCAS-SWD

-- Grade 10 ELA students with disabilities performed at or above the state average for SWD on 37 of 42 test items

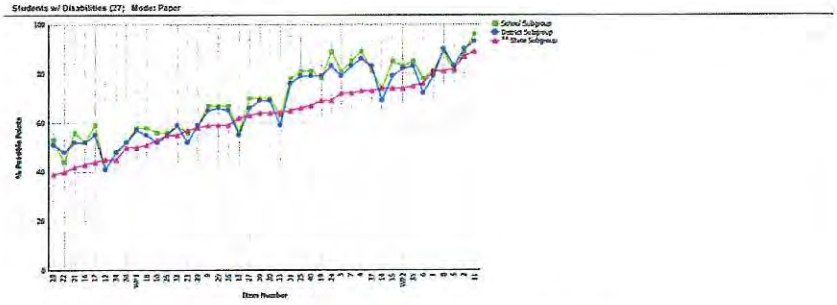
-- Challenge areas included finding supporting evidence, determining theme, and identifying mood

ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by Disability Status

District: Hingham
School: Hingham High
Grade: Grade 10

Students w/ Disabilities (27) Mode: Paper



Students w/ Disabilities (27) Standards: MA 2011 Standards

Item No.	Item Type	Standard	Average Item Score			
			School	District	State	School-State Diff.
12	MC	CCRA.R.2	41%	41%	45%	-4
22	MC	CCRA.R.4	44%	48%	40%	4
34	MC	CCRA.R.6	46%	43%	45%	3
10	MC	CCRA.R.5	56%	52%	53%	3
16	MC	CCRA.R.1	52%	52%	43%	9
21	MC	CCRA.R.2	56%	52%	42%	14
23	MC	CCRA.R.7	56%	52%	57%	-1
28	MC	CCRA.R.5	52%	52%	50%	2
11	MC	CCRA.L.4	56%	55%	62%	-6

Grade 10 ELA MCAS- High Needs

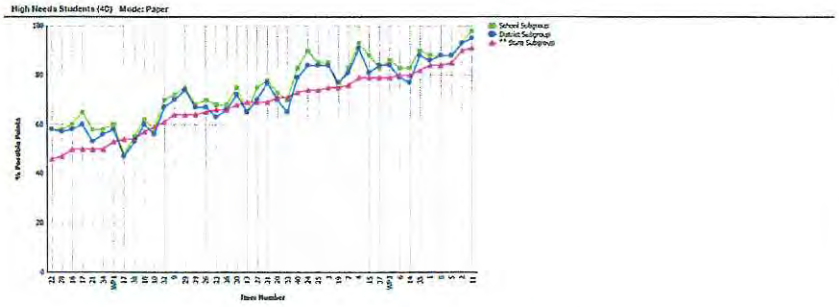
-- Grade 10 ELA students with high needs performed at or above the state average for high needs students on 38 of 42 test items

-- Challenge areas included examining author's style choice, determining theme, and identifying main purpose

ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Test Item Analysis Graph
English Language Arts
by High Needs Status

District: Hingham
School: Hingham High
Grade: Grade 10



High Needs Students (40) **Standards:** MA 2011 Standards

Item No.	Item Type	Standard	Average Item Score			
			School	District	State	School-State Diff.
12	MC	CCRA.R.2	48%	47%	54%	-6
21	MC	CCRA.R.2	58%	53%	50%	8
38	MC	CCRA.R.5	55%	53%	54%	1
10	MC	CCRA.R.5	58%	56%	59%	-1

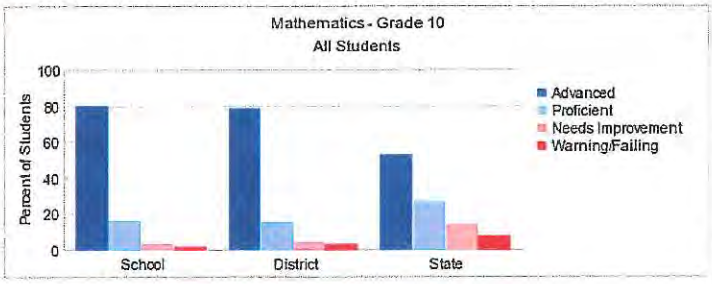
2017 Grade 10 Mathematics MCAS

Grade 10 Mathematics MCAS

-96% of Grade 10 students earned Advanced/Proficient with **98% of students earning a passing score.**

