

APPENDIX N

RAW TO SCALED SCORE LOOKUP TABLES

Table N-1. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 3

Raw Score	2009*			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	0	0	1	200	10	1
1	0	0	1	200	10	1
2	0	0	1	202	10	1
3	0	0	1	202	10	1
4	0	0	1	204	10	1
5	0	0	1	204	10	1
6	0	0	1	206	10	1
7	0	0	1	206	10	1
8	0	0	1	208	9.1	1
9	0	0	1	208	7.8	1
10	0	0	1	210	6.6	1
11	0	0	1	210	5.6	1
12	0	0	1	212	4.5	1
13	0	0	1	212	3.8	1
14	0	0	1	214	3.3	1
15	0	0	1	216	3	1
16	0	0	1	216	2.7	1
17	0	0	1	218	2.5	1
18	0	0	1	218	2.5	1
19	0	0	1	218	2.9	1
20	0	0	1	220	3.2	2
21	0	0	2	220	3.5	2
22	0	0	2	222	3.9	2
23	0	0	2	224	4.2	2
24	0	0	2	224	4.3	2
25	0	0	2	226	4.2	2
26	0	0	2	228	4	2
27	0	0	2	230	3.9	2
28	0	0	2	230	3.9	2
29	0	0	2	232	3.8	2
30	0	0	2	234	3.8	2
31	0	0	2	234	3.8	2
32	0	0	2	236	3.8	2
33	0	0	2	238	3.8	2
34	0	0	2	238	3.9	2
35	0	0	3	240	4.1	3
36	0	0	3	242	4.2	3
37	0	0	3	244	4.4	3
38	0	0	3	246	4.7	3
39	0	0	3	248	4.9	3
40	0	0	3	250	5.3	3
41	0	0	3	254	5.7	3
42	0	0	3	256	5.9	3
43	0	0	4	260	6.2	4
44	0	0	4	264	6.6	4
45	0	0	4	270	7.9	4
46	0	0	4	278	10	4
47	0	0	4	280	10	4

Raw Score	2009*			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
48	0	0	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Above Proficient

*Note that scaled scores were not reported for grade 3 prior to the 2010 administration.

Table N-2. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 4

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	9.8	1
3	202	9.9	1	202	8.6	1
4	202	8.8	1	202	7.6	1
5	202	7.8	1	202	6.7	1
6	204	6.9	1	204	6	1
7	204	6.2	1	204	5.3	1
8	204	5.5	1	204	4.8	1
9	204	4.9	1	204	4.4	1
10	206	4.4	1	206	4	1
11	206	4	1	206	3.8	1
12	206	3.6	1	206	3.5	1
13	208	3.3	1	208	3.4	1
14	208	3.1	1	208	3.2	1
15	208	2.9	1	208	3	1
16	208	2.7	1	208	2.9	1
17	210	2.5	1	210	2.7	1
18	210	2.4	1	210	2.5	1
19	210	2.3	1	210	2.4	1
20	212	2.2	1	212	2.3	1
21	212	2.1	1	212	2.1	1
22	212	2	1	212	2	1
23	214	2	1	214	2	1
24	214	1.9	1	214	1.9	1
25	214	1.8	1	214	1.8	1
26	214	1.8	1	216	1.8	1
27	216	1.7	1	216	1.7	1
28	216	1.7	1	216	1.7	1
29	216	1.6	1	216	1.6	1
30	216	1.6	1	218	1.6	1
31	218	1.6	1	218	1.6	1
32	218	1.5	1	218	1.5	1
33	218	1.5	1	218	1.5	1
34	218	1.8	1	218	1.9	1
35	220	2.2	2	220	2.3	2
36	220	2.7	2	220	2.7	2
37	220	3.1	2	220	3.2	2
38	222	3.6	2	222	3.6	2
39	222	4.1	2	224	4.1	2

