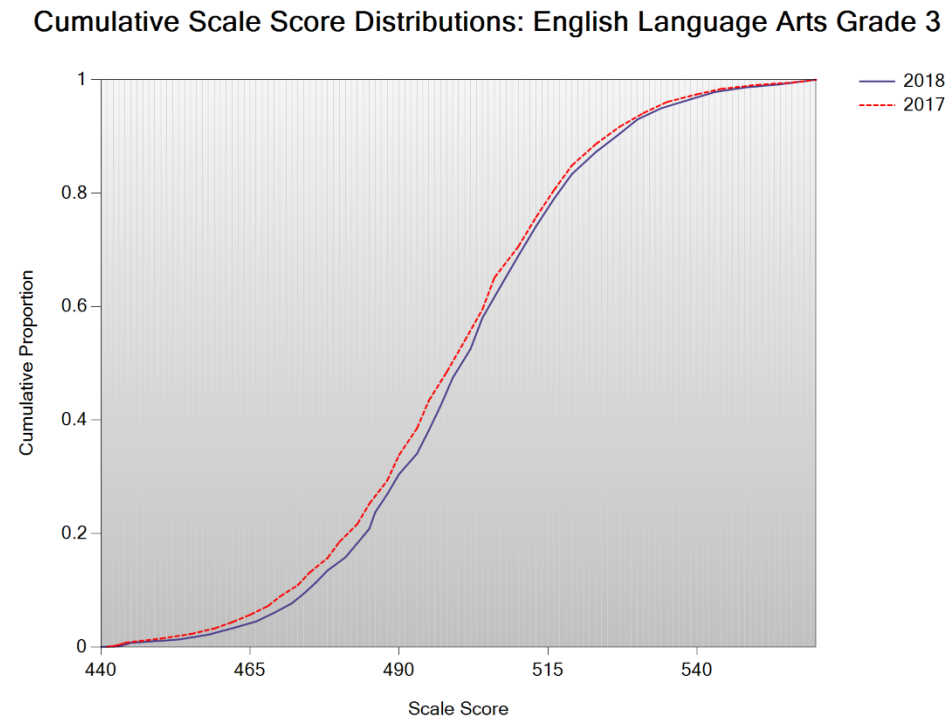


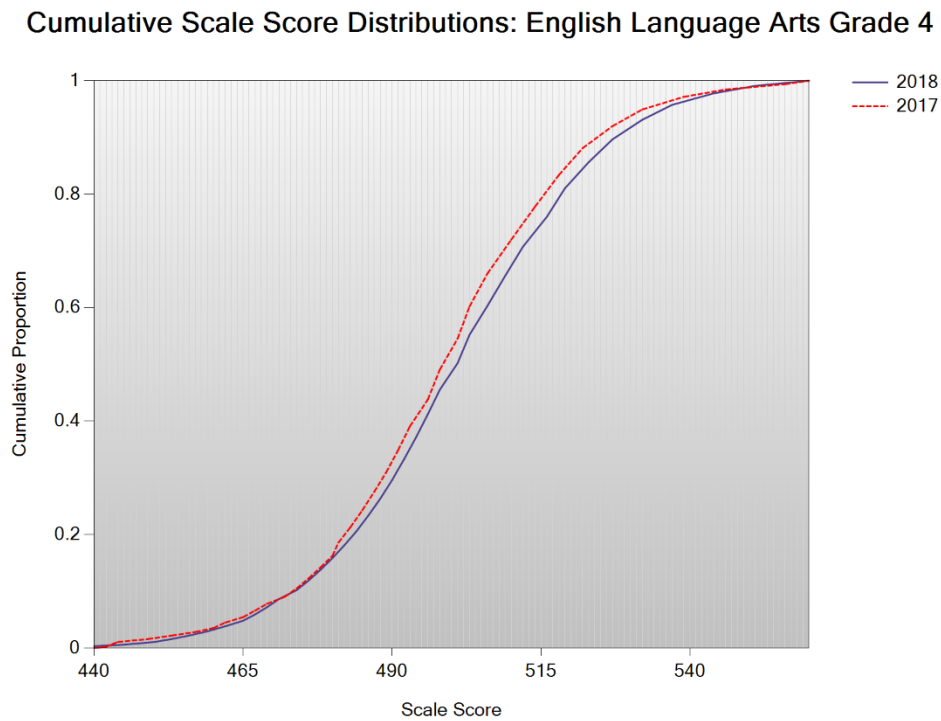
**APPENDIX N**

**SCALED SCORE DISTRIBUTIONS  
AND LOOKUP TABLES**

**Figure N-1. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – ELA Grade 3**

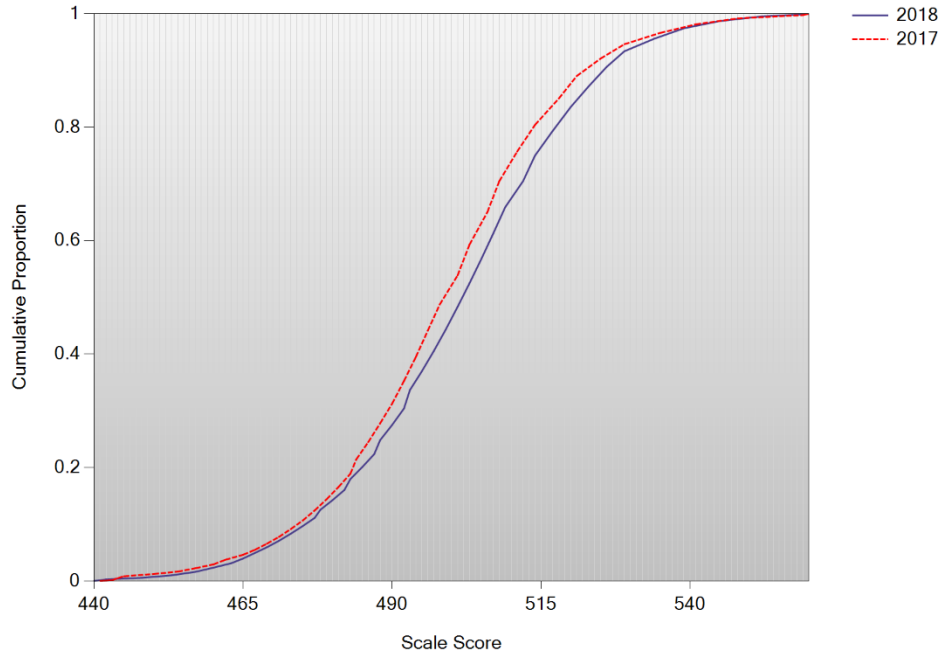


**Figure N-2. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – ELA Grade 4**



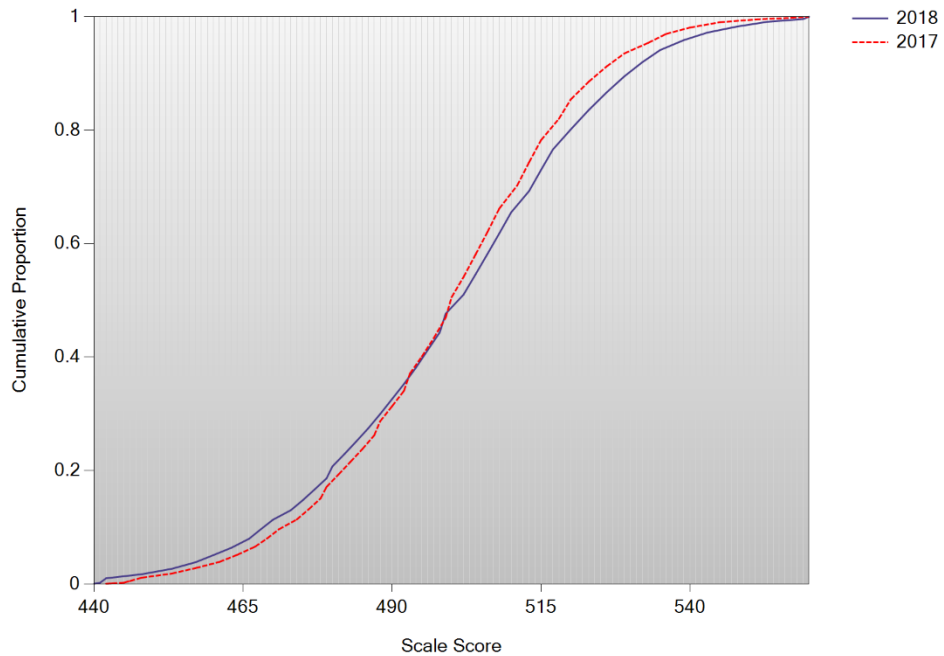
**Figure N-3. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – ELA Grade 5**