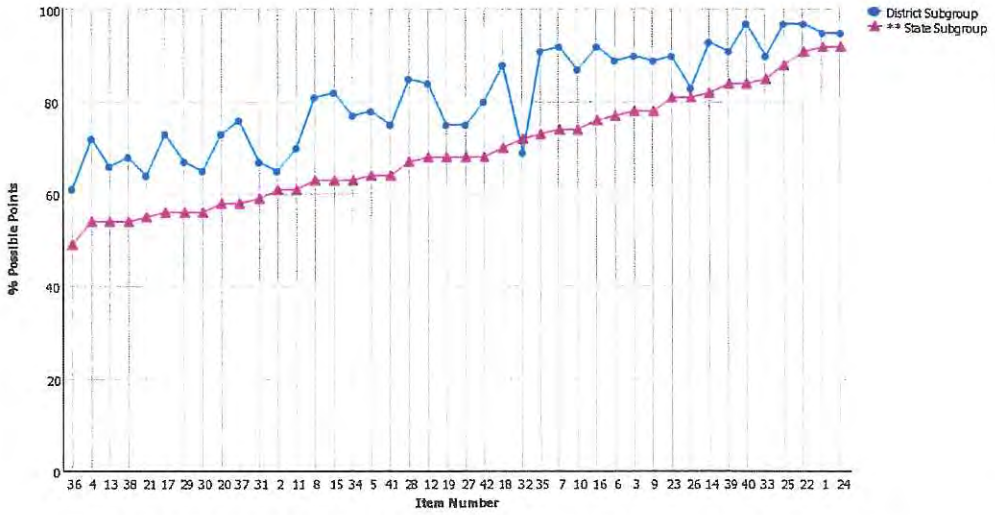
-**Statewide** only 79% of Grade 10 students earned a score of Advanced/Proficient

Mathematics	N Included	% School	% District	% State
Advanced	224	80	78	53
Proficient	44	16	15	26
Needs Improvement	8	3	3	14
Warning/Failing	5	2	3	8
Total Included	281			



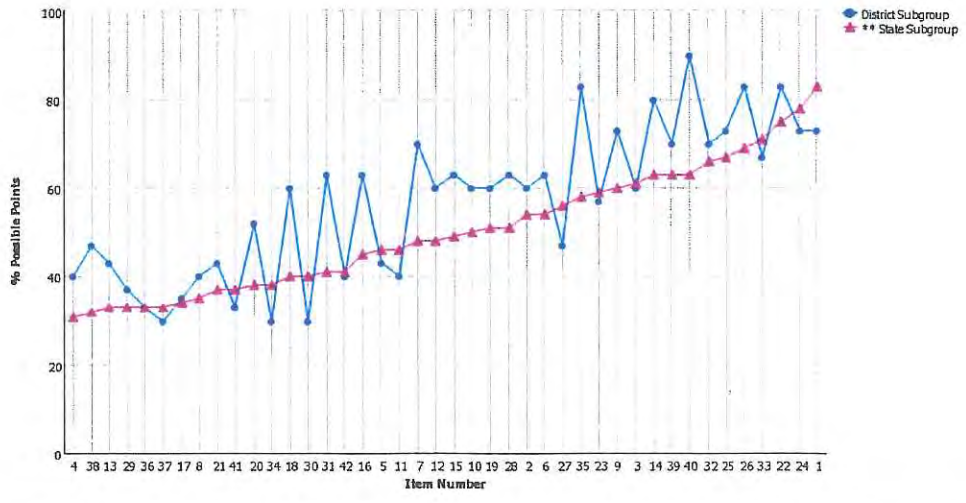
Grade 10 Math MCAS

-Grade 10 students performed **at or above the state average** on 39 of 40 test questions.



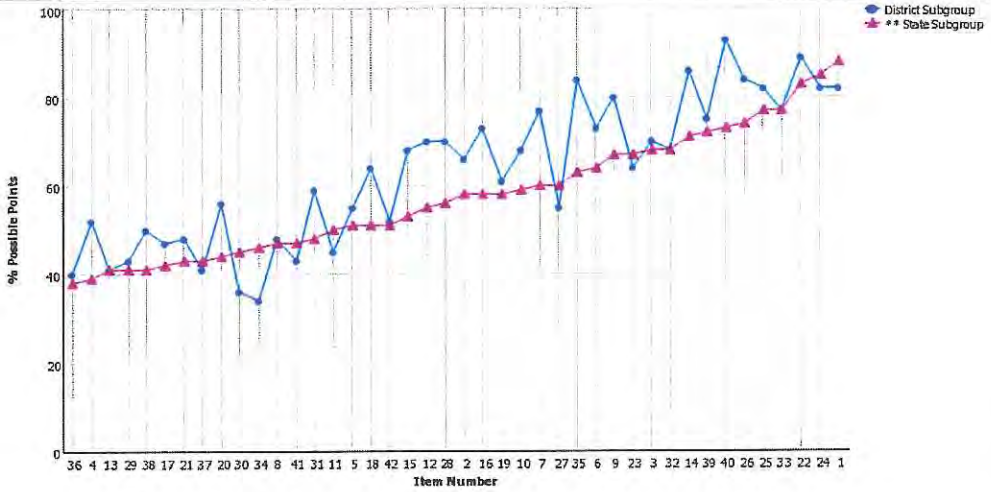
Grade 10 Math MCAS-SWD

-Grade 10 students with disabilities performed **at or above the state average** for SWD on 27 of 40 test questions and **below the state average** for 13 of 40 test questions.