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
40	224	4.5	2	224	4.5	2
41	226	4.6	2	226	4.5	2
42	228	4.7	2	228	4.5	2
43	228	4.7	2	228	4.6	2
44	230	4.7	2	230	4.6	2
45	232	4.8	2	232	4.6	2
46	234	4.9	2	232	4.6	2
47	234	5	2	234	4.7	2
48	236	4.9	2	236	4.7	2
49	238	4.8	2	238	4.6	2
50	240	4.7	3	238	4.5	2
51	242	4.7	3	240	4.4	3
52	244	4.6	3	242	4.3	3
53	244	4.6	3	244	4.3	3
54	246	4.7	3	244	4.2	3
55	248	4.8	3	246	4.4	3
56	250	5	3	248	4.5	3
57	252	5.1	3	250	4.7	3
58	254	5.3	3	252	4.9	3
59	256	5.5	3	254	5	3
60	260	5.7	4	256	5.3	3
61	262	6	4	258	5.6	3
62	264	6.3	4	260	5.9	4
63	268	6.6	4	262	6.2	4
64	270	6.8	4	266	6.6	4
65	274	7.1	4	270	7	4
66	278	7.4	4	272	7.3	4
67	280	7.9	4	276	7.7	4
68	280	8.7	4	280	8.2	4
69	280	10	4	280	8.9	4
70	280	10	4	280	10	4
71	280	10	4	280	10	4
72	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-3. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 5

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	9	1
3	202	9.7	1	202	8	1
4	204	8.5	1	204	7.1	1
5	204	7.5	1	204	6.3	1
6	204	6.7	1	206	5.7	1
7	206	6	1	206	5.1	1
8	206	5.5	1	206	4.7	1

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
9	208	5	1	208	4.3	1
10	208	4.6	1	208	4	1
11	210	4.3	1	210	3.7	1
12	210	3.9	1	210	3.4	1
13	210	3.6	1	212	3.1	1
14	212	3.3	1	212	2.9	1
15	212	3.1	1	214	2.7	1
16	214	2.9	1	214	2.6	1
17	214	2.7	1	216	2.5	1
18	216	2.5	1	216	2.4	1
19	216	2.3	1	216	2.3	1
20	218	2.2	1	218	2.2	1
21	218	2.1	1	218	2.5	1
22	218	2.5	1	218	2.9	1
23	220	2.9	2	220	3.4	2
24	220	3.4	2	220	3.8	2
25	222	3.8	2	222	4.3	2
26	222	4.2	2	224	4.7	2
27	224	4.6	2	226	4.9	2
28	226	4.7	2	228	4.8	2
29	228	4.6	2	228	4.7	2
30	230	4.6	2	230	4.7	2
31	230	4.5	2	232	4.7	2
32	232	4.5	2	234	4.6	2
33	234	4.6	2	236	4.6	2
34	236	4.6	2	236	4.6	2
35	238	4.6	2	238	4.6	2
36	238	4.7	2	240	4.6	3
37	240	4.7	3	242	4.6	3
38	242	4.8	3	244	4.7	3
39	244	4.9	3	246	4.8	3
40	246	5.2	3	248	5	3
41	250	5.5	3	250	5.2	3
42	252	5.9	3	252	5.5	3
43	256	6.2	3	256	5.8	3
44	258	6.3	3	258	5.8	3
45	262	6.5	4	262	5.9	4
46	266	6.8	4	264	5.9	4
47	270	7.9	4	268	6.2	4
48	276	9.7	4	272	6.8	4
49	280	10	4	276	7.6	4
50	280	10	4	280	8.7	4
51	280	10	4	280	10	4
52	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-4. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 6

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	8.6	1
5	204	9	1	204	7.3	1
6	204	7.9	1	204	6.2	1
7	206	6.9	1	206	5.4	1
8	206	6	1	206	4.7	1
9	206	5.2	1	208	4.1	1
10	208	4.6	1	208	3.7	1
11	208	4	1	210	3.3	1
12	210	3.5	1	210	3	1
13	210	3.2	1	210	2.8	1
14	210	3	1	212	2.7	1
15	212	2.8	1	212	2.6	1
16	212	2.7	1	214	2.5	1
17	214	2.5	1	214	2.4	1
18	214	2.4	1	216	2.3	1
19	216	2.3	1	216	2.2	1
20	216	2.2	1	218	2.2	1
21	216	2.1	1	218	2.1	1
22	218	2	1	218	2.6	1
23	218	1.9	1	220	3.3	2
24	218	2.4	1	220	4	2
25	220	3	2	222	4.6	2
26	220	3.6	2	224	5.3	2
27	222	4.2	2	226	5.9	2
28	224	4.8	2	228	6	2
29	226	5.4	2	230	5.9	2
30	226	5.5	2	232	5.8	2
31	228	5.5	2	234	5.8	2
32	230	5.5	2	236	5.5	2
33	232	5.5	2	238	5.2	2
34	234	5.6	2	240	4.8	3
35	236	5.3	2	242	4.5	3
36	238	5	2	242	4.2	3
37	240	4.8	3	244	4	3
38	242	4.5	3	246	4.1	3
39	244	4.3	3	248	4.2	3
40	246	4.4	3	250	4.3	3
41	248	4.6	3	252	4.5	3
42	250	4.8	3	254	4.7	3
43	252	5.1	3	256	4.9	3
44	254	5.4	3	258	5.2	3
45	258	5.8	3	260	5.6	4
46	260	6.2	4	264	6.1	4
47	264	6.7	4	266	6.6	4