**Cumulative Scale Score Distributions: English Language Arts Grade 5**



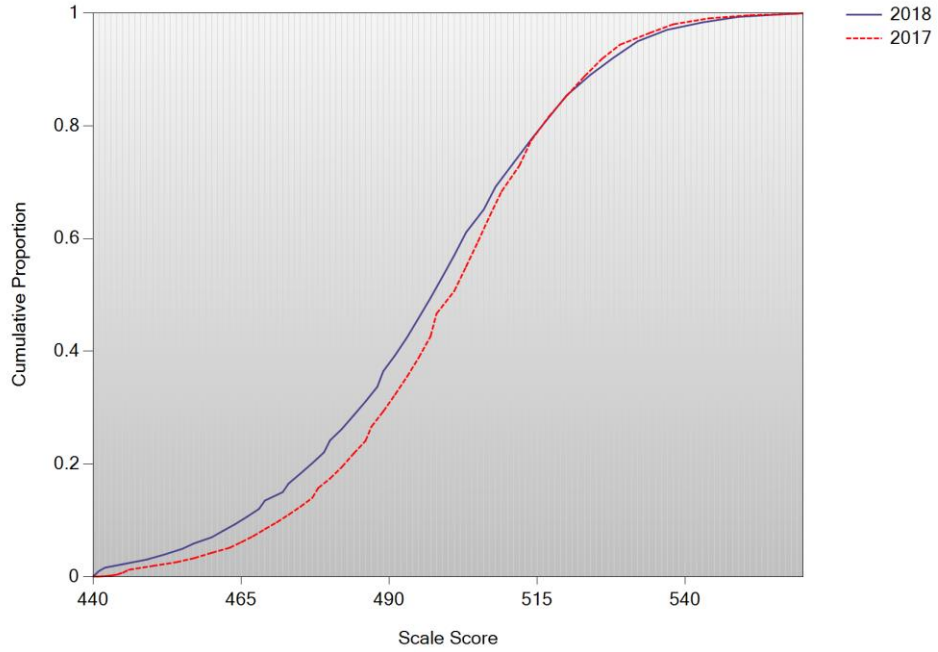
**Figure N-4. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – ELA Grade 6**

**Cumulative Scale Score Distributions: English Language Arts Grade 6**



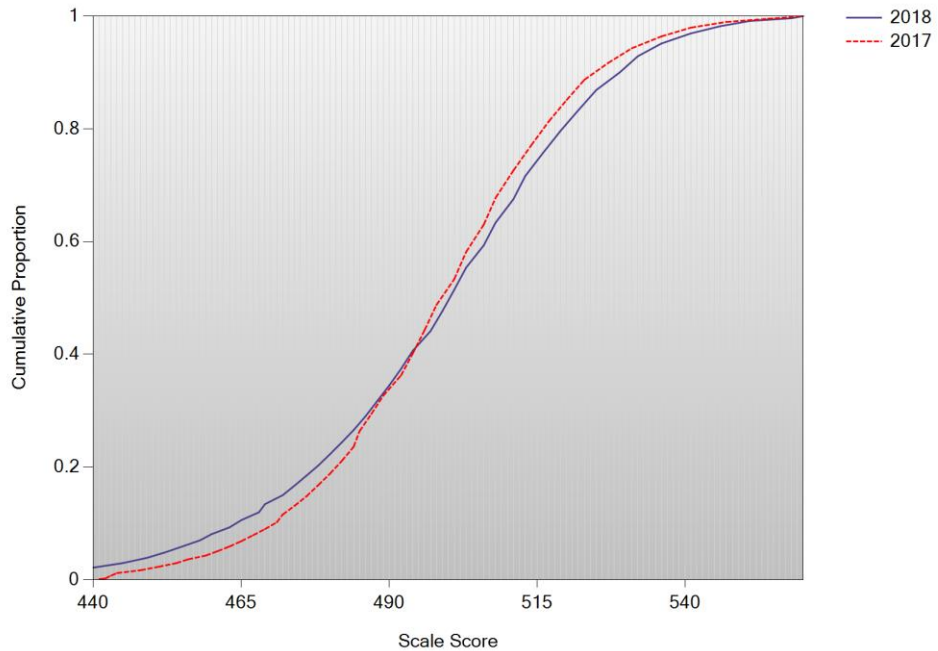
**Figure N-5. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – ELA Grade 7**