Grade 10 Math MCAS-High Needs

-Grade 10 High Needs students performed **at or above the state average** on 31 of 40 test questions and **below the state average** for 9 of 40 test questions.



Grade 10 Math MCAS

-Grade 10 students performed **between 10-19 points above the state average** for all content strands with the exception of *Creating Equations* which is **7 points above the state average.**

ELEMENTARY & SECONDARY EDUCATION

Spring 2017 MCAS School Results by Standards
Mathematics
All Students

District: Hingham
School: Hingham High
Grade: Grade 10

All Students Students (279)
Standards: MA 2011 Standards **Mode:** Paper

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School-State Diff
Mathematics					
All items	60	76%	78%	68%	12
Question Type					
Multiple Choice	32	85%	82%	72%	11
Open Response	24	71%	71%	56%	13
Short Answer	4	85%	84%	69%	16
Strand / Topic					
Arithmetic with Polynomials and Rational Expressions	1	93%	92%	74%	19
Perform arithmetic operations on polynomials.	1	93%	92%	74%	19
Building Functions	5	72%	71%	60%	12
Build a function that models a relationship between two quantities.	5	72%	71%	60%	12
Circles	1	91%	90%	81%	10
Understand and apply theorems about circles.	1	91%	90%	81%	10
Congruence	4	73%	73%	56%	17
Experiment with transformations in the plane.	4	73%	73%	56%	17
Creating Equations	4	89%	89%	82%	7
Create equations that describe numbers or relationships.	4	89%	89%	82%	7
Expressing Geometric Properties with Equations	2	70%	70%	55%	16
Use coordinates to prove simple geometric theorems algebraically.	2	70%	70%	55%	16
Expressions and Equations	8	76%	76%	61%	15
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	8	76%	76%	61%	15
Geometric Measurement and Dimension	5	78%	78%	67%	12
Explain volume formulas and use them to solve problems.	5	78%	78%	67%	12
Geometry	4	89%	89%	76%	14
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	3	89%	89%	73%	16
Understand congruence and similarity using physical models, transparencies, or geometry software.	1	91%	91%	84%	7
Interpreting Categorical and Quantitative Data	11	78%	77%	68%	10
Interpret linear models.	1	75%	75%	68%	7
Summarize, represent, and interpret data on a single count or	3	88%	87%	78%	10

2017 HHS Biology MCAS

HS Biology MCAS

-Aggregate performance results from 2014-2017 indicate an **upward trend** of HHS Biology scores over time.

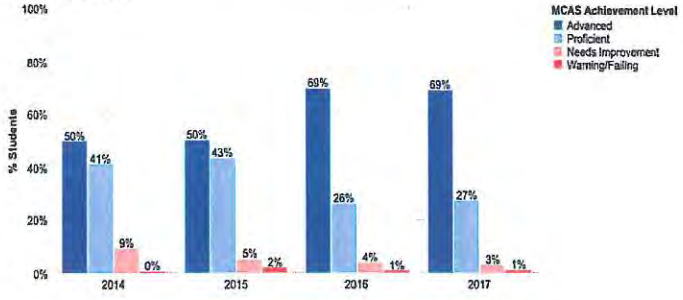
-297 of 298 students earned passing scores, with **96% of students earning a score of proficient or higher.**

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

School Achievement Distribution by Year
HS Biology

District: Hingham
School: Hingham High
Grade: HS (09, 10)

Student Group: All Students



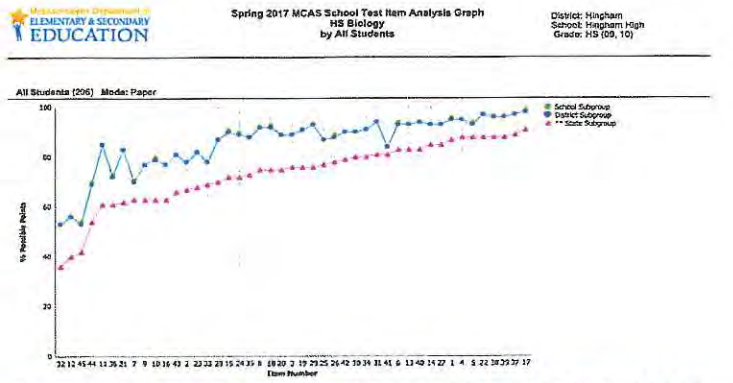
	2014			2015			2016			2017		
	School	District	State	School	District	State	School	District	State	School	District	State
Advanced	50%	49%	30%	50%	50%	27%	69%	69%	34%	69%	68%	
Proficient	41%	41%	43%	43%	43%	46%	26%	26%	41%	27%	28%	
Needs Improvement	9%	9%	20%	5%	5%	19%	4%	4%	17%	3%	3%	
Warning/Failing	0%	1%	8%	2%	2%	7%	1%	2%	8%	1%	1%	
N Students	288	292		308	313		295	299		298	302	
CPI												
Median SGP												

NOTE: Achievement level percentages are not calculated for student groups of less than 10.