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
48	268	7.1	4	270	7	4
49	272	7.5	4	276	7.6	4
50	278	8.5	4	280	8.5	4
51	280	10	4	280	10	4
52	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-5. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 7

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	8	1	200	10	1
1	200	7.3	1	200	10	1
2	202	6.7	1	202	10	1
3	202	6.1	1	202	9.1	1
4	202	5.6	1	202	7.9	1
5	202	5.1	1	204	6.9	1
6	204	4.6	1	204	6	1
7	204	4.3	1	204	5.3	1
8	204	3.9	1	204	4.8	1
9	206	3.7	1	206	4.3	1
10	206	3.4	1	206	3.9	1
11	206	3.2	1	206	3.7	1
12	206	3.1	1	208	3.4	1
13	208	2.9	1	208	3.2	1
14	208	2.8	1	208	3	1
15	208	2.7	1	210	2.8	1
16	210	2.6	1	210	2.7	1
17	210	2.4	1	210	2.5	1
18	210	2.3	1	212	2.4	1
19	210	2.3	1	212	2.3	1
20	212	2.2	1	212	2.2	1
21	212	2.1	1	214	2.1	1
22	212	2	1	214	2	1
23	214	2	1	214	2	1
24	214	1.9	1	216	1.9	1
25	214	1.9	1	216	1.9	1
26	216	1.9	1	216	1.8	1
27	216	1.8	1	218	1.8	1
28	216	1.8	1	218	1.7	1
29	216	1.8	1	218	1.8	1
30	218	1.7	1	218	2.3	1
31	218	1.7	1	220	2.7	2
32	218	1.9	1	220	3.2	2
33	220	2.4	2	222	3.6	2
34	220	2.9	2	222	4	2
35	220	3.4	2	224	4.5	2
36	222	3.8	2	226	4.7	2

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
37	224	4.3	2	226	4.6	2
38	224	4.8	2	228	4.6	2
39	226	5	2	230	4.6	2
40	228	5	2	230	4.6	2
41	230	5	2	232	4.6	2
42	230	5	2	234	4.6	2
43	232	5	2	236	4.6	2
44	234	5	2	236	4.4	2
45	236	5	2	238	4.1	2
46	236	4.7	2	240	3.9	3
47	238	4.4	2	240	3.6	3
48	240	4.2	3	242	3.4	3
49	242	3.9	3	242	3.1	3
50	242	3.6	3	244	3	3
51	244	3.3	3	244	3	3
52	244	3.4	3	246	3	3
53	246	3.4	3	246	3.1	3
54	246	3.5	3	248	3.2	3
55	248	3.6	3	248	3.2	3
56	250	3.7	3	250	3.3	3
57	252	3.8	3	252	3.4	3
58	252	3.9	3	252	3.5	3
59	254	4	3	254	3.6	3
60	256	4.1	3	256	3.8	3
61	258	4.5	3	258	4	3
62	260	4.8	4	258	4.3	3
63	262	5.2	4	260	4.7	4
64	264	5.5	4	264	5.1	4
65	268	5.9	4	266	5.5	4
66	270	6.2	4	270	5.8	4
67	274	6.8	4	272	6.2	4
68	280	7.8	4	276	6.9	4
69	280	9.5	4	280	8.1	4
70	280	10	4	280	10	4
71	280	10	4	280	10	4
72	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-6. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 8