**Cumulative Scale Score Distributions: English Language Arts Grade 7**

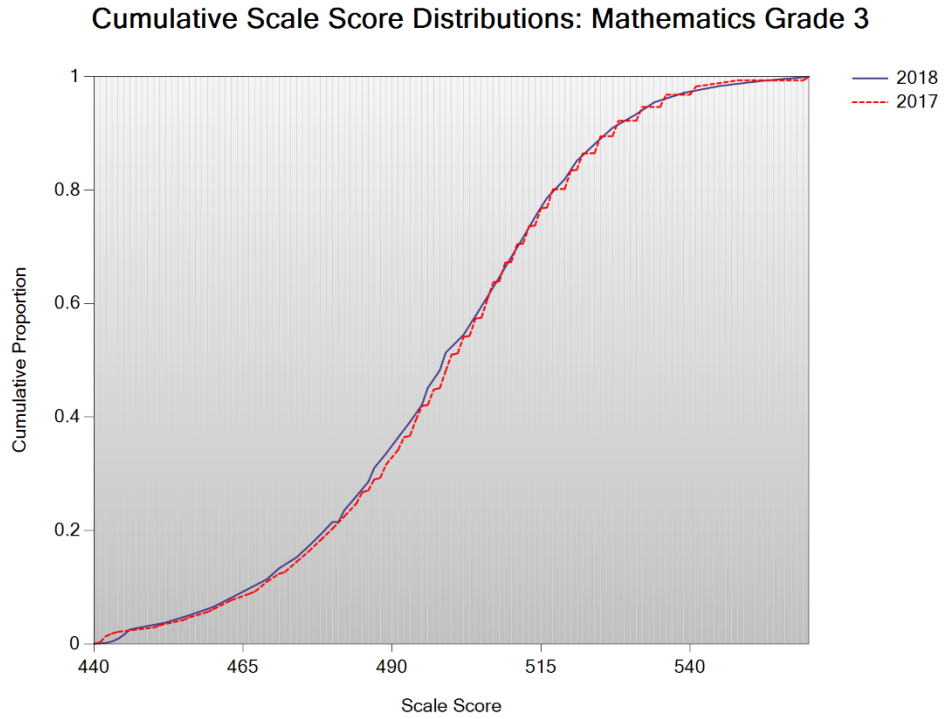


**Figure N-6. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – ELA Grade 8**

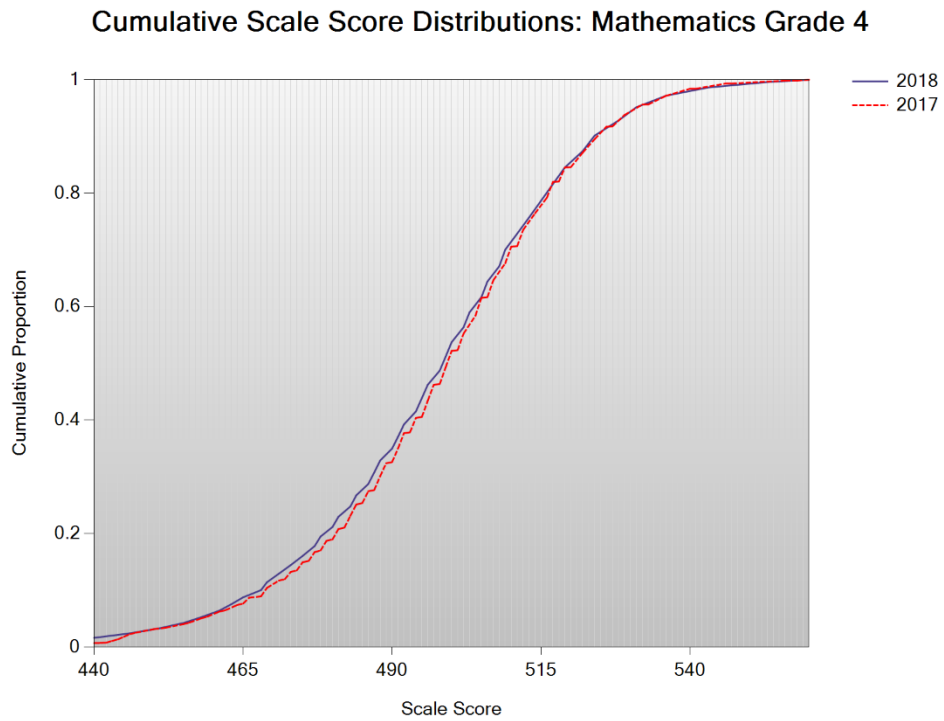
**Cumulative Scale Score Distributions: English Language Arts Grade 8**



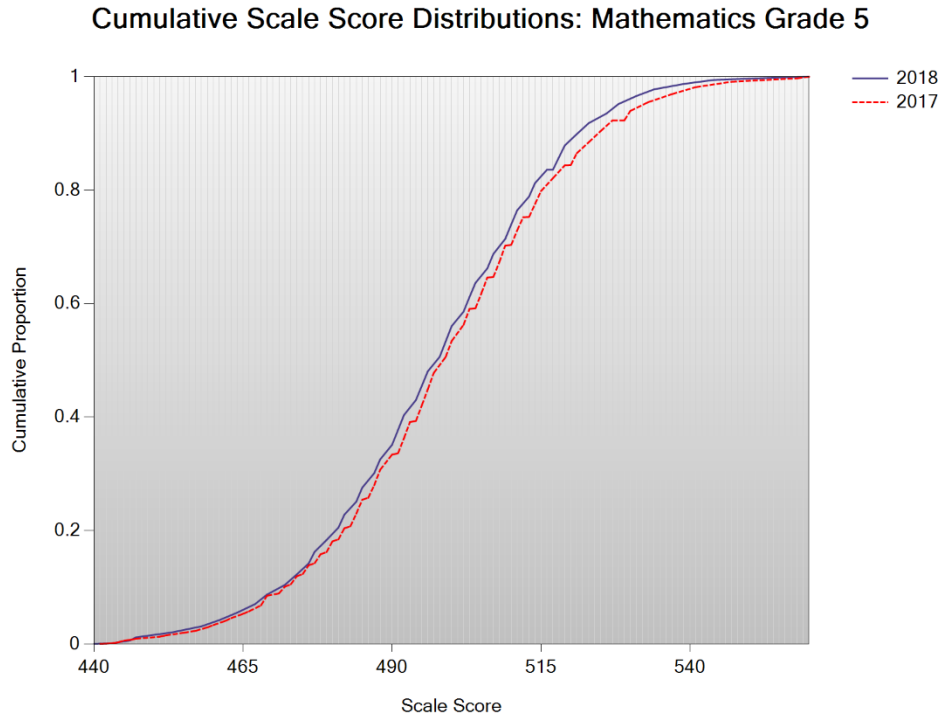
**Figure N-7. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – Mathematics Grade 3**



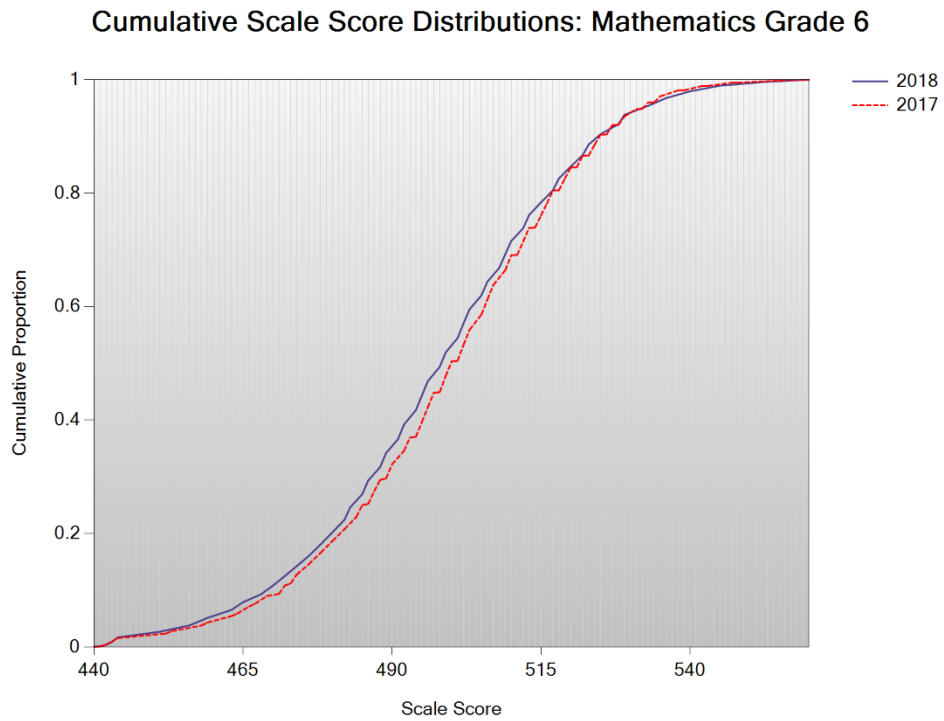
**Figure N-8. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – Mathematics Grade 4**



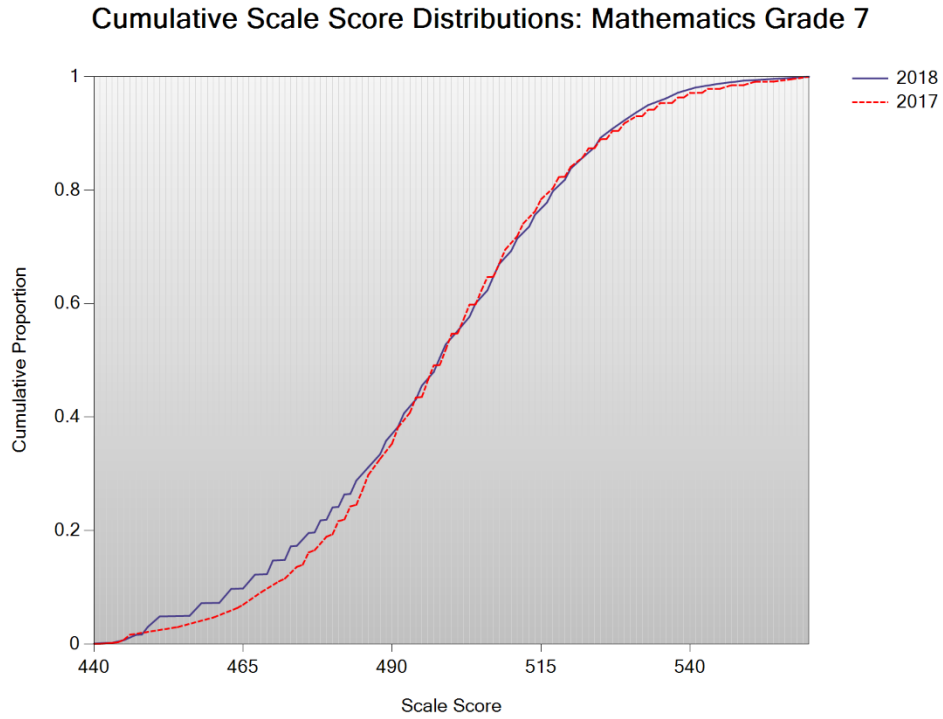
**Figure N-9. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – Mathematics Grade 5**