HS Biology MCAS

-HHS students performed **above the state average** on all 45 test questions.

-HHS students performed **13 points above the state average** for all content strands: *Anatomy & Physiology, Cell Biology, Chemistry of Life, Ecology, Evolution & Biodiversity & Genetics.*

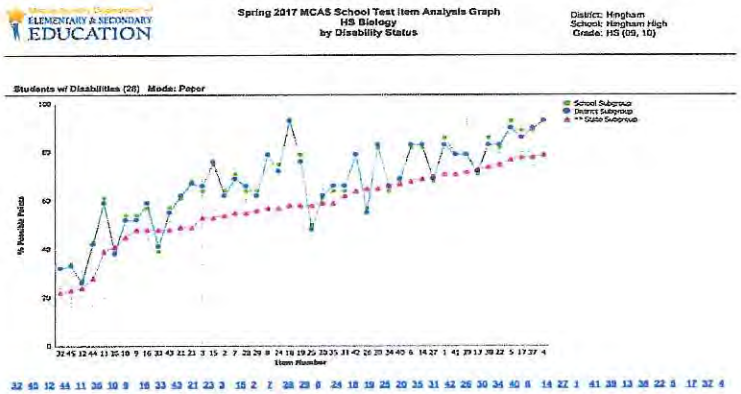


Strand / Topic	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
Biology High School Course	60	80%	80%	67%	13
Anatomy and Physiology	9	75%	75%	62%	13
Cell Biology	11	76%	76%	61%	14
Chemistry of Life	4	91%	90%	76%	15
Ecology	12	86%	86%	72%	14
Evolution and Biodiversity	12	78%	78%	66%	12
Genetics	12	80%	79%	68%	12

HS Biology MCAS-SWD

-HHS students with disabilities performed **above the state average** for SWD on 38 of 45 test questions.

-HHS students with disabilities performed **10 points above the state average** for SWD on all content strands: *Anatomy & Physiology, Cell Biology, Chemistry of Life, Ecology, Evolution & Biodiversity & Genetics.*



	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
Biology High School Course	60	61%	60%	50%	10
Anatomy and Physiology	9	60%	60%	49%	11
Cell Biology	11	48%	48%	45%	3
Chemistry of Life	4	72%	71%	59%	13
Ecology	12	70%	70%	56%	14
Evolution and Biodiversity	12	60%	59%	50%	10
Genetics	12	59%	59%	49%	10

HS Biology MCAS

-Analysis of aggregate results and results for SWD indicate that HHS students **performed above state level peers on multi-choice and open response questions**.

-Open response questions remains an **area for continued focus** for all students.

All Students Students (296)

Standards: Tested Standard **Mode:** Paper

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
HS Biology					
All items	60	80%	80%	67%	13
Question Type					
Multiple Choice	40	89%	88%	76%	12
Open Response	20	63%	62%	48%	15

Students w/ Disabilities Students (28)

Standards: Tested Standard **Mode:** Paper

	Possible Points	School % Possible Points	District % Possible Points	State % Possible Points	School/State Diff
HS Biology					
All items	60	61%	60%	50%	10
Question Type					
Multiple Choice	40	70%	70%	61%	9
Open Response	20	41%	40%	29%	12

Strategies for Improvement

HS Biology MCAS

- Strategies for improvement on open response questions include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.
- Students will continue to practice interpretation of novel data sets and diagrams.

SAMPLE OPEN RESPONSE QUESTION

Biology **Session 2**

Questions 44 and 45 are open-response questions.

- **BE SURE TO ANSWER AND LABEL ALL PARTS OF EACH QUESTION.**
- **Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.**
- **If you do the work in your head, explain in writing how you did the work.**

Write your answer to question 44 in the space provided in your Student Answer Booklet.

44 A certain genetic disorder is caused by a single base mutation in the DNA of a certain gene. The mutation changes the amino acid glutamate (Glu) to aspartate (Asp).

a. Identify the type of macromolecule (carbohydrate, lipid, nucleic acid, protein) that changes when Glu changes to Asp. Explain your answer.

A portion of the amino acid sequence that includes this mutation is shown below.

Val-Ser-Ala-Arg-Asp

The sample of DNA below is being analyzed to determine if a patient has the genetic disorder.

3' CAA-TCG-CGG-TCT-CTT 5'

b. Determine the mRNA sequence from the patient's DNA sequence.

c. Using the information in the codon table below, determine the amino acid sequence that is coded for by the mRNA sequence you determined in part (b).

d. Determine whether the patient has the genetic disorder. Explain your answer.

