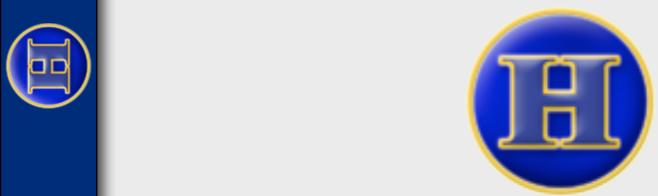


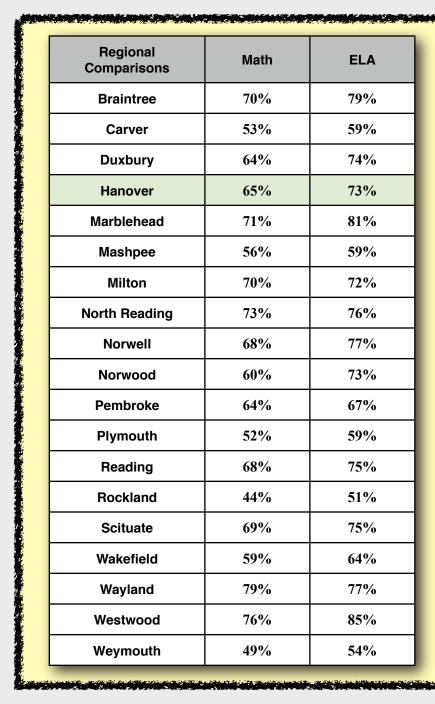
SUPPLEMENTAL DATA - E1

TABLE OF CONTENTS

REGIONAL DATA COMPARISON 1
ENGLISH LANGUAGE ARTS (ELA) * PERFORMANCE BY GRADE LEVEL
MATHEMATICS * PERFORMANCE BY GRADE LEVEL



AGGREGATE ELA & MATH REGIONAL DATA COMPARISON





Hanover Public Schools PARCC Results 2016

ENGLISH LANGUAGE ARTS GRADES 3/4

3RD GRADE	At or A	Above	Ne	ear	Below	
JRD GRADE	Students	%	Students	%	Students	%
Reading: Literary Analysis	121	60%	40	20%	38	19%
Reading: Informational Text	100	49%	51	25%	51	26%
Reading: Vocabulary	111	55%	53	26%	38	19%
Written Expression	113	56%	18	9%	69	34%
Language & Conventions	127	63%	30	15%	44	22%

4TH GRADE	At or A	Above	Near		Below	
4111 UKADE	Students	%	Students	%	Students	%
Reading: Literary Analysis	155	73%	35	18%	19	9%
Reading: Informational Text	127	60%	64	30%	21	10%
Reading: Vocabulary	138	65%	55	26%	19	9%
Written Expression	165	78%	34	16%	15	7%
Language & Conventions	165	78%	25	12%	21	10%



Hanover Public Schools

ENGLISH LANGUAGE ARTS GRADES 5/6

5TH GRADE	At or A	Above	Near		Below	
JIN GRADE	Students	%	Students	%	Students	%
Reading: Literary Analysis	140	74%	30	19%	11	7%
Reading: Informational Text	132	73%	38	21%	11	6%
Reading: Vocabulary	109	60%	47	26%	25	13%
Written Expression	134	74%	33	19%	14	7%
Language & Conventions	126	70%	41	22%	14	8%

6TH GRADE	At or Above		Near		Below	
OIN GRADE	Students	%	Students	%	Students	%
Reading: Literary Analysis	119	57%	40	19%	49	24%
Reading: Informational Text	121	58%	49	24%	38	18%
Reading: Vocabulary	109	52%	59	28%	40	20%
Written Expression	128	62%	50	24%	30	14%
Language & Conventions	116	58%	59	26%	33	16%



Hanover Public Schools

ENGLISH LANGUAGE ARTS GRADES 7/8

7TH GRADE	At or Above		Near		Below	
7 IN GRADE	Students	%	Students	%	Students	%
Reading: Literary Analysis	145	65%	50	23%	28	13%
Reading: Informational Text	150	67%	47	22%	26	12%
Reading: Vocabulary	141	64%	52	23%	30	13%
Written Expression	207	92%	12	5%	4	2%
Language & Conventions	196	88%	20	9%	7	3%

8th Grade	At or A	Above	Near		Below	
OIN GRADE	Students	%	Students	%	Students	%
Reading: Literary Analysis	149	75%	30	15%	19	10%
Reading: Informational Text	147	74%	26	13%	25	13%
Reading: Vocabulary	120	71%	34	17%	24	12%
Written Expression	160	81%	24	12%	14	7%
Language & Conventions	162	82%	22	11%	14	7%