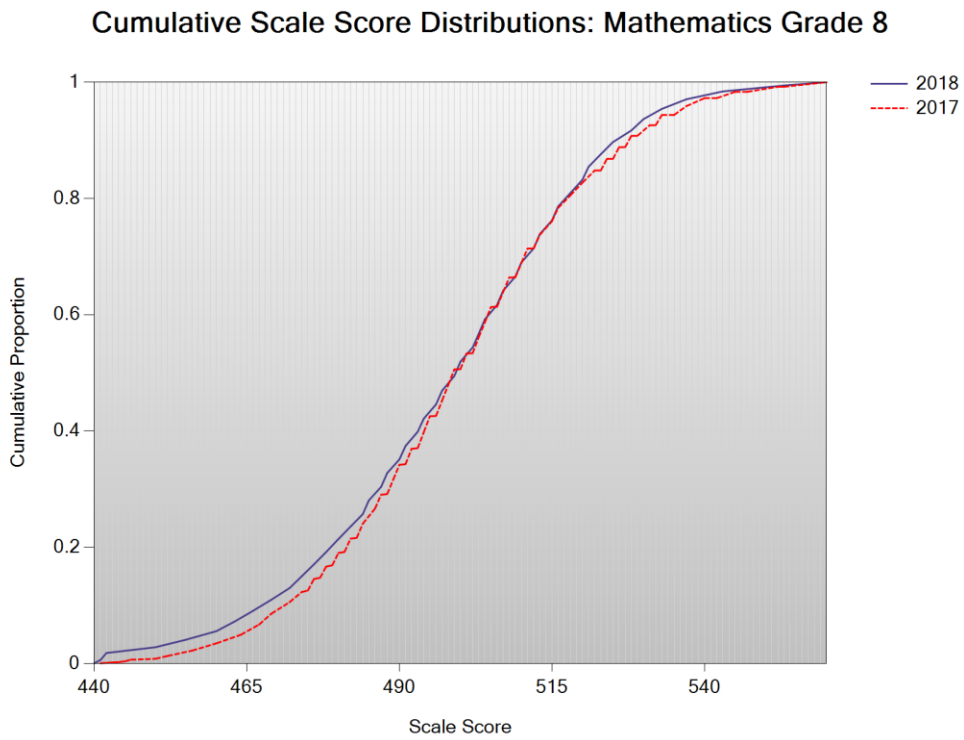
**Figure N-10. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – Mathematics Grade 6**



**Figure N-11. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – Mathematics Grade 7**



**Figure N-12. 2018 Next-Generation MCAS and MCAS Alt: CSS Distributions – Mathematics Grade 8**



**Table N-1. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—ELA Grade 3**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.173	1.22	10.0	440	440	1	1
1	-3.127	1.28	10.0	441	441	1	1
2	-3.080	1.34	10.0	442	442	1	1
3	-3.033	1.41	10.0	443	442	1	1
4	-2.986	1.48	10.0	444	443	1	1
5	-2.939	1.55	10.0	444	444	1	1
6	-2.892	1.63	10.0	445	450	1	1
7	-2.497	2.61	10.0	453	455	1	1
8	-2.209	3.79	9.7	458	459	1	1
9	-1.983	5.10	8.3	462	462	1	1
10	-1.796	6.47	7.4	466	465	1	1
11	-1.636	7.84	6.7	469	468	1	1
12	-1.493	9.17	6.2	472	470	2	2
13	-1.364	10.40	5.8	474	473	2	2
14	-1.244	11.47	5.6	476	475	2	2
15	-1.130	12.33	5.4	478	478	2	2
16	-1.021	12.97	5.2	481	480	2	2
17	-0.915	13.37	5.2	483	483	2	2
18	-0.811	13.53	5.1	485	485	2	2
19	-0.707	13.49	5.1	486	488	2	2
20	-0.602	13.25	5.2	488	490	2	2
21	-0.495	12.85	5.3	490	493	2	2
22	-0.386	12.31	5.4	493	495	2	2
23	-0.273	11.68	5.5	495	498	2	2
24	-0.155	10.97	5.7	497	501	2	3
25	-0.031	10.23	5.9	499	504	2	3
26	0.099	9.48	6.1	502	506	3	3
27	0.236	8.74	6.4	504	510	3	3
28	0.381	8.05	6.6	507	513	3	3
29	0.534	7.43	6.9	510	516	3	3
30	0.696	6.87	7.2	513	519	3	3
31	0.865	6.39	7.5	516	523	3	3
32	1.043	5.97	7.7	519	527	3	3
33	1.229	5.60	8.0	523	531	3	4
34	1.423	5.27	8.2	527	535	3	4
35	1.627	4.96	8.5	530	540	4	4
36	1.842	4.67	8.7	534	544	4	4
37	2.070	4.38	9.0	539	550	4	4
38	2.315	4.10	9.3	543	556	4	4
39	2.581	3.79	9.7	548	560	4	4
40	2.879	3.40	10.0	554	560	4	4
41	3.196	2.94	10.0	560	560	4	4
42	3.196	2.94	10.0	560	560	4	4
43	3.196	2.94	10.0	560	N/A	4	N/A
44	3.196	2.94	10.0	560	N/A	4	N/A



**Table N-2. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—ELA Grade 4**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.153	3.22	10.0	440	440	1	1
1	-3.149	3.23	10.0	440	441	1	1
2	-3.145	3.25	10.0	440	441	1	1
3	-3.142	3.26	10.0	440	442	1	1
4	-3.138	3.27	10.0	440	443	1	1
5	-3.134	3.28	10.0	440	443	1	1
6	-2.865	4.20	9.2	445	444	1	1
7	-2.644	5.03	8.4	450	449	1	1
8	-2.453	5.77	7.8	453	453	1	1
9	-2.283	6.43	7.4	456	457	1	1
10	-2.129	7.01	7.1	459	460	1	1
11	-1.986	7.52	6.9	462	462	1	1
12	-1.852	7.98	6.7	465	465	1	1
13	-1.726	8.38	6.5	467	467	1	1
14	-1.604	8.74	6.4	469	469	1	1
15	-1.488	9.06	6.3	471	472	2	2
16	-1.375	9.34	6.2	474	474	2	2
17	-1.264	9.58	6.1	476	476	2	2
18	-1.156	9.79	6.0	478	478	2	2
19	-1.049	9.95	6.0	480	480	2	2
20	-0.943	10.05	5.9	482	481	2	2
21	-0.838	10.09	5.9	484	483	2	2
22	-0.732	10.06	5.9	486	485	2	2
23	-0.625	9.96	6.0	488	487	2	2
24	-0.516	9.78	6.0	490	489	2	2
25	-0.405	9.53	6.1	492	491	2	2
26	-0.291	9.20	6.2	494	493	2	2
27	-0.173	8.81	6.3	496	496	2	2
28	-0.050	8.37	6.5	498	498	2	2
29	0.079	7.89	6.7	501	501	3	3
30	0.215	7.39	6.9	503	503	3	3
31	0.360	6.89	7.2	506	506	3	3
32	0.514	6.41	7.4	509	510	3	3
33	0.679	5.98	7.7	512	514	3	3
34	0.856	5.59	8.0	516	518	3	3
35	1.047	5.23	8.2	519	522	3	3
36	1.253	4.86	8.5	523	527	3	3
37	1.479	4.45	8.9	527	532	3	4
38	1.730	3.99	9.4	532	539	4	4
39	2.015	3.50	10.0	537	546	4	4
40	2.345	3.03	10.0	544	556	4	4
41	2.738	2.55	10.0	551	560	4	4
42	3.215	1.92	10.0	560	560	4	4
43	3.215	1.92	10.0	560	N/A	4	N/A
44	3.215	1.92	10.0	560	N/A	4	N/A