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	9.3	1	204	10	1

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
6	206	7.7	1	206	8.6	1
7	206	6.4	1	206	7	1
8	208	5.4	1	208	5.7	1
9	208	4.5	1	208	4.5	1
10	210	3.9	1	210	3.8	1
11	210	3.5	1	210	3.5	1
12	212	3.3	1	212	3.2	1
13	212	3.1	1	214	3.1	1
14	214	2.9	1	214	2.9	1
15	216	2.7	1	216	2.8	1
16	216	2.6	1	216	2.7	1
17	218	2.4	1	218	2.6	1
18	218	2.5	1	218	3	1
19	218	3	1	218	3.5	1
20	220	3.5	2	220	4	2
21	220	4	2	220	4.5	2
22	222	4.5	2	222	5	2
23	224	5	2	224	5.5	2
24	226	5.5	2	226	5.8	2
25	228	5.3	2	228	5.7	2
26	230	5.2	2	230	5.5	2
27	230	5.2	2	232	5.4	2
28	232	5.1	2	234	5.4	2
29	234	5	2	234	5.2	2
30	236	4.8	2	236	4.8	2
31	238	4.5	2	238	4.5	2
32	240	4.1	3	240	4.1	3
33	240	3.7	3	240	3.7	3
34	242	3.4	3	242	3.3	3
35	242	3	3	242	3	3
36	244	2.9	3	244	3	3
37	244	2.9	3	244	3	3
38	246	3	3	246	3.1	3
39	246	3.1	3	248	3.1	3
40	248	3.2	3	248	3.2	3
41	250	3.3	3	250	3.3	3
42	250	3.4	3	252	3.5	3
43	252	3.7	3	252	3.6	3
44	254	3.9	3	254	3.8	3
45	256	4.3	3	256	4	3
46	258	4.8	3	258	4.3	3
47	260	5.5	4	260	4.6	4
48	264	6.5	4	262	4.9	4
49	266	8.1	4	266	5.5	4
50	272	10	4	270	6.3	4
51	278	10	4	276	8.5	4
52	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-7. 2010 MCAS: Raw to Scaled Score Lookup Table – English Language Arts Grade 10

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	202	10	1	202	10	1
5	204	10	1	204	10	1
6	204	10	1	204	10	1
7	204	10	1	204	10	1
8	204	10	1	206	10	1
9	206	10	1	206	9.8	1
10	206	10	1	206	6.3	1
11	206	10	1	208	4.2	1
12	208	4.1	1	208	3.2	1
13	208	2.4	1	208	2.7	1
14	210	2.1	1	208	2.7	1
15	212	2	1	210	2.8	1
16	212	1.9	1	210	2.7	1
17	212	1.8	1	212	2.4	1
18	214	1.7	1	214	2.1	1
19	214	1.6	1	214	1.9	1
20	216	1.5	1	216	1.7	1
21	216	1.4	1	216	1.5	1
22	216	1.3	1	216	1.3	1
23	216	1.3	1	218	1.2	1
24	218	1.2	1	218	1.1	1
25	218	1.2	1	218	1	1
26	218	1.1	1	218	1	1
27	218	1.1	1	218	1	1
28	218	1.1	1	220	1	2
29	218	1	1	220	1.7	2
30	220	1.5	2	220	2.4	2
31	220	2	2	220	3.1	2
32	220	2.6	2	222	3.7	2
33	220	3.1	2	224	4.3	2
34	222	3.6	2	224	4.9	2
35	224	4.1	2	226	5	2
36	224	4.6	2	228	4.9	2
37	226	4.6	2	230	4.8	2
38	228	4.5	2	230	4.7	2
39	228	4.5	2	232	4.6	2
40	230	4.4	2	234	4.6	2
41	232	4.4	2	234	4.5	2
42	232	4.4	2	236	4.4	2
43	234	4.4	2	238	4.2	2
44	236	4.4	2	238	4.1	2
45	236	4.3	2	240	3.9	3
46	238	4.2	2	242	3.7	3
47	240	4.1	3	242	3.6	3

