

# Spring 2022 MCAS Results Overview

Reading Public Schools  
October 6, 2022



# MCAS Spring 2022 Context



# Context for Spring 2022 Results

When considering this year's test results and how to compare them to previous years, it is helpful to remember that, due to the pandemic, there were variations in how MCAS was administered over the last few years:

- 2019: Full tests in grades 3-8 and high school
- 2020: No MCAS tests administered
- 2021: Half tests in grades 3-8, full tests in high school
- 2022: Full tests in grades 3-8 and high school; first administration of Next Generation science in high school



Adapted from DESE Press Release Sept. 29, 2022

# Context for Spring 2022 Results

It is also important to understand the experience students had at school during the pandemic.

- In March of the 2019-20 school year, there was a sudden and unprecedented shift to remote learning. Students didn't returned to school that year and received most instruction asynchronously.
- During the 2020-21 school year, students participated in a hybrid instructional model, which was a new way of learning for staff, students and families. The 2020-21 year also featured several transition points as instructional models shifted.
- The 2021-22 school year featured social distancing during lunch, masks until February, and significant student and staff absences due to several COVID-19 surges.

**Across the country, teaching and learning environments were not ideal and schools and districts prioritized health and social-emotional needs.**



# MCAS Trends Across the Commonwealth and in Reading



# MCAS Trends Across the Commonwealth

- In general, state English Language Arts (ELA) scores declined
- ELA scores dipped to similar levels of Math scores in 2021

## State Changes in ELA achievement levels

Grade	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
03	-5	-7	-12
04	-3	-11	-14
05	-5	-6	-11
06	-6	-6	-12
07	-5	-2	-7
08	-11	+1	-10
3-8	-6	-5	-11
10	+3	-6	-3

*"Change M/E": change in the proportion of students with "Meeting" or "Exceeding" expectations achievement level*



# MCAS Trends Across the Commonwealth

- In general, state scores showed recovery across all grades 3-8 in 2022
- Additional loss in grade 10 but slowing as compared to 2021
- Overall results when compared to pre-pandemic levels show continued need for improvement.

## State Changes in **MATH** achievement levels

Grade	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
03	-16	+8	-8
04	-17	+9	-8
05	-15	+3	-12
06	-19	+9	-10
07	-13	+2	-11
08	-14	+4	-10
3-8	-16	+6	-10
10	-7	-2	-9

*"Change M/E": change in the proportion of students with "Meeting" or "Exceeding" expectations achievement level*



# MCAS Trends Across the Commonwealth

- In general, state scores showed a small recovery in grades 5 and 8 in 2022
- 2022 marks the first administration of Next-Generation Science MCAS in grade 10 Physics and Biology, which is not comparable to legacy test from prior years

## State Changes in SCIENCE achievement levels

Grade	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
05	-7	+1	-6
08	-5	+1	-4
10	—	—	—



*"Change M/E": change in the proportion of students with "Meeting" or "Exceeding" expectations achievement level*



# MCAS Trends in Reading

- In general, post pandemic recovery is stronger than state
- Similar to state, still challenges in early grades

## Changes in ELA achievement levels

Grade	Change M/E 19-21		Change M/E 21-22		Change M/E 19-22	
	State	Reading	State	Reading	State	Reading
03	-5	-7	-7	-5	-12	-12
04	-3	+11	-11	-17	-14	-6
05	-5	+2	-6	-3	-11	0
06	-6	-10	-6	+2	-12	-8
07	-5	-8	-2	+1	-7	-6
08	-11	-8	1	+1	-10	-7
3-8	-6	-3	-5	-3	-11	-7
10	+3	+15	-6	-8	-3	+7

*"Change M/E": change in the proportion of students with "Meeting" or "Exceeding" expectations achievement level*

*\*Changes rounded to the nearest integer percent, so cumulative changes may not exactly add up*



# MCAS Trends in Reading

- In general, Reading scores follow the state trend of dip in 2021 with recovery in 2022

