

STATISTICAL SUMMARY

SPRING 2024 ADMINISTRATION OF OHIO'S STATE TESTS IN ENGLISH LANGUAGE ARTS,
MATHEMATICS, SCIENCE AND SOCIAL STUDIES

Ohio's State Tests are designed to measure student progress toward achievement of Ohio's Learning Standards. In Spring 2024, the Ohio Department of Education and Workforce administered Ohio's State Tests to students in grades 3-8 and high school.

Ohio's State Tests are fixed form assessments that are intended for online administration. However, paper format is available as an accommodation for special circumstances.

The statistics reported here are based on the results of all public school and community school students participating in the Spring 2024 administration. Data for grade 3 ELA and all high school tests include both first-time and repeat test takers.

Table 1 – Operational Summary Statistics

Test	N-count	Max Raw Score	Raw Score Mean	Raw Score Standard Deviation	Raw Score SEM	Max Scale Score	Min Scale Score	Scale Score Mean	Scale Score Standard Deviation	Scale Score SEM	Reliability
English Language Arts											
Grade 3 ELA	114,312	42	19.90	8.11	2.92	863	545	712.28	48.31	17.63	0.87
Grade 4 ELA	119,792	42	23.20	8.77	2.91	846	549	715.11	51.17	17.20	0.89
Grade 5 ELA	120,513	42	25.53	9.21	3.19	848	552	722.88	51.06	17.36	0.88
Grade 6 ELA	120,032	62	32.99	12.09	3.63	851	555	702.46	44.69	13.32	0.91
Grade 7 ELA	121,755	62	34.61	12.77	3.38	833	568	711.19	46.03	12.56	0.93
Grade 8 ELA	122,915	60	32.50	11.87	3.56	805	586	698.31	33.65	9.98	0.91
High School ELA 2	135,885	62	32.05	12.59	3.78	808	597	704.26	31.86	9.35	0.91
Mathematics											
Grade 3 Math	115,990	50	27.84	11.94	3.16	818	587	714.79	49.87	12.82	0.93
Grade 4 Math	119,170	49	26.34	12.92	3.16	835	605	724.75	51.99	13.19	0.94
Grade 5 Math	119,273	49	23.56	12.40	3.04	804	624	708.36	39.32	10.00	0.94
Grade 6 Math	118,254	54	24.33	12.92	3.16	790	616	700.05	39.36	9.41	0.94
Grade 7 Math	115,197	53	22.62	11.50	3.04	806	605	698.99	38.42	10.41	0.93
Grade 8 Math	102,060	52	22.65	11.05	3.13	774	633	699.04	24.15	6.97	0.92
Algebra	148,263	54	20.80	12.20	3.45	814	618	702.02	36.09	10.01	0.92
Geometry	118,171	54	19.65	12.21	3.45	810	604	695.83	39.14	10.98	0.92
Integrated Math 1	2,977	55	17.47	11.83	3.55	814	618	688.50	37.09	10.83	0.91
Integrated Math 2	2,553	56	18.89	12.47	3.53	813	594	687.50	43.09	11.96	0.92

Table 1 – Continued

Test	N-count	Max Raw Score	Raw Score Mean	Raw Score Standard Deviation	Raw Score SEM	Max Scale Score	Min Scale Score	Scale Score Mean	Scale Score Standard Deviation	Scale Score SEM	Reliability
Science											
Grade 5 Science	120,575	55	30.81	11.68	3.30	845	559	716.96	52.42	14.39	0.92
Grade 8 Science	122,340	54	26.48	11.12	3.34	868	575	716.35	45.34	13.59	0.91
Biology	131,501	54	24.30	11.08	3.32	823	617	710.83	32.30	9.81	0.91
Social Studies											
American Government	79,395	53	27.96	12.02	3.40	774	642	712.05	21.86	6.31	0.92
American History	122,811	53	27.73	11.75	3.53	800	619	716.04	28.55	8.43	0.91

Note: SEM is standard error of measurement. Min and Max Scale Score and Max Raw Score show the highest and lowest scores the students could achieve.