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
48	240	3.9	3	244	3.5	3
49	242	3.8	3	244	3.5	3
50	244	3.7	3	246	3.5	3
51	244	3.7	3	246	3.6	3
52	246	3.7	3	248	3.6	3
53	246	3.8	3	250	3.7	3
54	248	3.9	3	250	3.8	3
55	250	4	3	252	3.9	3
56	252	4.1	3	254	4	3
57	252	4.2	3	256	4.1	3
58	254	4.3	3	256	4	3
59	256	4.4	3	258	3.8	3
60	258	4.2	3	260	3.7	4
61	260	4	4	262	3.5	4
62	262	3.8	4	264	3.2	4
63	262	3.5	4	264	3.4	4
64	264	3.5	4	266	3.5	4
65	266	3.6	4	268	3.6	4
66	268	3.8	4	270	3.9	4
67	270	4	4	274	4.3	4
68	274	4.4	4	276	5.1	4
69	276	5.1	4	280	6.8	4
70	280	6.1	4	280	10	4
71	280	7.5	4	280	10	4
72	280	10	4	280	10	4

Performance Levels: 1 = Failing, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-8. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 3

Raw Score	2009*			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	0	0	1	200	10	1
1	0	0	1	202	10	1
2	0	0	1	202	10	1
3	0	0	1	204	10	1
4	0	0	1	204	9.8	1
5	0	0	1	206	7.4	1
6	0	0	1	206	5.5	1
7	0	0	1	208	4.2	1
8	0	0	1	208	3.6	1
9	0	0	1	210	3.2	1
10	0	0	1	212	2.9	1
11	0	0	1	212	2.7	1
12	0	0	1	214	2.5	1
13	0	0	1	214	2.4	1
14	0	0	1	216	2.3	1
15	0	0	1	216	2.2	1
16	0	0	1	218	2.1	1

Raw Score	2009*			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
17	0	0	1	218	2.5	1
18	0	0	1	220	3.3	2
19	0	0	1	220	4.1	2
20	0	0	1	222	4.9	2
21	0	0	2	224	5.7	2
22	0	0	2	226	6.5	2
23	0	0	2	228	6.5	2
24	0	0	2	230	6.4	2
25	0	0	2	234	6.4	2
26	0	0	2	236	6.2	2
27	0	0	2	238	6	2
28	0	0	2	240	5.8	3
29	0	0	2	242	5.7	3
30	0	0	3	244	5.5	3
31	0	0	3	246	5.5	3
32	0	0	3	250	5.7	3
33	0	0	3	252	5.9	3
34	0	0	3	254	6	3
35	0	0	3	258	5.7	3
36	0	0	3	260	5.4	4
37	0	0	4	264	5.2	4
38	0	0	4	268	5.8	4
39	0	0	4	274	8.5	4
40	0	0	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Above Proficient

* Note that scaled scores were not reported for grade 3 prior to the 2010 administration.

Table N-9. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 4

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	10	1	204	10	1
6	204	8	1	206	10	1
7	206	6.3	1	206	10	1
8	206	5	1	206	5.2	1
9	208	3.8	1	208	3.6	1
10	208	3.2	1	210	3	1
11	210	2.9	1	212	2.7	1
12	210	2.7	1	212	2.5	1
13	212	2.5	1	214	2.3	1
14	212	2.4	1	214	2.2	1
15	214	2.3	1	216	2.1	1
16	214	2.2	1	216	2	1

<i>Raw Score</i>	<i>2009*</i>			<i>2010</i>		
	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>
17	216	2.2	1	216	1.9	1
18	216	2.1	1	218	1.9	1
19	216	2	1	218	1.8	1
20	218	1.9	1	218	1.8	1
21	218	1.8	1	218	2.1	1
22	218	2.2	1	220	2.5	2
23	220	2.5	2	220	2.8	2
24	220	2.9	2	220	3.1	2
25	220	3.3	2	222	3.5	2
26	222	3.6	2	224	3.8	2
27	224	3.9	2	224	4	2
28	224	4.3	2	226	3.9	2
29	226	4.2	2	226	3.9	2
30	226	4.1	2	228	3.9	2
31	228	4	2	230	3.8	2
32	230	4	2	230	3.8	2
33	230	3.9	2	232	3.8	2
34	232	3.8	2	232	3.8	2
35	232	3.8	2	234	3.8	2
36	234	3.8	2	234	3.8	2
37	234	3.8	2	236	3.8	2
38	236	3.8	2	238	4.2	2
39	238	4	2	238	4.5	2
40	238	4.3	2	240	5	3
41	240	4.7	3	242	5.4	3
42	242	5.1	3	244	5.9	3
43	244	5.6	3	246	6.4	3
44	246	6.1	3	248	6.7	3
45	248	6.5	3	252	6.9	3
46	250	6.7	3	254	7	3
47	254	7	3	256	6.5	3
48	256	6.6	3	260	6	4
49	260	6.2	4	262	5.6	4
50	262	5.8	4	264	5.1	4
51	264	5.5	4	268	5.6	4
52	268	6.5	4	272	6.7	4
53	276	9.6	4	278	9.4	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-10. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 5