## Changes in Math achievement levels

Grade	Change M/E 19-21		Change M/E 21-22		Change M/E 19-22	
	State	Reading	State	Reading	State	Reading
03	-16	-10	+8	0	-8	-10
04	-17	-6	+9	+8	-8	+2
05	-15	-10	+3	+2	-12	-8
06	-19	-21	+9	+20	-10	-1
07	-13	-16	+2	+7	-11	-9
08	-14	-25	+4	+15	-10	-10
3-8	-16	-15	+6	+9	-10	-6
10	-7	-2	-2	-4	-9	-6

*"Change M/E": change in the proportion of students with "Meeting" or "Exceeding" expectations achievement level*

*\*Changes rounded to the nearest integer percent, so cumulative changes may not exactly add up*



# MCAS Trends in Reading

- Encouraging recovery in science
- Next-Gen Science MCAS in grade 10 Physics and Biology and not comparable to prior years

## Changes in Science achievement levels

Grade	Change M/E 19-21		Change M/E 21-22		Change M/E 19-22	
	State	Reading	State	Reading	State	Reading
05	-7	-11	+1	+9	-6	-2
08	-5	-8	+1	+9	-4	0
10	-	-	-	-	-	-



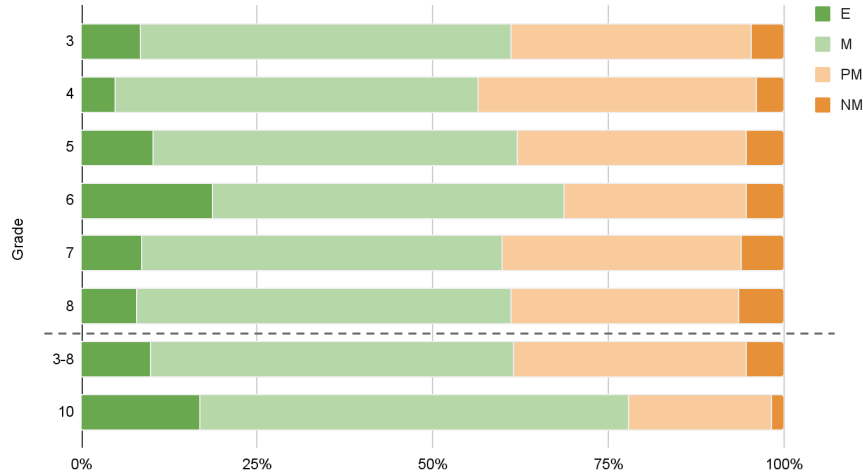
*"Change M/E": change in the proportion of students with "Meeting" or "Exceeding" expectations achievement level*  
*\*Changes rounded to the nearest integer percent, so cumulative changes may not exactly add up*

# Achievement and Growth in Reading

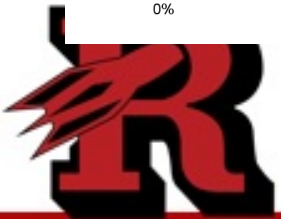
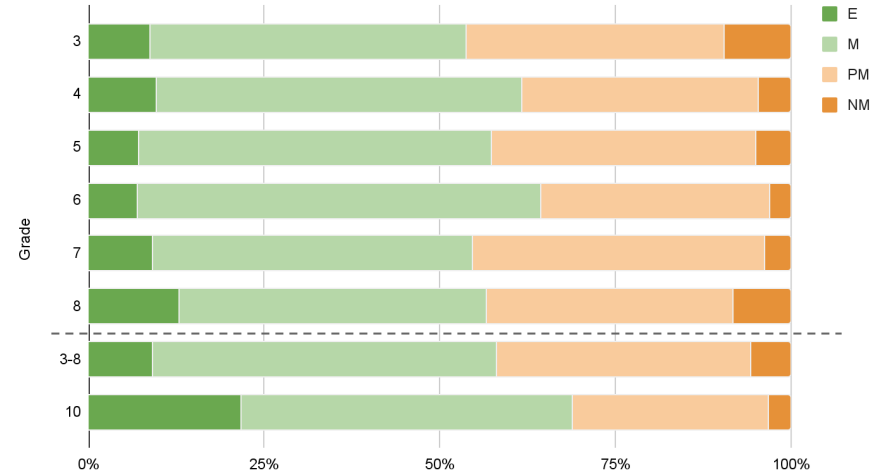