**Table N-3. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—ELA Grade 5**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.360	2.08	10.0	440	440	1	1
1	-3.337	2.14	10.0	440	441	1	1
2	-3.314	2.20	10.0	441	441	1	1
3	-3.290	2.27	10.0	441	442	1	1
4	-3.267	2.33	10.0	442	443	1	1
5	-2.891	3.68	9.2	448	444	1	1
6	-2.623	5.00	7.9	453	444	1	1
7	-2.411	6.28	7.1	457	445	1	1
8	-2.234	7.49	6.5	460	450	1	1
9	-2.080	8.61	6.0	463	454	1	1
10	-1.942	9.63	5.6	465	457	1	1
11	-1.816	10.53	5.4	467	460	1	1
12	-1.699	11.29	5.2	469	462	1	1
13	-1.589	11.93	5.1	471	465	2	1
14	-1.483	12.45	5.0	473	467	2	1
15	-1.381	12.85	4.9	475	469	2	1
16	-1.282	13.15	4.9	477	471	2	2
17	-1.185	13.36	4.8	478	473	2	2
18	-1.089	13.50	4.8	480	475	2	2
19	-0.995	13.58	4.8	482	477	2	2
20	-0.901	13.60	4.8	483	479	2	2
21	-0.808	13.58	4.8	485	481	2	2
22	-0.714	13.53	4.8	487	483	2	2
23	-0.620	13.43	4.8	488	484	2	2
24	-0.526	13.30	4.8	490	486	2	2
25	-0.430	13.13	4.9	492	488	2	2
26	-0.333	12.92	4.9	493	490	2	2
27	-0.234	12.65	5.0	495	492	2	2
28	-0.133	12.32	5.0	497	494	2	2
29	-0.028	11.93	5.1	499	496	2	2
30	0.079	11.47	5.2	501	498	3	2
31	0.191	10.95	5.3	503	501	3	3
32	0.309	10.38	5.5	505	503	3	3
33	0.432	9.80	5.7	507	506	3	3
34	0.563	9.23	5.8	509	508	3	3
35	0.701	8.71	6.0	512	511	3	3
36	0.848	8.27	6.1	514	514	3	3
37	1.004	7.93	6.3	517	518	3	3
38	1.168	7.65	6.4	520	521	3	3
39	1.342	7.36	6.5	523	525	3	3
40	1.528	6.98	6.7	526	529	3	3
41	1.732	6.40	7.0	529	535	3	4
42	1.960	5.60	7.5	534	541	4	4
43	2.229	4.64	8.2	539	548	4	4
44	2.555	3.75	9.1	545	559	4	4
45	2.952	3.23	9.8	552	560	4	4
46	3.422	2.88	10.0	559	560	4	4
47	3.430	2.87	10.0	560	N/A	4	N/A
48	3.430	2.87	10.0	560	N/A	4	N/A

**Table N-4. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—ELA Grade 6**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.171	1.94	10.0	440	440	1	1
1	-3.149	2.00	10.0	440	442	1	1
2	-3.127	2.05	10.0	441	443	1	1
3	-3.105	2.11	10.0	441	445	1	1
4	-3.082	2.17	10.0	442	446	1	1
5	-3.060	2.23	10.0	442	448	1	1
6	-2.725	3.39	10.0	448	453	1	1
7	-2.473	4.57	8.9	453	457	1	1
8	-2.270	5.73	7.9	457	461	1	1
9	-2.098	6.81	7.3	460	464	1	1
10	-1.946	7.79	6.8	463	467	1	1
11	-1.810	8.64	6.5	466	469	1	1
12	-1.684	9.35	6.2	468	471	1	2
13	-1.566	9.93	6.0	470	474	2	2
14	-1.454	10.39	5.9	473	476	2	2
15	-1.346	10.73	5.8	475	478	2	2
16	-1.242	10.97	5.7	477	479	2	2
17	-1.139	11.13	5.7	479	481	2	2
18	-1.039	11.22	5.7	480	483	2	2
19	-0.939	11.27	5.7	482	485	2	2
20	-0.840	11.30	5.6	484	487	2	2
21	-0.741	11.31	5.6	486	488	2	2
22	-0.642	11.31	5.6	488	490	2	2
23	-0.543	11.30	5.6	490	492	2	2
24	-0.443	11.28	5.7	492	493	2	2
25	-0.343	11.25	5.7	494	495	2	2
26	-0.242	11.19	5.7	496	497	2	2
27	-0.139	11.09	5.7	498	499	2	2
28	-0.035	10.95	5.7	499	500	2	3
29	0.071	10.76	5.8	502	502	3	3
30	0.180	10.53	5.8	504	504	3	3
31	0.292	10.27	5.9	506	506	3	3
32	0.407	9.98	6.0	508	508	3	3
33	0.526	9.69	6.1	510	511	3	3
34	0.649	9.41	6.2	513	513	3	3
35	0.777	9.16	6.3	515	515	3	3
36	0.909	8.92	6.4	517	518	3	3
37	1.047	8.69	6.4	520	520	3	3
38	1.191	8.44	6.5	523	523	3	3
39	1.341	8.13	6.7	526	526	3	3
40	1.500	7.74	6.8	529	529	3	3
41	1.669	7.25	7.0	532	533	4	4
42	1.851	6.67	7.3	535	536	4	4
43	2.050	6.05	7.7	539	540	4	4
44	2.269	5.43	8.1	543	545	4	4
45	2.512	4.87	8.6	548	551	4	4
46	2.783	4.35	9.1	553	557	4	4
47	3.089	3.87	9.6	559	560	4	4
48	3.150	3.79	9.8	560	560	4	4
49	3.150	3.79	9.8	560	560	4	4
50	3.150	3.79	9.8	560	N/A	4	N/A
51	3.150	3.79	9.8	560	N/A	4	N/A