Note: Starting with the Spring 2022 administration, the Elaboration and Organization rubrics for the Grade 3-8 and HS ELA 2 writing prompts are coded from 1-4 to 0-3 for student ability estimation purposes. The Conventions rubric is not coded because its lowest possible score is 0, and nonscorable responses receiving condition codes always earn no points. The data in Table 1 reflect raw scores before coding.

Table 2 – Scale Score Cut Points for the Basic, Proficient, Accomplished, and Advanced Performance Levels

Test	Basic	Proficient	Accomplished	Advanced
English Language Arts				
Grade 3 ELA	672	700	725	752
Grade 4 ELA	674	700	725	753
Grade 5 ELA	669	700	725	755
Grade 6 ELA	668	700	725	751
Grade 7 ELA	670	700	725	749
Grade 8 ELA	682	700	725	744
High School ELA 2	679	700	725	742
Mathematics				
Grade 3 Math	683	700	725	753
Grade 4 Math	686	700	725	759
Grade 5 Math	687	700	725	749
Grade 6 Math	682	700	725	744
Grade 7 Math	684	700	725	755
Grade 8 Math	690	700	725	744
Algebra	682	700	725	754
Geometry	678	700	725	756
Integrated Math 1	682	700	725	754
Integrated Math 2	677	700	725	758
Science				
Grade 5 Science	664	700	725	753
Grade 8 Science	674	700	725	766
Biology	685	700	725	735
Social Studies				
American Government	687	700	725	739
American History	684	700	725	738

Table 3 – Percent of Students at Each Performance Level

Test	N-Count	Limited	Basic	Proficient	Accomplished	Advanced	At or Above Proficient
English Language Arts							
Grade 3 ELA	114,312	20	19	21	20	20	62
Grade 4 ELA	119,792	22	14	18	22	24	64
Grade 5 ELA	120,513	15	14	19	25	27	71
Grade 6 ELA	120,032	21	23	21	21	14	55
Grade 7 ELA	121,755	19	19	21	18	23	62
Grade 8 ELA	122,915	31	19	26	15	8	50
High School ELA 2	135,885	23	19	28	16	13	58
Mathematics							
Grade 3 Math	115,990	28	10	20	19	24	62
Grade 4 Math	119,170	24	8	17	23	27	68
Grade 5 Math	119,273	32	10	24	17	17	58
Grade 6 Math	118,254	33	16	20	15	16	50
Grade 7 Math	115,197	36	15	23	18	8	49
Grade 8 Math	102,060	38	15	31	10	5	47
Algebra	148,263	34	17	22	17	10	49
Geometry	118,171	37	21	17	15	9	42
Integrated Math 1	2,977	48	18	16	11	6	34
Integrated Math 2	2,553	45	17	15	15	7	38
Science							
Grade 5 Science	120,575	18	18	18	18	28	64
Grade 8 Science	122,340	18	20	19	28	15	62
Biology	131,501	24	16	27	10	24	60
Social Studies							
American Government	79,395	11	21	39	16	12	67
American History	122,811	13	21	29	15	22	66

Subscale Data

Table 4 – Raw Score Ranges for Below Proficient, At/Near Proficient and Above Proficient

Test	Strand	Below Proficient	At/Near Proficient	Above Proficient
Grade 3 ELA	RI	0-5	6-8	9-16
	RL	0-5	6-10	11-16
	W	0-0	1-2	3-8
Grade 4 ELA	RI	0-5	6-9	10-16
	RL	0-7	8-11	12-16
	W	0-1	2-3	4-8
Grade 5 ELA	RI	0-7	8-11	12-16
	RL	0-5	6-9	10-16
	W	0-1	2-3	4-8
Grade 6 ELA	RI	0-8	9-12	13-22
	RL	0-9	10-13	14-20
	W	0-4	5-8	9-16
Grade 7 ELA	RI	0-10	11-15	16-24
	RL	0-7	8-11	12-18
	W	0-3	4-6	7-16
Grade 8 ELA	RI	0-10	11-15	16-21
	RL	0-7	8-11	12-19
	W	0-5	6-8	9-16
High School ELA 2	RI	0-8	9-13	14-25
	RL	0-7	8-11	12-17
	W	0-4	5-7	8-16

Note: RL = Reading Literary Text; RI = Reading Informational Text; W = Writing. The ranges are based on the online test form.