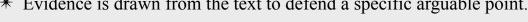
READING:	At or Above		Near		Below	
LITERARY ANALYSIS	Students	%	Students	%	Students	%
3rd Grade	121	60%	40	20%	38	19%
4th Grade	155	73%	35	18%	19	9%
5th Grade	140	74%	30	19%	11	7%
6th Grade	119	57%	49	19%	38	24%
7th Grade	145	65%	50	23%	28	13%
8th Grade	149	75%	30	15%	19	10%
Range	57% - 75%		15% - 23%		7% - 24%	



Reading: Literary Analysis -

- * Involves a discussion of a text as writing.
- * Includes certain concepts that are specifically associated with literature.
- * Discusses how various components of an individual work relate to each other.
- * Examines how two separate literary works deal with similar concepts or forms.
- * Relates larger aesthetic, political, social, economic, or religious contexts.
- * Focuses on specific attribute(s) of the text(s)
- * Evidence is drawn from the text to defend a specific arguable point.





https://owl.english.purdue.edu/owl/resource/697/1

READING:	At or Above		Near		Below		
Informational Text	Students	%	Students	%	Students	%	
3rd Grade	100	49%	51	25%	51	26%	
4th Grade	127	60%	64	30%	21	10%	
5th Grade	132	73%	38	21%	11	6%	
6th Grade	121	58%	49	24%	38	18%	
7th Grade	150	67%	47	22%	26	12%	
8th Grade	147	74%	26	13%	25	13%	
Range	49% -	49% - 74%		13% - 30%		6% - 26%	



Reading: Informational Text -

- * Text whose primary purpose is to convey information about the natural and social world.
- * Typically has characteristic features such as addressing whole classes of things in a timeless way.
- * Comes in many different formats, including books, magazines, handouts, brochures, CD-ROMs, and the Internet.
- * The PARCC's Research Simulation Task requires students to analyze an informational topic through several articles or multimedia stimuli. Students read and respond to a series of questions and synthesize information from multiple sources in order to write an analytic essay.





https://prc.parcconline.org/system/files/7th%20Grade%20-%20Research%20Simulation%20Task%20-%20Item%20Set.pdf

READING:	At or Above		Near		Below	
Vocabulary	Students	%	Students	%	Students	%
3rd Grade	111	55%	53	26%	38	19%
4th Grade	138	65%	55	26%	19	9%
5th Grade	109	60%	47	26%	25	14%
6th Grade	109	52%	59	28%	40	20%
7th Grade	141	64%	52	23%	30	13%
8th Grade	120	71%	34	17%	24	12%
Range	52% -	- 71%	17% - 28%		9% - 20%	

Reading: Vocabulary -

- * Vocabulary focuses on understanding words and phrases, their relationships, and their nuances, particularly general academic and domain-specific words and phrases.
- * General academic vocabulary consists of words that appear reasonably frequently within and across academic domains, such as analyze and process.
- * Domain-specific academic vocabulary consists of relatively low-frequency, content-specific words that appear in textbooks and other instructional materials; for example, apex in math, escarpment in geography, and isobar in science.
- * Literary vocabulary consists of words that may be infrequently used in everyday speech but may appear in literature, such as torrid, hyperbolic, or suave.



Bauman, James and Graves, Michael. "What is Academic Vocabulary?". Journal of Adolescent and Adult Literacy Vol 54, Issue 1, 4-12. (2010) online

WRITTEN	At or Above		Near		Below	
EXPRESSION	Students	%	Students	%	Students	%
3rd Grade	113	56%	18	9%	69	34%
4th Grade	165	78%	34	16%	15	7%
5th Grade	134	74%	33	19%	14	7%
6th Grade	128	62%	50	24%	30	14%
7th Grade	207	92%	12	5%	4	2%
8th Grade	160	81%	24	12%	14	7%
Range	56% - 92%		5% - 24%		2% - 34%	



Written Expression -

- * Prose Constructed Response (PRC): Three kinds of PRC on the PARCC. See below.
- * Research Simulation Task (RST): Analyze an informational topic presented through several texts or multimedia stimuli. Students engage with the texts by answering a series of questions and writing an analytic response to a prompt, synthesizing information from multiple sources.
- * Literary Analysis Task (LAT): Read and analyze two pieces of literature. Types of texts include short stories, novels, poems, or other types of literature. Students write an analytic response to a prompt based on the literary texts
- * Narrative Writing Task (NWT): Read a literary text from a grade-appropriate short story, novel, poem, or other type of literature. Students write a narrative response to a prompt based on this literary text.

https://prc.parcconline.org/system/files/ELA Released Items Scorer Training Final Approved.pdf