**Table N-5. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—ELA Grade 7**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.131	4.72	8.8	440	440	1	1
1	-3.119	4.77	8.7	440	441	1	1
2	-3.107	4.82	8.7	440	442	1	1
3	-3.096	4.87	8.7	441	443	1	1
4	-3.084	4.92	8.6	441	444	1	1
5	-3.072	4.97	8.6	441	445	1	1
6	-3.061	5.02	8.5	441	446	1	1
7	-3.049	5.07	8.5	442	450	1	1
8	-2.846	5.97	7.8	445	454	1	1
9	-2.669	6.77	7.3	449	457	1	1
10	-2.511	7.48	7.0	452	460	1	1
11	-2.367	8.14	6.7	455	463	1	1
12	-2.233	8.75	6.5	457	465	1	1
13	-2.109	9.31	6.3	460	467	1	1
14	-1.991	9.84	6.1	462	469	1	1
15	-1.880	10.33	5.9	464	471	1	2
16	-1.773	10.78	5.8	466	473	1	2
17	-1.671	11.18	5.7	468	475	1	2
18	-1.571	11.53	5.6	469	477	1	2
19	-1.474	11.82	5.6	472	478	2	2
20	-1.379	12.06	5.5	473	480	2	2
21	-1.286	12.25	5.5	475	482	2	2
22	-1.194	12.38	5.4	477	484	2	2
23	-1.102	12.47	5.4	479	486	2	2
24	-1.011	12.51	5.4	480	487	2	2
25	-0.919	12.51	5.4	482	489	2	2
26	-0.827	12.47	5.4	484	491	2	2
27	-0.735	12.40	5.4	486	493	2	2
28	-0.641	12.30	5.4	488	495	2	2
29	-0.546	12.16	5.5	489	497	2	2
30	-0.449	11.99	5.5	491	498	2	2
31	-0.350	11.79	5.6	493	501	2	3
32	-0.249	11.56	5.6	495	503	2	3
33	-0.144	11.30	5.7	497	505	2	3
34	-0.036	10.99	5.8	499	507	2	3
35	0.076	10.66	5.9	501	509	3	3
36	0.192	10.28	6.0	503	512	3	3
37	0.315	9.85	6.1	506	514	3	3
38	0.444	9.38	6.2	508	517	3	3
39	0.582	8.84	6.4	511	520	3	3
40	0.729	8.25	6.7	514	523	3	3
41	0.889	7.59	6.9	517	526	3	3
42	1.064	6.91	7.3	520	529	3	3
43	1.257	6.23	7.6	524	534	3	4
44	1.470	5.62	8.1	528	538	3	4
45	1.705	5.07	8.5	532	544	4	4
46	1.964	4.59	8.9	537	551	4	4
47	2.251	4.17	9.3	543	559	4	4
48	2.574	3.80	9.8	549	560	4	4
49	2.957	3.22	10.0	556	560	4	4
50	3.153	2.80	10.0	560	N/A	4	N/A
51	3.153	2.80	10.0	560	N/A	4	N/A

**Table N-6. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—ELA Grade 8**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-2.964	4.09	9.8	440	440	1	1
1	-2.962	4.09	9.8	440	441	1	1
2	-2.961	4.10	9.8	440	441	1	1
3	-2.959	4.11	9.8	440	442	1	1
4	-2.957	4.11	9.8	440	443	1	1
5	-2.956	4.12	9.8	440	443	1	1
6	-2.954	4.13	9.8	440	444	1	1
7	-2.953	4.13	9.8	440	448	1	1
8	-2.722	5.22	8.7	445	451	1	1
9	-2.528	6.25	8.0	449	454	1	1
10	-2.358	7.16	7.4	452	456	1	1
11	-2.206	7.93	7.1	455	459	1	1
12	-2.066	8.53	6.8	458	461	1	1
13	-1.936	9.00	6.6	460	463	1	1
14	-1.812	9.33	6.5	463	465	1	1
15	-1.694	9.58	6.4	465	467	1	1
16	-1.580	9.76	6.4	468	469	1	1
17	-1.470	9.91	6.3	469	471	1	2
18	-1.362	10.03	6.3	472	472	2	2
19	-1.256	10.15	6.2	474	474	2	2
20	-1.152	10.25	6.2	476	476	2	2
21	-1.049	10.34	6.2	478	478	2	2
22	-0.947	10.41	6.2	480	480	2	2
23	-0.846	10.45	6.2	482	482	2	2
24	-0.744	10.46	6.2	484	484	2	2
25	-0.643	10.43	6.2	486	485	2	2
26	-0.541	10.39	6.2	488	487	2	2
27	-0.438	10.32	6.2	490	489	2	2
28	-0.334	10.24	6.2	492	492	2	2
29	-0.228	10.16	6.2	494	494	2	2
30	-0.121	10.07	6.3	497	496	2	2
31	-0.012	9.97	6.3	499	498	2	2
32	0.100	9.86	6.3	501	501	3	3
33	0.215	9.72	6.4	503	503	3	3
34	0.332	9.54	6.4	506	506	3	3
35	0.454	9.32	6.5	508	508	3	3
36	0.579	9.04	6.6	511	511	3	3
37	0.711	8.70	6.7	513	514	3	3
38	0.848	8.31	6.9	516	517	3	3
39	0.993	7.89	7.1	519	520	3	3
40	1.147	7.44	7.3	522	523	3	3
41	1.310	6.99	7.5	525	527	3	3
42	1.484	6.53	7.8	529	531	3	4
43	1.672	6.07	8.1	532	536	4	4
44	1.874	5.61	8.4	536	541	4	4
45	2.096	5.13	8.8	541	547	4	4
46	2.342	4.64	9.2	546	554	4	4
47	2.622	4.11	9.8	551	560	4	4
48	2.954	3.50	10.0	558	560	4	4
49	3.066	3.28	10.0	560	560	4	4
50	3.066	3.28	10.0	560	N/A	4	N/A
51	3.066	3.28	10.0	560	N/A	4	N/A

**Table N-7. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—Mathematics Grade 3**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-2.782	2.44	10.0	440	440	1	1
1	-2.737	2.57	10.0	441	441	1	1
2	-2.693	2.71	10.0	442	441	1	1
3	-2.648	2.85	10.0	443	442	1	1
4	-2.603	3.01	10.0	444	442	1	1
5	-2.559	3.17	10.0	445	443	1	1
6	-2.514	3.35	10.0	446	443	1	1
7	-2.237	4.66	9.9	452	444	1	1
8	-2.020	5.99	8.7	456	451	1	1
9	-1.840	7.29	7.9	460	456	1	1
10	-1.685	8.54	7.3	463	460	1	1
11	-1.547	9.71	6.9	466	463	1	1
12	-1.423	10.81	6.5	469	467	1	1
13	-1.308	11.82	6.2	471	469	2	1
14	-1.201	12.73	6.0	474	472	2	2
15	-1.100	13.56	5.8	476	474	2	2
16	-1.003	14.29	5.7	478	476	2	2
17	-0.910	14.93	5.5	480	478	2	2
18	-0.820	15.47	5.4	482	480	2	2
19	-0.733	15.93	5.4	484	482	2	2
20	-0.647	16.29	5.3	486	484	2	2
21	-0.562	16.56	5.2	487	486	2	2
22	-0.478	16.75	5.2	489	488	2	2
23	-0.395	16.85	5.2	491	489	2	2
24	-0.312	16.88	5.2	493	491	2	2
25	-0.229	16.85	5.2	495	493	2	2
26	-0.145	16.75	5.2	496	494	2	2
27	-0.061	16.61	5.2	498	496	2	2
28	0.025	16.42	5.3	499	498	2	2
29	0.111	16.19	5.3	502	499	3	2
30	0.200	15.92	5.4	504	501	3	3
31	0.290	15.61	5.4	506	503	3	3
32	0.382	15.25	5.5	508	505	3	3
33	0.477	14.83	5.5	510	506	3	3
34	0.575	14.33	5.6	512	508	3	3
35	0.678	13.74	5.8	514	510	3	3
36	0.785	13.04	5.9	516	512	3	3
37	0.898	12.23	6.1	519	514	3	3
38	1.020	11.31	6.4	521	516	3	3
39	1.151	10.29	6.7	524	519	3	3
40	1.295	9.19	7.0	527	521	3	3
41	1.457	8.03	7.5	531	524	4	3
42	1.641	6.83	8.2	534	527	4	3
43	1.858	5.61	9.0	539	531	4	4
44	2.121	4.40	10.0	545	535	4	4
45	2.459	3.21	10.0	552	540	4	4
46	2.837	2.25	10.0	560	548	4	4
47	2.837	2.25	10.0	560	559	4	4
48	2.837	2.25	10.0	560	560	4	4