# Achievement Levels Spring 2022 (ELA & Math)

## ELA achievement level by grade

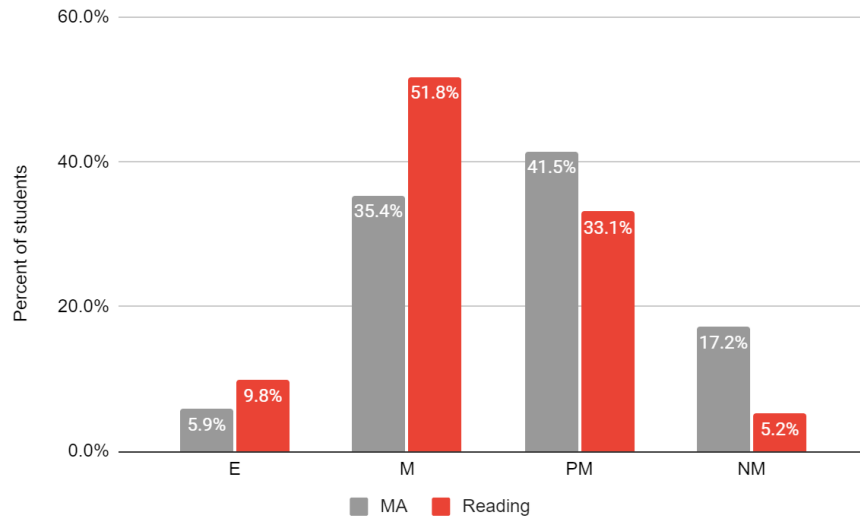


## Math achievement level by grade

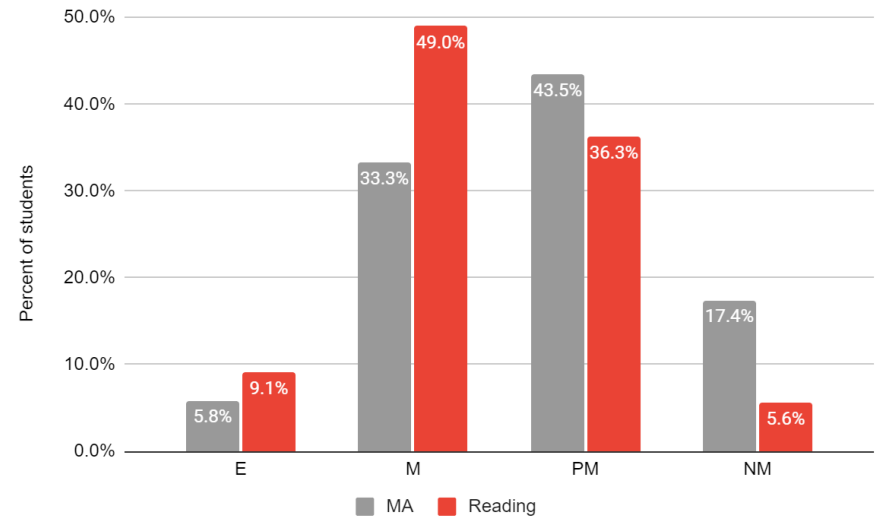


# Achievement Levels versus State (grade 3-8)

## ELA achievement, gr 3-8

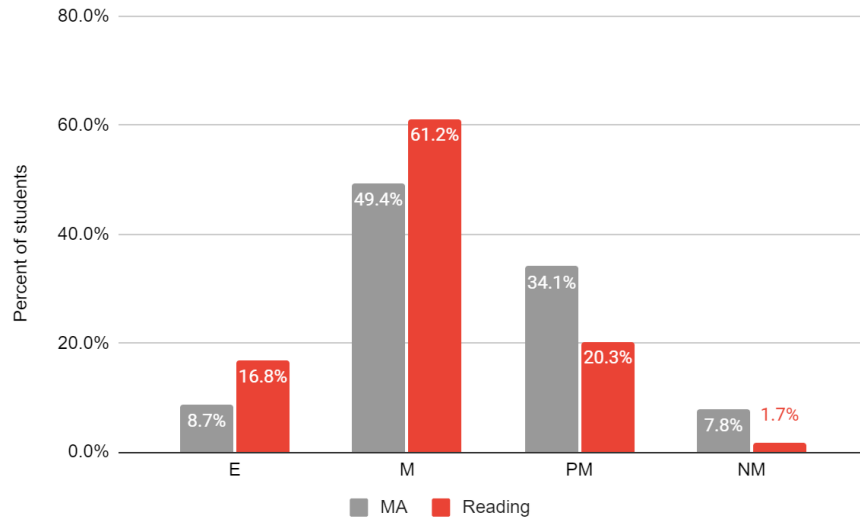


## Math achievement, gr 3-8

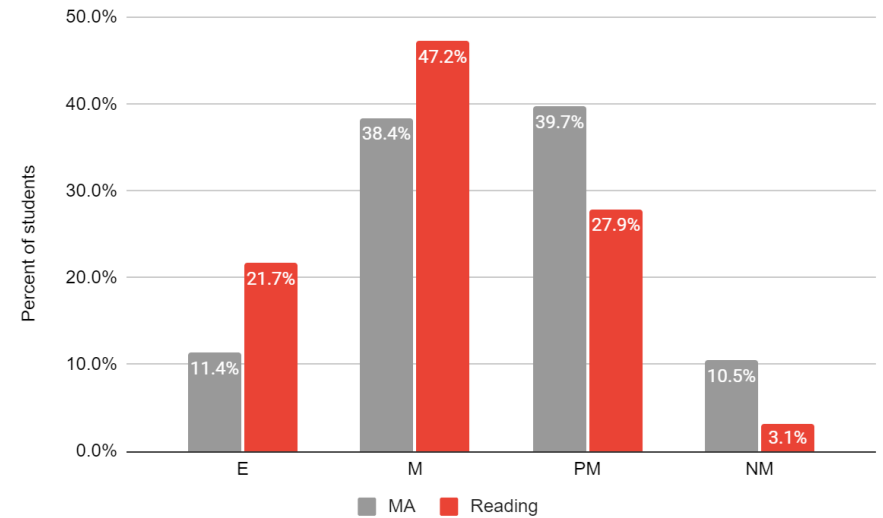


# Achievement Levels versus State (grade 10)

## ELA achievement, gr 10

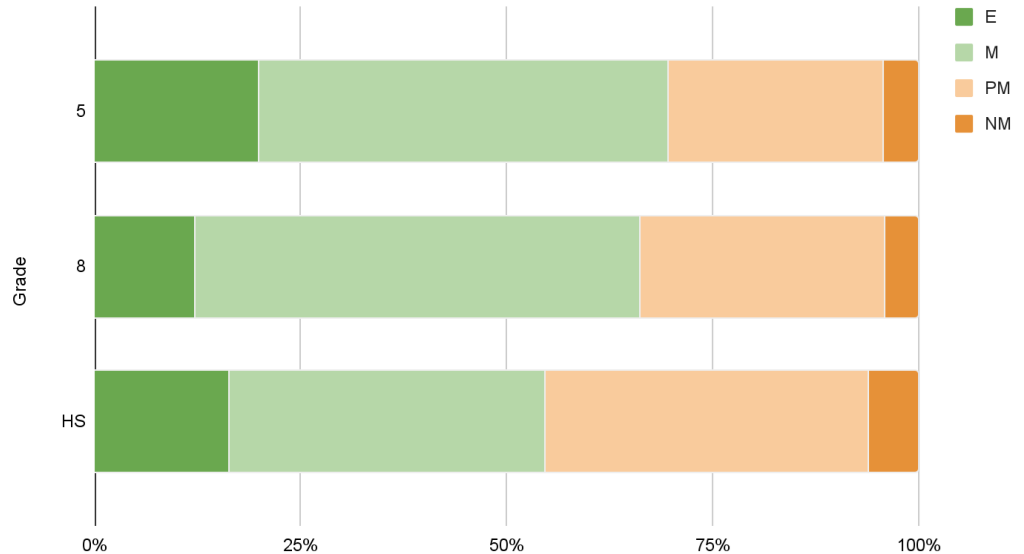


## Math achievement, gr 10



# Achievement Levels Spring 2022 (Science)

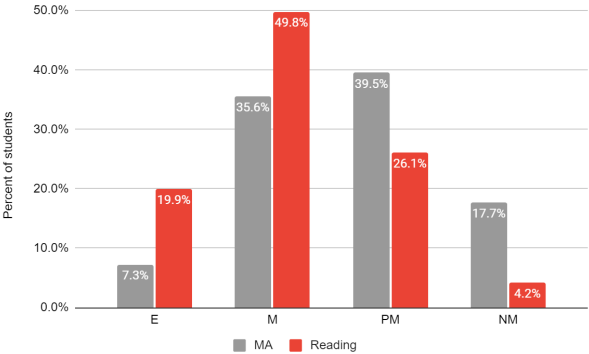
Science achievement level by grade



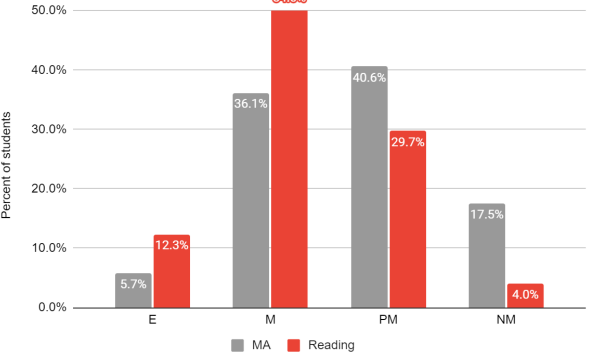


# Science Achievement Levels versus State

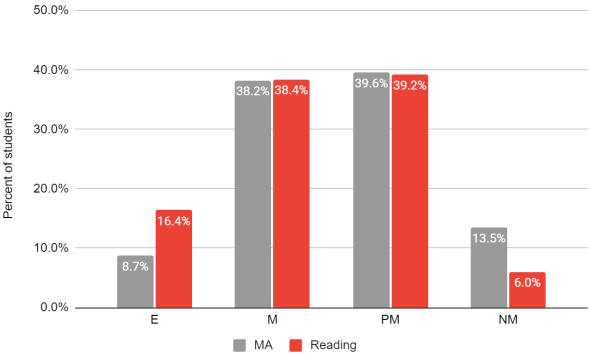