<i>Raw Score</i>	<i>2009</i>			<i>2010</i>		
	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
4	202	10	1	204	10	1
5	204	10	1	204	10	1
6	204	10	1	204	10	1
7	206	7.5	1	206	7.9	1
8	206	4.7	1	206	4.8	1
9	208	3.8	1	208	3.8	1
10	210	3.2	1	210	3.2	1
11	210	2.9	1	210	2.8	1
12	212	2.6	1	212	2.6	1
13	212	2.4	1	212	2.4	1
14	214	2.3	1	214	2.2	1
15	214	2.2	1	214	2.1	1
16	214	2.1	1	216	2	1
17	216	2	1	216	1.9	1
18	216	1.9	1	216	1.8	1
19	216	1.9	1	216	1.8	1
20	216	1.8	1	218	1.7	1
21	218	1.8	1	218	1.7	1
22	218	1.7	1	218	1.7	1
23	218	1.7	1	218	2.2	1
24	218	2.2	1	220	2.8	2
25	220	2.8	2	220	3.4	2
26	220	3.3	2	220	3.9	2
27	220	3.9	2	222	4.5	2
28	222	4.4	2	224	5.1	2
29	224	5	2	226	5.6	2
30	226	5.5	2	228	5.5	2
31	226	5.6	2	228	5.5	2
32	228	5.5	2	230	5.4	2
33	230	5.5	2	232	5.4	2
34	232	5.4	2	234	5.4	2
35	234	5.4	2	236	5.4	2
36	234	5.4	2	236	5.4	2
37	236	5.4	2	238	5.4	2
38	238	5.5	2	240	5.4	3
39	240	5.5	3	242	5.5	3
40	242	5.6	3	244	5.5	3
41	244	5.7	3	246	5.6	3
42	246	5.8	3	248	5.7	3
43	248	5.9	3	250	5.8	3
44	250	6	3	252	6	3
45	252	6.2	3	254	6	3
46	254	6.1	3	256	5.5	3
47	258	5.5	3	260	5	4
48	260	5	4	262	4.5	4
49	262	4.4	4	262	4	4
50	264	3.8	4	264	4	4
51	266	4.4	4	268	4.6	4
52	270	5.4	4	270	5.6	4

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
53	274	7.9	4	276	7.9	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-11. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 6

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	202	10	1	204	10	1
5	204	8.2	1	204	10	1
6	204	5.5	1	204	5.8	1
7	206	3.8	1	206	3.7	1
8	206	3.1	1	208	3	1
9	208	2.7	1	210	2.6	1
10	210	2.4	1	210	2.4	1
11	210	2.2	1	212	2.2	1
12	212	2.1	1	212	2.1	1
13	212	1.9	1	214	2	1
14	214	1.8	1	214	1.9	1
15	214	1.8	1	214	1.8	1
16	214	1.7	1	216	1.8	1
17	216	1.7	1	216	1.7	1
18	216	1.6	1	216	1.7	1
19	216	1.6	1	216	1.6	1
20	216	1.6	1	218	1.6	1
21	218	1.5	1	218	1.6	1
22	218	1.5	1	218	1.5	1
23	218	1.5	1	218	1.9	1
24	218	1.6	1	220	2.6	2
25	220	2.3	2	220	3.3	2
26	220	3	2	220	3.9	2
27	220	3.7	2	222	4.6	2
28	222	4.4	2	224	5.3	2
29	224	5	2	226	5.9	2
30	226	5.7	2	228	6.2	2
31	226	6.1	2	230	6.1	2
32	228	6	2	230	6.1	2
33	230	6	2	232	6.1	2
34	232	6	2	234	6	2
35	234	6	2	236	5.9	2
36	236	5.8	2	238	5.7	2
37	238	5.7	2	240	5.6	3
38	240	5.6	3	242	5.5	3
39	242	5.5	3	244	5.4	3