Note: Starting with the Spring 2022 administration, the Elaboration and Organization rubrics for the Grade 3-8 and HS ELA 2 writing prompts are coded from 1-4 to 0-3 for student ability estimation purposes. The Conventions rubric is not coded because its lowest possible score is 0, and nonscorable responses receiving condition codes always earn no points. The data in Table 4 reflect raw scores after coding.

Table 4 – Continued

Test	Strand	Below Proficient	At/Near Proficient	Above Proficient
Grade 3 Math	FRA	0-4	5-8	9-13
	G	0-5	6-8	9-12
	MUD	0-4	5-8	9-14
	MR	0-10	11-15	16-31
	NO	0-2	3-5	6-11
Grade 4 Math	FRA	0-5	6-9	10-18
	G	0-3	4-6	7-11
	MUD	0-5	6-9	10-20
	MR	0-6	7-10	11-21
Grade 5 Math	D	0-7	8-11	12-20
	FRA	0-4	5-7	8-17
	G	0-3	4-6	7-12
	MR	0-6	7-11	12-25
Grade 6 Math	EE	0-6	7-9	10-17
	GS	0-1	2-4	5-11
	MR	0-5	6-9	10-21
	NS	0-4	5-7	8-12
	RP	0-5	6-8	9-14
Grade 7 Math	G	0-4	5-7	8-13
	MR	0-8	9-13	14-31
	NS	0-3	4-7	8-15
	RP	0-5	6-8	9-13
	SP	0-3	4-6	7-12
Grade 8 Math	EE	0-4	5-7	8-13
	F	0-4	5-7	8-12
	G	0-5	6-8	9-16
	MR	0-9	10-14	15-30
	NS	0-2	3-5	6-11
Algebra	F	0-7	8-11	12-25
	MR	0-7	8-11	12-27
	NQEE	0-4	5-9	10-19
	S	0-1	2-4	5-10

Table 4 – Continued

Geometry	C	0-2	3-5	6-11
	CP	0-4	5-9	10-19
	MR	0-7	8-12	13-27
	P	0-2	3-4	5-10
	ST	0-4	5-7	8-14
Integrated Math 1	A	0-2	3-5	6-13
	G	0-3	4-6	7-13
	MR	0-8	9-13	14-32
	NQF	0-5	6-9	10-18
	S	0-2	3-5	6-11
Integrated Math 2	F	0-3	4-5	6-11
	G	0-6	7-10	11-21
	MR	0-8	9-13	14-33
	NQEE	0-3	4-7	8-14
	P	0-1	2-4	5-10

Note: MR = Model Reasoning; MUD = Multiplication & Division; NO = Numbers & Operations; G = Geometry; FRA = Fractions; D = Decimals; EE = Expressions & Equations; NS = The Number System; GS = Geometry and Statistics; RP = Ratios and Proportions; SP = Statistics and Probability; F = Functions; NQEE = Number, Quantities, Equations and Expressions; S = Statistics; CP = Congruence & Proof; ST = Similarity & Trigonometry; C = Circles; P = Probability; A = Algebra; NQF = Number & Quantity/Functions. The ranges are based on the online test form. Modeling and Reasoning items are embedded within the other mathematics reporting categories.

Table 4 – Continued

Test	Strand	Below Proficient	At/Near Proficient	Above Proficient
Grade 5 Science	ESS	0-4	5-8	9-15
	LS	0-7	8-11	12-19
	PS	0-8	9-12	13-21
Grade 8 Science	ESS	0-7	8-11	12-22
	LS	0-5	6-9	10-16
	PS	0-3	4-7	8-16
Biology	Ce	0-2	3-5	6-13
	DI	0-4	5-7	8-13
	E	0-4	5-7	8-14
	H	0-2	3-6	7-14

Note: ES = Earth Science; LS = Life Science; PS = Physical Science; H = Heredity; E = Evolution; DI = Diversity and Interdependence of Life; Ce = Cells. The ranges are based on the online test form.