First Base of mRNA Codon	Second Base of mRNA Codon: U	C	A	G	Third Base of mRNA Codon
U	UUU Phe	UCU Ser	UAU Tyr	UGU Cys	U
	UUC Phe	UCC Ser	UAC Tyr	UGC Cys	C
	UUA Leu	UCA Ser	UAA STOP	UGA STOP	A
	UUG Leu	UCG Ser	UAG STOP	UGG Trp	G
C	CUU Leu	CCU Pro	CAU His	CGU Arg	U
	CUC Leu	CCC Pro	CAC His	CGC Arg	C
	CUA Leu	CCA Pro	CAA Gln	CGA Arg	A
	CUG Leu	CCG Pro	CAG Gln	CGG Arg	G
A	AUU Ile	ACU Thr	AAU Asn	AGU Ser	U
	AUC Ile	ACC Thr	AAC Asn	AGC Ser	C
	AUA Ile	ACA Thr	AAA Lys	AGA Arg	A
	AUG Met	ACG Thr	AAG Lys	AGG Arg	G
G	GUU Val	GCU Ala	GAU Asp	GGU Gly	U
	GUC Val	GCC Ala	GAC Asp	GGC Gly	C
	GUA Val	GCA Ala	GAA Glu	GGA Gly	A
	GUG Val	GCG Ala	GAG Glu	GGG Gly	G

GRADE 8 SCIENCE MCAS

Strand / Topic

Earth and Space Science (preK-8)

- Earth's History
- Earth's Structure
- Heat Transfer in the Earth System
- The Earth in the Solar System

Life Science (preK-8)

- Changes in Ecosystems Over Time
- Energy and Living Things
- Evolution and Biodiversity
- Reproduction and Heredity
- Structure and Function of Cells
- Systems in Living Things

Physical Sciences (preK-8)

- Elements, Compounds, and Mixtures
- Forms of Energy
- Heat Energy
- Motion of Objects
- Properties of Matter

Technology/Engineering (preK-8)

- Communication Technologies
- Construction Technologies
- Engineering Design
- Manufacturing Technologies
- Materials, Tools, and Machines
- Transportation Technologies

Note: Placing Gr. 8 and Bio MCAS in relative context. Grade 8 MCAS standards are "a mile wide and an inch deep"!

HS BIO MCAS

Strand / Topic

Biology High School Course

- Anatomy and Physiology
- Cell Biology
- Chemistry of Life
- Ecology
- Evolution and Biodiversity
- Genetics

APPENDIX I

Hingham Performance on 2017 Next Generation MCAS and Benchmark Comparisons

(All Students, High Needs Students, and Students with Disabilities)

GRADE 3 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (ALL STUDENTS)

COMMUNITY	READING	COMMUNITY	MATH
Westwood	80	Carlisle	79
Weston	78	Concord	79
Concord	77	Westwood	78
Scituate	77	Winchester	77
Carlisle	72	Lexington	74
Lexington	71	Scituate	74
Winchester	67	Canton	73
Norwell	66	Milton	71
Canton	65	Hingham	70
Wellesley	65	Weston	70
Hingham	64	Needham	68
Milton	64	Norwell	65
Braintree	63	Wellesley	64
Marblehead	63	Cohasset	63
Andover	62	Braintree	62
Needham	61	Andover	59
Weymouth	58	Dedham	54
Cohasset	56	Hull	53
Dedham	48	Marblehead	53
Hull	48	Weymouth	51
Rockland	28	Rockland	38

GRADE 3 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (STUDENTS WITH DISABILITIES)

COMMUNITY	READING	COMMUNITY	MATH
Weston	52	Carlisle	60
Scituate	43	Concord	48
Westwood	36	Weston	43
Carlisle	30	Winchester	43
Winchester	30	Lexington	40
Concord	29	Scituate	38
Lexington	29	Westwood	38
Milton	23	Hingham	35
Needham	22	Needham	34
Wellesley	22	Milton	33
Dedham	21	Canton	32
Norwell	21	Wellesley	29
Canton	20	Andover	26
Hingham	20	Hull	25
Andover	19	Marblehead	23
Cohasset	19	Cohasset	22
Hull	19	Dedham	22
Braintree	17	Weymouth	19
Marblehead	13	Braintree	17
Weymouth	9	Norwell	17
Rockland	4	Rockland	5

GRADE 3 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (HIGH NEEDS)

COMMUNITY	READING	COMMUNITY	MATH
Weston	59	Carlisle	73
Scituate	53	Lexington	58
Carlisle	47	Winchester	56
Lexington	46	Concord	53
Westwood	42	Braintree	46
Braintree	41	Weston	44
Winchester	37	Canton	43
Concord	35	Needham	42
Wellesley	35	Milton	41
Weymouth	34	Scituate	41
Canton	33	Westwood	41
Dedham	32	Hingham	39
Hull	32	Hull	35
Norwell	32	Weymouth	35
Andover	30	Andover	34
Needham	30	Dedham	34
Milton	28	Wellesley	34
Hingham	27	Marblehead	30
Cohasset	21	Norwell	29
Marblehead	19	Cohasset	24
Rockland	14	Rockland	21

GRADE 4 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (ALL STUDENTS)