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
40	242	5.4	3	246	5.3	3
41	244	5.4	3	246	5.3	3
42	246	5.4	3	248	5.4	3
43	248	5.5	3	250	5.5	3
44	250	5.7	3	252	5.7	3
45	252	5.9	3	256	5.6	3
46	254	5.9	3	258	5.1	3
47	258	5.4	3	260	4.6	4
48	260	5	4	262	4	4
49	262	4.5	4	262	3.4	4
50	264	4	4	264	3.5	4
51	266	4.3	4	266	3.9	4
52	268	5.2	4	270	4.7	4
53	274	7.4	4	274	6.6	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-12. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 7

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	202	10	1	202	10	1
5	204	10	1	204	10	1
6	204	10	1	204	10	1
7	206	4.7	1	206	10	1
8	208	3.2	1	206	4.1	1
9	210	2.6	1	208	2.8	1
10	210	2.3	1	210	2.3	1
11	212	2.1	1	212	2	1
12	212	1.9	1	212	1.9	1
13	214	1.8	1	214	1.7	1
14	214	1.7	1	214	1.7	1
15	214	1.6	1	214	1.6	1
16	214	1.6	1	216	1.6	1
17	216	1.5	1	216	1.5	1
18	216	1.5	1	216	1.5	1
19	216	1.5	1	216	1.4	1
20	216	1.4	1	218	1.4	1
21	218	1.4	1	218	1.4	1
22	218	1.4	1	218	1.4	1
23	218	1.4	1	218	1.3	1
24	218	1.3	1	218	1.7	1
25	218	1.8	1	220	2.4	2
26	220	2.4	2	220	3.1	2

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
27	220	3	2	220	3.8	2
28	220	3.6	2	222	4.4	2
29	222	4.2	2	224	5.1	2
30	224	4.8	2	226	5.6	2
31	226	5.5	2	228	5.5	2
32	226	5.6	2	230	5.5	2
33	228	5.5	2	230	5.4	2
34	230	5.5	2	232	5.3	2
35	232	5.5	2	234	5.3	2
36	234	5.5	2	236	5.1	2
37	234	5.4	2	238	5	2
38	236	5.2	2	240	4.8	3
39	238	5.1	2	240	4.6	3
40	240	5	3	242	4.5	3
41	242	4.8	3	244	4.3	3
42	244	4.7	3	246	4.3	3
43	244	4.6	3	246	4.3	3
44	246	4.7	3	248	4.4	3
45	248	4.8	3	250	4.4	3
46	250	5	3	252	4.6	3
47	252	5.2	3	254	4.7	3
48	254	5.5	3	256	4.7	3
49	256	5.2	3	258	4.4	3
50	260	4.9	4	260	4	4
51	262	4.6	4	262	3.8	4
52	264	4.5	4	264	4.1	4
53	268	6.4	4	270	6.2	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-13. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 8

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	202	10	1
5	204	10	1	204	10	1
6	204	7.9	1	204	9.8	1
7	206	4.1	1	206	5.8	1
8	208	3	1	206	3.7	1
9	210	2.5	1	208	2.9	1
10	210	2.2	1	210	2.5	1
11	212	2	1	212	2.2	1
12	212	1.9	1	212	2	1
13	214	1.8	1	212	1.9	1