**Table N-8. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—Mathematics Grade 4**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-2.812	3.08	10.0	440	440	1	1
1	-2.810	3.08	10.0	440	440	1	1
2	-2.808	3.09	10.0	440	440	1	1
3	-2.806	3.10	10.0	440	440	1	1
4	-2.805	3.11	10.0	440	440	1	1
5	-2.803	3.11	10.0	440	440	1	1
6	-2.514	4.47	9.9	446	440	1	1
7	-2.295	5.77	8.7	451	440	1	1
8	-2.117	7.01	7.9	455	447	1	1
9	-1.965	8.18	7.3	458	452	1	1
10	-1.831	9.28	6.9	461	456	1	1
11	-1.710	10.31	6.5	463	459	1	1
12	-1.599	11.28	6.2	465	462	1	1
13	-1.496	12.20	6.0	468	465	1	1
14	-1.400	13.07	5.8	469	468	1	1
15	-1.309	13.89	5.6	471	469	2	1
16	-1.223	14.67	5.5	473	472	2	2
17	-1.140	15.42	5.3	475	474	2	2
18	-1.061	16.13	5.2	477	476	2	2
19	-0.984	16.81	5.1	478	478	2	2
20	-0.910	17.47	5.0	480	480	2	2
21	-0.838	18.10	4.9	481	482	2	2
22	-0.768	18.70	4.8	483	483	2	2
23	-0.699	19.28	4.8	484	485	2	2
24	-0.632	19.84	4.7	486	487	2	2
25	-0.566	20.36	4.6	487	488	2	2
26	-0.500	20.84	4.6	488	490	2	2
27	-0.436	21.28	4.5	490	492	2	2
28	-0.372	21.66	4.5	491	493	2	2
29	-0.309	21.98	4.5	492	495	2	2
30	-0.246	22.23	4.4	494	496	2	2
31	-0.183	22.40	4.4	495	498	2	2
32	-0.120	22.48	4.4	496	499	2	2
33	-0.057	22.45	4.4	498	501	2	3
34	0.007	22.33	4.4	499	502	2	3
35	0.072	22.09	4.5	500	504	3	3
36	0.138	21.75	4.5	502	506	3	3
37	0.205	21.28	4.5	503	507	3	3
38	0.275	20.71	4.6	505	509	3	3
39	0.346	20.03	4.7	506	511	3	3
40	0.420	19.24	4.8	508	512	3	3
41	0.497	18.35	4.9	509	514	3	3
42	0.579	17.37	5.0	511	516	3	3
43	0.664	16.30	5.2	513	518	3	3
44	0.756	15.15	5.4	515	520	3	3
45	0.855	13.93	5.6	517	522	3	3
46	0.962	12.65	5.9	519	524	3	3
47	1.081	11.32	6.2	522	527	3	3
48	1.214	9.93	6.6	524	529	3	3
49	1.368	8.50	7.2	528	533	3	4
50	1.549	7.00	7.9	531	536	4	4
51	1.776	5.42	9.0	536	541	4	4
52	2.084	3.72	10.0	543	547	4	4
53	2.597	1.87	10.0	553	558	4	4
54	2.920	1.18	10.0	560	560	4	4

**Table N-9. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—Mathematics Grade 5**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.126	1.65	10.0	440	440	1	1
1	-3.050	1.84	10.0	441	441	1	1
2	-2.974	2.06	10.0	443	442	1	1
3	-2.898	2.30	10.0	444	443	1	1
4	-2.822	2.56	10.0	446	444	1	1
5	-2.746	2.86	10.0	447	445	1	1
6	-2.422	4.48	9.0	453	446	1	1
7	-2.188	6.08	7.7	458	447	1	1
8	-2.001	7.62	6.9	461	452	1	1
9	-1.843	9.07	6.3	464	457	1	1
10	-1.704	10.41	5.9	467	460	1	1
11	-1.580	11.65	5.6	469	463	1	1
12	-1.466	12.80	5.3	472	466	2	1
13	-1.360	13.84	5.1	474	469	2	1
14	-1.261	14.80	4.9	476	471	2	2
15	-1.167	15.67	4.8	477	473	2	2
16	-1.077	16.44	4.7	479	475	2	2
17	-0.991	17.11	4.6	481	477	2	2
18	-0.908	17.69	4.5	482	479	2	2
19	-0.827	18.18	4.5	484	481	2	2
20	-0.749	18.58	4.4	485	483	2	2
21	-0.672	18.89	4.4	487	485	2	2
22	-0.597	19.14	4.4	488	486	2	2
23	-0.523	19.31	4.3	490	488	2	2
24	-0.450	19.44	4.3	491	490	2	2
25	-0.377	19.52	4.3	492	491	2	2
26	-0.306	19.57	4.3	494	493	2	2
27	-0.234	19.59	4.3	495	494	2	2
28	-0.164	19.59	4.3	496	496	2	2
29	-0.093	19.57	4.3	498	497	2	2
30	-0.023	19.54	4.3	499	499	2	2
31	0.047	19.50	4.3	500	500	3	3
32	0.118	19.45	4.3	502	502	3	3
33	0.188	19.39	4.3	503	503	3	3
34	0.259	19.32	4.3	504	504	3	3
35	0.330	19.24	4.3	506	506	3	3
36	0.403	19.12	4.4	507	507	3	3
37	0.476	18.97	4.4	509	509	3	3
38	0.550	18.74	4.4	510	510	3	3
39	0.625	18.43	4.4	511	512	3	3
40	0.703	18.01	4.5	513	513	3	3
41	0.783	17.45	4.6	514	515	3	3
42	0.867	16.74	4.7	516	517	3	3
43	0.955	15.88	4.8	518	519	3	3
44	1.047	14.86	4.9	519	520	3	3
45	1.147	13.70	5.1	521	523	3	3
46	1.254	12.44	5.4	523	525	3	3
47	1.372	11.10	5.7	526	527	3	3
48	1.505	9.72	6.1	528	529	3	3
49	1.656	8.30	6.6	531	533	4	4
50	1.835	6.85	7.3	534	537	4	4
51	2.057	5.32	8.3	539	541	4	4
52	2.360	3.65	10.0	544	547	4	4
53	2.865	1.79	10.0	554	558	4	4
54	3.176	1.13	10.0	560	560	4	4



**Table N-10. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—Mathematics Grade 6**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-3.028	2.54	10.0	440	440	1	1
1	-2.973	2.73	10.0	441	441	1	1
2	-2.918	2.93	10.0	442	442	1	1
3	-2.862	3.14	10.0	443	442	1	1
4	-2.807	3.36	10.0	444	443	1	1
5	-2.485	4.97	8.9	451	453	1	1
6	-2.246	6.55	7.8	456	459	1	1
7	-2.053	8.07	7.0	459	464	1	1
8	-1.890	9.51	6.4	463	467	1	1
9	-1.748	10.85	6.0	465	471	1	2
10	-1.620	12.11	5.7	468	473	1	2
11	-1.504	13.27	5.5	470	476	2	2
12	-1.396	14.35	5.2	472	478	2	2
13	-1.295	15.34	5.1	474	480	2	2
14	-1.199	16.25	4.9	476	482	2	2
15	-1.109	17.08	4.8	478	484	2	2
16	-1.022	17.82	4.7	480	486	2	2
17	-0.938	18.48	4.6	482	487	2	2
18	-0.856	19.06	4.6	483	489	2	2
19	-0.777	19.56	4.5	485	490	2	2
20	-0.700	19.98	4.4	486	492	2	2
21	-0.624	20.33	4.4	488	494	2	2
22	-0.550	20.61	4.4	489	495	2	2
23	-0.476	20.84	4.4	491	496	2	2
24	-0.404	21.01	4.3	492	498	2	2
25	-0.332	21.13	4.3	494	499	2	2
26	-0.261	21.21	4.3	495	501	2	3
27	-0.190	21.26	4.3	496	502	2	3
28	-0.120	21.26	4.3	498	503	2	3
29	-0.050	21.24	4.3	499	505	2	3
30	0.020	21.19	4.3	501	506	3	3
31	0.090	21.12	4.3	502	507	3	3
32	0.160	21.02	4.3	503	509	3	3
33	0.231	20.91	4.3	505	510	3	3
34	0.301	20.77	4.4	506	511	3	3
35	0.373	20.60	4.4	508	513	3	3
36	0.445	20.41	4.4	509	514	3	3
37	0.517	20.18	4.4	510	516	3	3
38	0.591	19.92	4.5	512	517	3	3
39	0.667	19.62	4.5	513	518	3	3
40	0.744	19.27	4.5	515	520	3	3
41	0.823	18.86	4.6	517	521	3	3
42	0.905	18.37	4.6	518	523	3	3
43	0.990	17.80	4.7	520	524	3	3
44	1.079	17.11	4.8	522	526	3	3
45	1.172	16.29	4.9	523	528	3	3
46	1.272	15.32	5.1	525	529	3	3
47	1.380	14.17	5.3	528	532	3	4
48	1.499	12.83	5.5	529	534	3	4
49	1.633	11.27	5.9	533	536	4	4
50	1.789	9.50	6.4	536	539	4	4
51	1.980	7.50	7.3	540	543	4	4
52	2.236	5.26	8.7	545	548	4	4
53	2.653	2.72	10.0	553	558	4	4
54	3.011	1.46	10.0	560	560	4	4