COMMUNITY	READING	COMMUNITY	MATH
Weston	83	Winchester	81
Concord	81	Weston	80
Westwood	80	Hingham	79
Winchester	79	Lexington	79
Carlisle	78	Carlisle	78
Cohasset	78	Concord	77
Wellesley	78	Westwood	75
Lexington	76	Marblehead	73
Scituate	75	Scituate	73
Hingham	73	Milton	70
Milton	69	Wellesley	68
Braintree	66	Needham	66
Marblehead	66	Cohasset	64
Needham	66	Andover	61
Hull	65	Braintree	60
Andover	62	Canton	60
Canton	62	Hull	54
Dedham	55	Dedham	47
Norwell	54	Rockland	46
Weymouth	52	Weymouth	45
Rockland	44	Norwell	41

GRADE 4 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (STUDENTS WITH DISABILITIES)

COMMUNITY	READING	COMMUNITY	MATH
Concord	49	Winchester	47
Weston	42	Concord	39
Scituate	39	Lexington	37
Winchester	37	Westwood	37
Wellesley	36	Marblehead	35
Westwood	34	Milton	31
Hingham	32	Cohasset	28
Lexington	31	Scituate	27
Milton	28	Wellesley	26
Braintree	27	Hingham	26
Dedham	26	Braintree	24
Cohasset	22	Andover	23
Needham	22	Weston	22
Marblehead	21	Needham	21
Canton	20	Dedham	20
Andover	19	Canton	15
Norwell	19	Weymouth	11
Weymouth	15	Rockland	7
Rockland	7	Norwell	3
Carlisle	N/A	Carlisle	N/A

GRADE 4 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (HIGH NEEDS)

COMMUNITY	READING	COMMUNITY	MATH
Concord	59	Winchester	63
Weston	57	Lexington	56
Winchester	57	Concord	52
Westwood	50	Westwood	51
Lexington	48	Weston	48
Hull	47	Marblehead	47
Braintree	44	Carlisle	45
Scituate	43	Braintree	40
Wellesley	43	Milton	40
Hingham	41	Hingham	39
Cohasset	37	Andover	38
Carlisle	36	Needham	36
Canton	35	Scituate	36
Milton	35	Wellesley	34
Weymouth	34	Hull	30
Andover	33	Rockland	30
Dedham	33	Cohasset	29
Marblehead	32	Dedham	27
Needham	32	Weymouth	27
Norwell	28	Canton	24
Rockland	26	Norwell	11

GRADE 5 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (ALL STUDENTS)

COMMUNITY	READING	COMMUNITY	MATH	COMMUNITY	SCIENCE
Concord	83	Concord	86	Hingham	86
Hingham	81	Weston	84	Winchester	81
Wellesley	78	Hingham	83	Weston	80
Winchester	78	Winchester	81	Concord	77
Cohasset	77	Westwood	73	Carlisle	76
Westwood	77	Lexington	72	Westwood	76
Carlisle	76	Carlisle	70	Lexington	73
Scituate	76	Milton	70	Andover	67
Lexington	75	Needham	69	Needham	67
Needham	71	Wellesley	69	Milton	66
Weston	71	Canton	68	Scituate	66
Milton	70	Scituate	65	Braintree	64
Norwell	68	Andover	64	Norwell	63
Andover	65	Marblehead	60	Marblehead	62
Braintree	64	Cohasset	56	Wellesley	62
Canton	64	Braintree	53	Canton	60
Marblehead	58	Norwell	51	Dedham	57
Hull	56	Dedham	50	Cohasset	56
Dedham	51	Hull	48	Hull	52
Rockland	49	Weymouth	36	Rockland	43
Weymouth	39	Rockland	34	Weymouth	36

GRADE 5 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (STUDENTS WITH DISABILITIES)

COMMUNITY	READING	COMMUNITY	MATH	COMMUNITY	SCIENCE
Concord	44	Weston	55	Winchester	54
Wellesley	39	Concord	45	Weston	48
Braintree	35	Winchester	43	Hingham	47
Lexington	32	Hingham	31	Westwood	37
Weston	32	Needham	29	Lexington	33
Winchester	30	Westwood	28	Milton	33
Needham	27	Lexington	24	Concord	29
Cohasset	24	Andover	23	Braintree	29
Canton	23	Wellesley	23	Needham	28
Hingham	21	Milton	22	Marblehead	27
Andover	20	Braintree	21	Scituate	26
Marblehead	20	Dedham	19	Andover	25
Westwood	20	Marblehead	18	Wellesley	24
Scituate	19	Canton	16	Cohasset	23
Milton	18	Cohasset	11	Dedham	23
Rockland	18	Norwell	10	Norwell	19
Dedham	17	Scituate	10	Hull	17
Norwell	16	Weymouth	8	Rockland	15
Hull	8	Rockland	6	Canton	14
Weymouth	2	Hull	0	Weymouth	7
Carlisle	N/A	Carlisle	N/A	Carlisle	N/A

GRADE 5 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (HIGH NEEDS)