Table 4 – Continued

Test	Strand	Below Proficient	At/Near Proficient	Above Proficient
American Government	AGA	0-5	6-9	10-18
	AGB	0-6	7-11	12-21
	AGC	0-2	3-6	7-14
American History	AHA	0-3	4-6	7-13
	AHB	0-6	7-10	11-22
	AHC	0-5	6-9	10-18

Note: AGA = Historic Documents; AGB = Principles & Structures; AGC = Ohio/Policy/Economy; AHA = Skills & Documents; AHB = 1877-1945; AHC = 1945-Present. The ranges are based on the online test form.

Subscale Data

Table 5 - Percentage of Students Below Proficient, At/Near Proficient and Above Proficient

Test	Strand	Below Proficient	At/Near Proficient	Above Proficient
Grade 3 ELA	RI	28	30	42
	RL	23	39	38
	W	27	49	23
Grade 4 ELA	RI	23	32	45
	RL	28	28	43
	W	30	23	46
Grade 5 ELA	RI	24	32	45
	RL	20	25	56
	W	23	19	58
Grade 6 ELA	RI	28	28	43
	RL	34	29	38
	W	32	41	27
Grade 7 ELA	RI	29	28	43
	RL	22	29	49
	W	32	13	55
Grade 8 ELA	RI	35	37	28
	RL	39	29	32
	W	33	29	39
High School ELA 2	RI	31	28	41
	RL	28	32	40
	W	33	17	51

Note: RL = Reading Literary Text; RI = Reading Informational Text; W = Writing

Table 5 - Continued

Test	Strand	Below Proficient	At/Near Proficient	Above Proficient
Grade 3 Math	FRA	24	33	42
	G	17	36	48
	MUD	28	27	45
	MR	32	18	50
	NO	28	28	44
Grade 4 Math	FRA	23	22	55
	G	27	26	47
	MUD	26	20	54
	MR	26	20	54
Grade 5 Math	D	35	21	44
	FRA	35	21	44
	G	26	30	43
	MR	33	23	44
Grade 6 Math	EE	41	19	40
	GS	34	34	32
	MR	32	29	39
	NS	27	33	39
	RP	44	22	34
Grade 7 Math	G	37	33	30
	MR	41	23	36
	NS	35	37	28
	RP	39	30	31
	SP	41	33	26
Grade 8 Math	EE	41	29	30
	F	37	35	28
	G	42	28	30
	MR	45	23	32
	NS	28	37	35
Algebra	F	41	22	37
	MR	43	22	35
	NQEE	35	33	32
	S	29	42	29
Geometry	CP	44	30	26
	C	42	36	22
	MR	49	24	27
	P	40	23	37
	ST	43	28	29

Table 5 - Continued

Integrated Math 1	A	44	34	21
	G	60	25	15
	MR	54	21	25
	NQF	50	25	24
	S	39	37	25
Integrated Math 2	F	45	29	26
	G	55	21	25
	MR	55	17	28
	NQEE	46	27	28
	P	47	30	23
Grade 5 Science	ES	19	36	45
	LS	27	23	50
	PS	25	24	51
Grade 8 Science	ES	26	27	47
	LS	28	32	41
	PS	18	39	42
Biology	Ce	17	43	40
	DI	27	35	38
	E	30	21	49
	H	21	44	35
American Government	AGA	23	23	54
	AGB	21	33	46
	AGC	9	39	52
American History	AHA	16	30	55
	AHB	26	23	51
	AHC	18	31	51

Note: MR = Model Reasoning; MUD = Multiplication & Division; NO = Numbers & Operations; G = Geometry; FRA = Fractions; D = Decimals; EE = Expressions & Equations; NS = The Number System; GS = Geometry and Statistics; RP = Ratios and Proportions; SP = Statistics and Probability; F = Functions; NQEE = Number, Quantities, Equations and Expressions; S = Statistics; CP = Congruence & Proof; ST = Similarity & Trigonometry; C = Circles; P = Probability; A = Algebra; NQF = Number & Quantity/Functions. Modeling and Reasoning items are embedded within the other mathematics reporting categories.

Note: ES = Earth Science; LS = Life Science; PS = Physical Science; H = Heredity; E = Evolution; DI = Diversity and Interdependence of Life; Ce = Cells.

Note: AGA = Historic Documents; AGB = Principles & Structures; AGC = Ohio/Policy/Economy; AHA = Skills & Documents; AHB = 1877-1945; AHC = 1945-Present.