LANGUAGE &	At or Above		Near		Below	
Conventions	Students	%	Students	%	Students	%
3rd Grade	127	63%	30	15%	44	22%
4th Grade	165	78%	25	12%	21	10%
5th Grade	126	70%	41	22%	14	8%
6th Grade	116	58%	59	26%	33	16%
7th Grade	196	88%	12	9%	7	3%
8th Grade	162	82%	22	11%	14	7%
Range	58% -	- 88%	9% -	26%	3% -	22%



Language & Conventions -

- * The conventions of standard English.
- * Language complexity.
- * Mechanics, grammar, and usage, related to clarity.



https://prc.parcconline.org/system/files/Grade%206-11%20Rubric%20Final_July%202015.pdf

ENGLISH LANGUAGE ARTS HIGH NEEDS POPULATION

		Achievement Levels & Growth Percentage											
HIGH NEEDS	5		4	ı	3		2		1		Total # of	Student Growth	
POPULATION	# of Students	%	# of Students	%	# of Students	%	# of Students	%	# of Students	%	# or Students	Percentile (SGP)	
3rd Grade	1	1%	23	33%	16	23%	14	20%	16	23%	70	N/A	
4th Grade	5	9%	24	41%	19	33%	10	17%	0	0%	58	42%	
5th Grade	0	0%	16	39%	16	39%	7	17%	2	5%	41	40%	
6th Grade	1	2%	24	41%	15	25%	13	22%	6	10%	59	26%	
7th Grade	2	5%	19	44%	11	26%	10	23%	1	2%	43	55%	
8th Grade	6	11%	19	35%	18	33%	3	6%	8	15%	54	33%	







10

Hanover Public Schools

MATHEMATICS GRADES 3/4

3RD GRADE	At or A	Above	Ne	ear	Below		
3RD GRADE	Students	%	Students	%	Students	%	
Major Content Standards	123	61%	56	28%	22	11%	
Mathematical Reasoning	136	68%	30	15%	34	17%	
Modeling Practice	131 65%		46	23%	24	12%	
Additional & Supporting Clusters	115	57%	36	18%	50	25%	

4TH GRADE	At or A	Above	Ne	ear	Below		
41n GRADE	Students	%	Students	%	Students	%	
Major Content Standards	159	75%	35	18%	15	7%	
Mathematical Reasoning	144	144 68%		17%	34	16%	
Modeling Practice	159	75%	23	11%	30	14%	
Additional & Supporting Clusters	134	64%	33	16%	42	20%	







Hanover Public Schools PARCC Results 2016

MATHEMATICS GRADES 5/6

5TH GRADE	At or A	Above	Ne	ar	Below		
SIH GRADE	Students	%	Students	%	Students	%	
Major Content Standards	99	50%	63	35%	28	15%	
Mathematical Reasoning	102	57%	44	24%	34	19%	
Modeling Practice	114	65%	41	23%	25	12%	
Additional & Supporting Clusters	105	55%	34	18%	51	27%	

6TH GRADE	At or A	Above	Ne	ear	Below		
OIH GRADE	Students	%	Students	%	Students	%	
Major Content Standards	117	57%	65	31%	25	12%	
Mathematical Reasoning	115	55%	45	22%	47	23%	
Modeling Practice	119	57%	62	30%	26	13%	
Additional & Supporting Clusters	137	66%	43	21%	29	14%	



Hanover Public Schools PARCC Results 2016

MATHEMATICS GRADES 7/8

7TH CDADE	At or A	Above	Ne	ear	Below		
7TH GRADE	Students	%	Students	%	Students	%	
Major Content Standards	135	60%	64	29%	24	11%	
Mathematical Reasoning	164	73%	26	12%	33	15%	
Modeling Practice	114	51%	37	16%	72	32%	
Additional & Supporting Clusters	116	52%	51	23%	56	25%	

8th Grade	At or A	Above	N€	ear	Below		
AGGREGATE	Students	tudents %		%	Students	%	
Major Content Standards	121	61%	40	20%	37	19%	
Mathematical Reasoning	111	56%	39	17%	48	24%	
Modeling Practice	109	55%	26	13%	63	32%	
Additional & Supporting Clusters	119	60%	36	18%	43	22%	



MAJOR CONTENT	At or A	Above	Ne	ear	Below		
STANDARDS	Students	%	Students	%	Students	%	
3rd Grade	123	61%	56	28%	22	11%	
4th Grade	159	159 75%		18%	15	7%	
5th Grade	99	50%	63	35%	28	15%	
6th Grade	117	57%	65	31%	25	12%	
7th Grade	135	60%	64	29%	24	11%	
8th Grade Aggregate	121 61%		40 20%		37	19%	
Range	50% -	- 75%	18% -	- 35%	7% -	19%	