## Grade 5



## Grade 8



## High School



# Reading Student Growth Percentiles Spring 2022 (SGP)

- Availability of data allows for return to cohort model for student growth percentile calculations
- Should not be compared to 2021
- Old standards for understanding the means are applicable
  - Mean SGP of 1-19 = Very low growth
  - Mean SGP of 20-39 = Low growth
  - Mean SGP of 40-59 = Typical growth
  - Mean SGP of 60-79 = High growth
  - Mean SGP of 80-99 = Very high growth

## Mean SGP by grade level

Grade	ELA	Math
04	53.3	51.0
05	56.4	56.4
06	63.3	53.0
07	53.8	60.2
08	57.2	58.9
10	53.8	59.4



# Performance in Selected Populations



# Results for ELA and Mathematics in Selected Populations

- Spring 2022 MCAS results show a significant difference in the achievement of high needs students, economically disadvantaged students, African American and Black students, and Hispanic students in comparison to overall student results.
- Achievement level percentages are not calculated for groups with fewer than 10 students.



# Achievement in Selected Populations Spring 2022 - Grades 3-8

Percent of students meeting or exceeding expectations (Grade 3-8 ELA)

Population	2021	2022
All students	64	61
Economically disadvantaged	39	36
Students w/ disabilities	25	23
High needs students	33	31
African Amer/Black	32	18
Asian	74	74
Hispanic/Latino	41	46
Multi-Race, Non-Hisp/Latino	63	69
White	65	62

Percent of students meeting or exceeding expectations (Grade 3-8 Math)

Population	2021	2022
All students	49	57
Economically disadvantaged	15	28
Students w/ disabilities	14	19
High needs students	18	25
English learners	5	17
African Amer/Black	21	13
Asian	59	75
Hispanic/Latino	23	44
Multi-Race, Non-Hisp/Latino	48	60
White	50	59