COMMUNITY	READING	COMMUNITY	MATH	COMMUNITY	SCIENCE
Concord	51	Weston	59	Winchester	59
Carlisle	50	Concord	56	Hingham	56
Lexington	48	Winchester	53	Weston	53
Wellesley	48	Hingham	46	Carlisle	50
Braintree	45	Lexington	45	Lexington	47
Winchester	43	Carlisle	43	Braintree	43
Hingham	41	Canton	39	Westwood	43
Scituate	40	Westwood	39	Concord	41
Canton	38	Needham	37	Milton	38
Cohasset	37	Braintree	35	Scituate	38
Milton	37	Milton	33	Dedham	36
Needham	35	Wellesley	33	Canton	35
Weston	34	Marblehead	32	Marblehead	34
Westwood	34	Andover	30	Needham	34
Hull	30	Scituate	30	Andover	33
Andover	30	Dedham	29	Wellesley	31
Marblehead	27	Weymouth	22	Norwell	26
Dedham	27	Hull	19	Weymouth	22
Norwell	23	Norwell	17	Rockland	21
Weymouth	23	Rockland	16	Cohasset	17
Rockland	23	Cohasset	9	Hull	13

GRADE 6 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (ALL STUDENTS)

COMMUNITY	READING	COMMUNITY	MATH
Carlisle	86	Lexington	87
Lexington	84	Winchester	85
Winchester	83	Needham	84
Concord	80	Carlisle	82
Needham	80	Concord	79
Wellesley	79	Wellesley	77
Cohasset	78	Weston	75
Hingham	77	Milton	73
Westwood	73	Hingham	71
Norwell	72	Hull	71
Scituate	72	Norwell	68
Hull	68	Scituate	67
Milton	67	Westwood	66
Weston	66	Canton	62
Andover	61	Cohasset	60
Marblehead	60	Braintree	58
Braintree	59	Marblehead	58
Canton	59	Andover	57
Dedham	53	Dedham	55
Rockland	47	Weymouth	49
Weymouth	39	Rockland	40

GRADE 6 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (STUDENTS WITH DISABILITIES)

COMMUNITY	READING	COMMUNITY	MATH
Lexington	49	Winchester	43
Winchester	48	Lexington	41
Needham	39	Needham	41
Concord	38	Milton	38
Wellesley	28	Concord	34
Hingham	25	Carlisle	27
Scituate	24	Weston	27
Weston	24	Dedham	25
Westwood	24	Scituate	24
Norwell	22	Marblehead	22
Cohasset	20	Norwell	22
Marblehead	20	Hingham	21
Milton	20	Wellesley	21
Dedham	19	Cohasset	20
Carlisle	18	Braintree	18
Andover	16	Andover	16
Braintree	15	Westwood	15
Canton	12	Canton	14
Rockland	8	Rockland	10
Weymouth	4	Weymouth	9
Hull	N/A	Hull	N/A

GRADE 6 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (HIGH NEEDS)

COMMUNITY	READING	COMMUNITY	MATH
Lexington	55	Hull	64
Winchester	51	Lexington	58
Hull	50	Winchester	52
Scituate	47	Needham	48
Needham	45	Carlisle	47
Carlisle	40	Milton	44
Cohasset	39	Weston	43
Concord	39	Concord	41
Weston	38	Braintree	36
Hingham	37	Scituate	36
Wellesley	36	Westwood	33
Norwell	35	Dedham	30
Westwood	35	Canton	29
Braintree	33	Norwell	29
Canton	30	Hingham	28
Milton	30	Wellesley	28
Dedham	29	Weymouth	28
Rockland	26	Cohasset	27
Andover	25	Andover	26
Marblehead	24	Rockland	23
Weymouth	21	Marblehead	22

GRADE 7 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (ALL STUDENTS)

COMMUNITY	READING	COMMUNITY	MATH
Lexington	85	Carlisle	86
Concord	84	Lexington	85
Norwell	83	Needham	84
Weston	81	Concord	82
Carlisle	79	Winchester	81
Needham	78	Weston	77
Wellesley	76	Wellesley	75
Winchester	76	Hingham	71
Hingham	75	Westwood	70
Cohasset	71	Marblehead	67
Marblehead	71	Milton	67
Westwood	69	Norwell	66
Scituate	68	Cohasset	64
Andover	62	Andover	63
Braintree	60	Scituate	60
Canton	59	Canton	58
Hull	58	Braintree	57
Milton	58	Hull	53
Dedham	54	Dedham	52
Rockland	44	Weymouth	39
Weymouth	32	Rockland	34

GRADE 7 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (STUDENTS WITH DISABILITIES)

COMMUNITY	READING	COMMUNITY	MATH
Dedham	50	Carlisle	64
Weston	48	Needham	45
Lexington	42	Lexington	44
Carlisle	38	Winchester	36
Needham	37	Wellesley	35
Concord	36	Concord	29
Norwell	35	Weston	23
Wellesley	32	Milton	22
Hingham	27	Cohasset	20
Winchester	26	Andover	19
Cohasset	25	Westwood	19
Westwood	24	Braintree	15
Andover	21	Norwell	14
Scituate	20	Marblehead	13
Marblehead	16	Hingham	12
Milton	14	Hull	10
Braintree	13	Canton	9
Canton	12	Scituate	6
Hull	10	Dedham	5
Weymouth	6	Weymouth	4
Rockland	5	Rockland	3