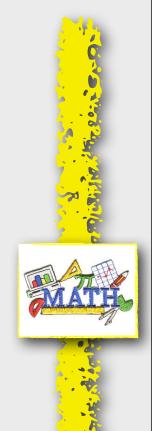


Major Content Standards -

- * The major work focused on solid conceptual understanding
- * A high degree of procedural skill and fluency,
- * The ability to apply the math they know to solve problems inside and outside the math classroom.
- * Not all of the content in a given grade is emphasized equally in the standards.
- * Some clusters require greater emphasis than the others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness



MATHEMATICAL	At or A	Above	Ne	ear	Below		
REASONING	Students	%	Students	%	Students	%	
3rd Grade	136	68%	30	15%	34	17%	
4th Grade	144	68%	36	17%	34	16%	
5th Grade	102	57%	44	24%	34	19%	
6th Grade	115	55%	45	22%	47	23%	
7th Grade	164	73%	26	12%	33	15%	
8th Grade Aggregate	111	56%	39	17%	48	24%	
Range	55% -	- 73%	12% -	- 24%	15%	- 24%	





Mathematical Reasoning -

- * The Standards for Mathematical Practice describe ways in which students ought to engage with mathematics through elementary, middle and high school.
- * Make sense of problems and persevere in solving them (MP 1)
- * Reason abstractly and quantitatively (MP 2)
- * Construct viable arguments and critique the reasoning of others. (MP 3)
- * Use appropriate tools strategically (MP 5)
- * Look for and make use of structure. (MP 7)
- * Look for and express regularity in repeated reasoning (MP 8)

http://achievethecore.org/content/upload/Focus_in_Math_06.12.2013.pdf http://www.corestandards.org/Math/Practice/







Modeling	At or A	Above	Ne	ar	Below		
PRACTICE	Students	%	Students	%	Students	%	
3rd Grade	131	65%	46	23%	24	12%	
4th Grade	159	75%	23	11%	30	14%	
5th Grade	114	65%	41	23%	25	12%	
6th Grade	119	57%	62	30%	26	13%	
7th Grade	114	51%	37	16%	72	32%	
8th Grade Aggregate	109	55%	26	13%	63	32%	
Range	51% -	- 75%	11% - 30%		12% - 32%		









Modeling Practice -

- * The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education.
- * Make sense of problems and persevere in solving them (MP 1)
- * Construct viable arguments and critique the reasoning of others. (MP 3)
- * Model with mathematics (MP 4)
- * Use appropriate tools strategically (MP 5)
- * Look for and make use of structure. (MP 7)
- * Look for and express regularity in repeated reasoning (MP 8)

http://www.corestandards.org/Math/Practice/

ADDITIONAL &	At or A	Above	Ne	ar	Below		
SUPPORTING CLUSTERS	Students	%	Students	%	Students	%	
3rd Grade	115 57%		36	36 18%		25%	
4th Grade	134	64%	33	16%	42	20%	
5th Grade	105	55%	34	18%	51	27%	
6th Grade	137	66%	43	21%	29	14%	
7th Grade	116	52%	51	23%	56	25%	
8th Grade Aggregate	119	60%	36	18%	43	22%	
Range	52% -	- 66%	16% -	- 23%	14% - 27%		



Additional & Supporting Clusters -

- * Some clusters that are not major emphases in themselves are designed to support and strengthen areas of major emphasis, while other clusters that may not connect tightly or explicitly to the major work of the grade are called additional.
- * Although some concepts and skills have greater emphasis is not to say that anything in the standards can safely be neglected in instruction.
- * Major Clusters are a majority of the assessment, Supporting Clusters are assessed through their success at supporting the Major Clusters
- * Additional Clusters are assessed independently as well.







MATHEMATICS HIGH NEEDS POPULATION

Нідн		Achievement Levels & Growth Percentage											
NEEDS POPULATION	5		4		3		2		1		Total # of	Student Growth	
	# of Students	%	# of Students	%	# of Students	%	# of Students	%	# of Students	%	Students	Percentile (SGP)	
3rd Grade	4	6%	25	36%	26	37%	11	16%	4	6%	70	N/A	
4th Grade	1	2%	25	43%	21	36%	10	17%	1	2%	58	45%	
5th Grade	0	0%	7	18%	14	35%	14	35%	5	13%	40	26%	
6th Grade	4	7%	15	26%	18	31%	13	22%	8	14%	58	53%	
7th Grade	1	2%	9	21%	16	37%	10	23%	7	16%	43	48%	
8th Grade Math	1	2%	7	15%	16	34%	14	30%	9	19%	47	42%	