*\*Achievement level percentages are not calculated for groups with fewer than 10 students*



# Achievement in Selected Populations Spring 2022 - Grade 10

Percent of students meeting or exceeding expectations (Grade 10 ELA)

Population	2021	2022
All students	84	76
Economically disadvantaged	70	59
Students w/ disabilities	41	42
High needs students	51	51
African Amer/Black		45
Asian	94	78
White	86	78

Percent of students meeting or exceeding expectations (Grade 10 Math)

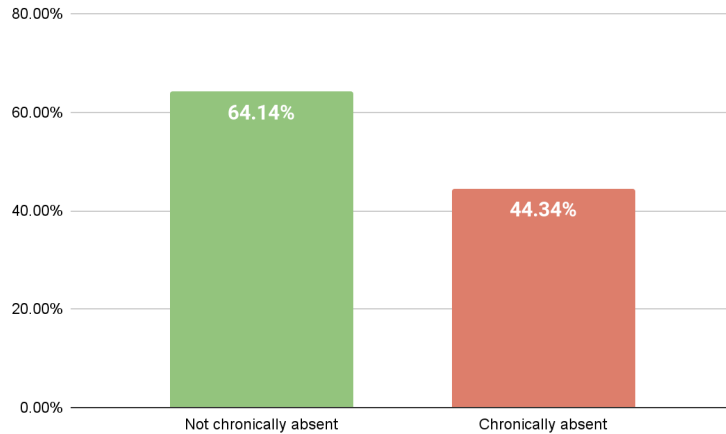
Population	2021	2022
All students	72	68
Economically disadvantaged	46	50
Students w/ disabilities	23	18
High needs students	33	34
African Amer/Black		50
Asian	100	84
White	72	68



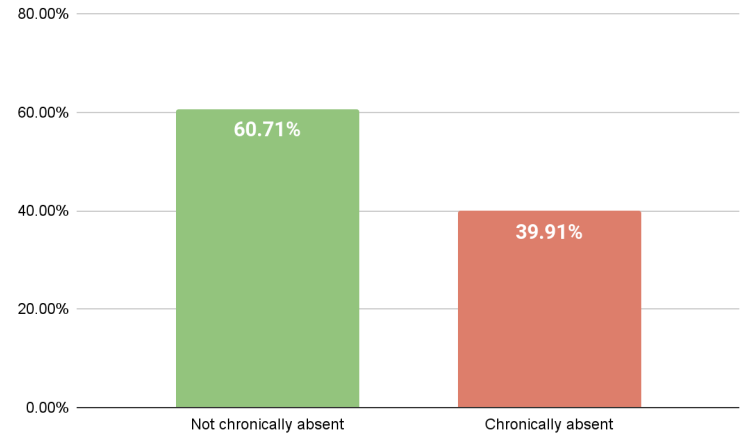
*\*Achievement level percentages are not calculated for groups with fewer than 10 students*

# Connection to Attendance in 2021-2022

Percent of students meeting or exceeding expectations  
Grade 3-8 ELA Spring 2022



Percent of students meeting or exceeding expectations  
Grade 3-8 Math Spring 2022



# Moving Forward

Commitments on how we will use data:

- DESE will create accountability benchmarks based on 2022 results; in coming years we will connect back to 2022 results as a baseline
- In future years, we will present cohort results
- Each school will share Spring 2022 MCAS results with their families





# Moving Forward

District next steps include:

- District strategic plan goal areas designed to address student growth and achievement
- Fidelity of implementation of new curricular materials and instructional methods (ARC Core, Illustrative Math, enVision Math)
- Utilizing assessment to drive instruction and interventions (i-Ready, IRLA, Early Literacy Screenings; Elementary math common assessments)
- Focus on instructional leadership training and development for leaders (Instructional Leadership Teams for principals, RMHS Dept. Heads, District Data Team)
- Continued review of curriculum and instructional practices (Middle School Literacy Leadership Team, High school curriculum review and adoption process)
- Utilizing interventions and increasing time on learning (Vacation and summer academies, RMHS Tier 2 Academic Support Center, Scheduling workshops at all levels)