GRADE 7 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (HIGH NEEDS)

COMMUNITY	READING	COMMUNITY	MATH
Lexington	55	Carlisle	64
Weston	51	Lexington	55
Concord	47	Needham	52
Wellesley	45	Wellesley	48
Carlisle	43	Winchester	45
Needham	43	Concord	44
Norwell	40	Hull	40
Hingham	39	Milton	34
Cohasset	36	Braintree	32
Hull	36	Westwood	29
Scituate	36	Hingham	28
Winchester	34	Andover	25
Braintree	33	Weston	25
Westwood	30	Canton	22
Andover	28	Norwell	22
Marblehead	27	Cohasset	21
Canton	25	Dedham	21
Rockland	25	Marblehead	21
Milton	23	Weymouth	21
Dedham	21	Rockland	20
Weymouth	18	Scituate	19

GRADE 8 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (ALL STUDENTS)

COMMUNITY	READING	COMMUNITY	MATH	COMMUNITY	SCIENCE
Carlisle	85	Lexington	91	Carlisle	84
Cohasset	83	Carlisle	85	Lexington	77
Lexington	83	Weston	78	Concord	74
Wellesley	80	Wellesley	77	Weston	74
Winchester	80	Needham	76	Winchester	70
Concord	77	Winchester	73	Needham	68
Needham	76	Concord	71	Norwell	66
Westwood	76	Canton	68	Westwood	66
Andover	74	Westwood	68	Marblehead	64
Weston	71	Cohasset	66	Braintree	63
Canton	70	Andover	63	Wellesley	63
Hingham	70	Marblehead	62	Hingham	62
Marblehead	68	Braintree	61	Canton	61
Braintree	67	Hingham	61	Scituate	59
Norwell	63	Norwell	60	Andover	57
Scituate	59	Milton	59	Cohasset	56
Hull	57	Dedham	51	Milton	50
Milton	54	Scituate	44	Hull	44
Dedham	51	Hull	38	Dedham	36
Weymouth	47	Weymouth	38	Weymouth	32
Rockland	28	Rockland	34	Rockland	24

GRADE 8 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (STUDENTS WITH DISABILITIES)

COMMUNITY	READING	COMMUNITY	MATH	COMMUNITY	SCIENCE
Wellesley	46	Lexington	52	Concord	47
Winchester	43	Wellesley	43	Lexington	34
Lexington	37	Needham	36	Winchester	31
Andover	36	Concord	33	Wellesley	30
Cohasset	34	Winchester	31	Marblehead	29
Needham	32	Braintree	27	Braintree	27
Concord	31	Weston	26	Needham	26
Braintree	26	Andover	21	Norwell	26
Marblehead	23	Marblehead	19	Weston	24
Westwood	22	Cohasset	15	Andover	17
Canton	21	Dedham	12	Cohasset	17
Weston	20	Hingham	12	Scituate	17
Hingham	14	Canton	11	Westwood	15
Norwell	14	Norwell	11	Dedham	14
Dedham	12	Westwood	11	Hingham	10
Scituate	9	Hull	6	Milton	7
Weymouth	7	Milton	5	Hull	6
Hull	6	Scituate	3	Canton	5
Rockland	3	Weymouth	1	Weymouth	4
Milton	2	Rockland	0	Rockland	3
Carlisle	N/A	Carlisle	N/A	Carlisle	N/A

GRADE 8 MCAS 2.0
EXCEEDING OR MEETING EXPECTATIONS (HIGH NEEDS)

COMMUNITY	READING	COMMUNITY	MATH	COMMUNITY	SCIENCE
Cohasset	54	Lexington	65	Concord	50
Lexington	50	Wellesley	48	Lexington	48
Winchester	48	Needham	42	Marblehead	41
Wellesley	46	Concord	41	Weston	37
Andover	43	Canton	38	Winchester	36
Canton	43	Winchester	38	Braintree	34
Concord	43	Braintree	37	Needham	30
Braintree	42	Weston	37	Hull	29
Needham	36	Andover	30	Canton	28
Weston	34	Marblehead	30	Wellesley	28
Marblehead	33	Cohasset	28	Andover	26
Westwood	32	Westwood	23	Norwell	26
Hull	26	Dedham	20	Westwood	26
Weymouth	25	Hull	20	Scituate	25
Hingham	20	Milton	19	Dedham	20
Scituate	19	Weymouth	16	Cohasset	19
Dedham	18	Hingham	14	Rockland	13
Norwell	14	Scituate	12	Weymouth	13
Milton	13	Norwell	11	Hingham	12
Rockland	13	Rockland	11	Milton	12
Carlisle	N/A	Carlisle	N/A	Carlisle	N/A