**Table N-11. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—Mathematics Grade 7**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-2.859	1.56	10.0	440	440	1	1
1	-2.750	1.85	10.0	442	441	1	1
2	-2.641	2.17	10.0	445	442	1	1
3	-2.532	2.54	10.0	447	444	1	1
4	-2.423	2.95	10.0	449	445	1	1
5	-2.314	3.41	10.0	451	446	1	1
6	-1.978	5.16	9.1	458	454	1	1
7	-1.738	6.75	8.0	463	460	1	1
8	-1.549	8.27	7.2	467	465	1	1
9	-1.391	9.72	6.7	470	468	2	1
10	-1.254	11.08	6.2	473	472	2	2
11	-1.133	12.35	5.9	476	475	2	2
12	-1.022	13.50	5.7	478	477	2	2
13	-0.921	14.52	5.4	480	480	2	2
14	-0.826	15.42	5.3	482	482	2	2
15	-0.736	16.20	5.2	484	484	2	2
16	-0.651	16.86	5.1	486	486	2	2
17	-0.569	17.40	5.0	488	488	2	2
18	-0.490	17.86	4.9	489	490	2	2
19	-0.413	18.22	4.9	491	491	2	2
20	-0.337	18.52	4.8	492	493	2	2
21	-0.264	18.75	4.8	494	495	2	2
22	-0.191	18.94	4.8	495	496	2	2
23	-0.120	19.09	4.8	497	498	2	2
24	-0.049	19.21	4.7	498	499	2	2
25	0.021	19.31	4.7	499	501	2	3
26	0.091	19.39	4.7	501	503	3	3
27	0.160	19.46	4.7	503	504	3	3
28	0.229	19.52	4.7	504	506	3	3
29	0.298	19.58	4.7	506	507	3	3
30	0.367	19.62	4.7	507	509	3	3
31	0.436	19.64	4.7	508	511	3	3
32	0.505	19.64	4.7	510	512	3	3
33	0.575	19.62	4.7	511	514	3	3
34	0.645	19.57	4.7	513	515	3	3
35	0.715	19.48	4.7	514	517	3	3
36	0.787	19.35	4.7	516	519	3	3
37	0.859	19.18	4.7	517	520	3	3
38	0.933	18.96	4.8	519	522	3	3
39	1.009	18.67	4.8	520	524	3	3
40	1.087	18.33	4.8	522	526	3	3
41	1.167	17.91	4.9	524	528	3	3
42	1.250	17.40	5.0	525	529	3	3
43	1.336	16.78	5.1	527	532	3	4
44	1.428	16.04	5.2	529	534	3	4
45	1.525	15.15	5.3	531	537	4	4
46	1.630	14.10	5.5	533	539	4	4
47	1.744	12.90	5.8	536	542	4	4
48	1.872	11.57	6.1	538	545	4	4
49	2.016	10.20	6.5	541	549	4	4
50	2.185	8.84	7.0	545	554	4	4
51	2.390	7.39	7.6	549	560	4	4
52	2.663	5.39	8.9	555	560	4	4
53	2.922	3.58	10.0	560	560	4	4
54	2.922	3.58	10.0	560	560	4	4

**Table N-12. 2018 Next-Generation MCAS and MCAS Alt: Raw Score to Scaled Score  
Lookup Tables—Mathematics Grade 8**

Raw Score	Theta	Information	SE (Scale Score)	Scale Score		Achievement Levels	
				2018	2017	2018	2017
0	-2.983	2.19	10.0	440	440	1	1
1	-2.969	2.23	10.0	440	441	1	1
2	-2.956	2.28	10.0	441	441	1	1
3	-2.942	2.32	10.0	441	442	1	1
4	-2.929	2.36	10.0	441	442	1	1
5	-2.916	2.41	10.0	441	443	1	1
6	-2.902	2.45	10.0	442	450	1	1
7	-2.889	2.50	10.0	442	456	1	1
8	-2.494	4.14	9.9	450	460	1	1
9	-2.221	5.59	8.5	455	464	1	1
10	-2.006	6.89	7.7	460	467	1	1
11	-1.827	8.08	7.1	463	469	1	1
12	-1.671	9.21	6.6	466	472	1	2
13	-1.533	10.28	6.3	469	475	1	2
14	-1.409	11.30	6.0	472	477	2	2
15	-1.294	12.27	5.8	474	479	2	2
16	-1.188	13.18	5.6	476	481	2	2
17	-1.089	14.04	5.4	478	483	2	2
18	-0.995	14.83	5.2	480	484	2	2
19	-0.905	15.56	5.1	482	486	2	2
20	-0.820	16.22	5.0	484	488	2	2
21	-0.737	16.81	4.9	485	489	2	2
22	-0.658	17.33	4.8	487	491	2	2
23	-0.580	17.78	4.8	488	493	2	2
24	-0.505	18.16	4.7	490	494	2	2
25	-0.430	18.47	4.7	491	496	2	2
26	-0.357	18.73	4.7	493	497	2	2
27	-0.285	18.93	4.6	494	499	2	2
28	-0.214	19.08	4.6	496	500	2	3
29	-0.143	19.19	4.6	497	502	2	3
30	-0.072	19.27	4.6	499	503	2	3
31	-0.002	19.33	4.6	500	504	3	3
32	0.069	19.38	4.6	502	506	3	3
33	0.139	19.44	4.6	503	507	3	3
34	0.210	19.50	4.6	504	509	3	3
35	0.281	19.59	4.6	506	510	3	3
36	0.352	19.70	4.5	507	512	3	3
37	0.424	19.84	4.5	509	513	3	3
38	0.497	20.00	4.5	510	515	3	3
39	0.570	20.16	4.5	512	516	3	3
40	0.645	20.31	4.5	513	518	3	3
41	0.721	20.40	4.5	515	520	3	3
42	0.799	20.40	4.5	516	522	3	3
43	0.879	20.24	4.5	518	523	3	3
44	0.963	19.85	4.5	520	525	3	3
45	1.051	19.18	4.6	521	527	3	3
46	1.145	18.16	4.7	523	529	3	3
47	1.247	16.75	4.9	525	532	3	4
48	1.361	14.95	5.2	528	535	3	4
49	1.492	12.78	5.6	530	538	4	4
50	1.648	10.28	6.3	533	542	4	4
51	1.847	7.57	7.3	537	547	4	4
52	2.127	4.79	9.2	543	553	4	4
53	2.617	2.12	10.0	553	560	4	4
54	2.966	1.21	10.0	560	560	4	4