<i>Raw Score</i>	<i>2009</i>			<i>2010</i>		
	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>
14	214	1.7	1	214	1.8	1
15	214	1.6	1	214	1.7	1
16	216	1.6	1	214	1.6	1
17	216	1.5	1	216	1.6	1
18	216	1.5	1	216	1.5	1
19	218	1.4	1	216	1.5	1
20	218	1.4	1	218	1.4	1
21	218	1.4	1	218	1.4	1
22	218	1.4	1	218	1.3	1
23	218	1.7	1	218	1.3	1
24	220	2.4	2	218	1.4	1
25	220	3.2	2	220	2.2	2
26	220	3.9	2	220	3	2
27	222	4.6	2	220	3.7	2
28	224	5.3	2	222	4.4	2
29	226	6	2	224	5.2	2
30	228	6.2	2	226	5.9	2
31	230	6.1	2	228	6.2	2
32	232	6.1	2	230	6.2	2
33	232	6.1	2	232	6.2	2
34	234	6	2	232	6.2	2
35	236	5.9	2	234	6.2	2
36	238	5.8	2	236	6	2
37	240	5.7	3	238	5.9	2
38	242	5.6	3	240	5.8	3
39	244	5.5	3	242	5.7	3
40	244	5.4	3	244	5.6	3
41	246	5.4	3	246	5.5	3
42	248	5.6	3	248	5.6	3
43	250	5.7	3	250	5.7	3
44	252	5.8	3	252	5.8	3
45	254	5.9	3	254	5.9	3
46	256	5.6	3	256	5.7	3
47	260	5.2	4	258	5.3	3
48	260	4.8	4	260	4.8	4
49	262	4.3	4	262	4.4	4
50	264	4.1	4	264	4.1	4
51	266	4.6	4	266	4.5	4
52	270	5.4	4	270	5.5	4
53	276	7.5	4	274	7.9	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-14. 2010 MCAS: Raw to Scaled Score Lookup Table – Mathematics Grade 10

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	202	10	1	202	10	1
2	202	10	1	202	10	1
3	204	10	1	204	10	1
4	204	10	1	204	10	1
5	206	10	1	206	10	1
6	206	10	1	206	10	1
7	208	10	1	208	10	1
8	212	3	1	208	10	1
9	214	2.1	1	214	2.8	1
10	216	1.7	1	214	1.7	1
11	216	1.5	1	216	1.3	1
12	218	1.3	1	216	1.2	1
13	218	1.2	1	218	1.1	1
14	218	1.2	1	218	1	1
15	218	1.1	1	218	1	1
16	220	2.2	2	218	1	1
17	220	3.3	2	220	1	2
18	220	4.4	2	220	2.1	2
19	222	5.4	2	220	3.1	2
20	226	6.4	2	220	4.1	2
21	228	7	2	222	5.1	2
22	230	6.8	2	224	6	2
23	232	6.6	2	226	6.8	2
24	234	6.4	2	230	6.6	2
25	236	6.2	2	232	6.5	2
26	238	6.1	2	232	6.4	2
27	240	5.9	3	234	6.3	2
28	242	5.8	3	236	6.2	2
29	244	5.6	3	238	6	2
30	244	5.5	3	240	5.9	3
31	246	5.4	3	242	5.8	3
32	248	5.3	3	244	5.8	3
33	250	5.2	3	246	5.7	3
34	250	5.1	3	246	5.6	3
35	252	5	3	248	5.5	3
36	254	5	3	250	5.5	3
37	256	4.9	3	252	5.4	3
38	256	4.4	3	252	5.4	3
39	258	3.9	3	254	5.4	3
40	260	3.4	4	256	4.9	3
41	260	2.9	4	258	4.4	3
42	260	2.4	4	260	3.8	4
43	262	1.9	4	260	3.3	4

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
44	262	1.5	4	260	2.8	4
45	262	1.5	4	262	2.2	4
46	262	1.6	4	262	1.7	4
47	264	1.6	4	262	1.7	4
48	264	1.6	4	262	1.7	4
49	264	1.6	4	264	1.8	4
50	264	1.7	4	264	1.8	4
51	266	1.7	4	264	1.8	4
52	266	1.8	4	266	1.9	4
53	266	1.9	4	266	2	4
54	268	2.1	4	268	2	4
55	268	2.2	4	268	2.2	4
56	270	2.5	4	270	2.4	4
57	272	2.9	4	270	2.7	4
58	274	3.7	4	272	3.3	4
59	278	5.7	4	276	4.8	4
60	280	10	4	280	10	4

Performance Levels: 1 = Failing, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-15. 2010 MCAS: Raw to Scaled Score Lookup Table – Science and Technology/Engineering Grade 5

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	10	1	204	8.9	1
6	204	10	1	204	7.8	1
7	206	8.5	1	206	6.9	1
8	206	7	1	206	6.1	1
9	208	5.9	1	208	5.3	1
10	208	4.8	1	208	4.7	1
11	210	4.1	1	208	4.1	1
12	210	3.6	1	210	3.6	1
13	212	3.3	1	210	3.2	1
14	212	3	1	212	2.9	1
15	214	2.8	1	212	2.7	1
16	214	2.6	1	214	2.5	1
17	216	2.5	1	214	2.4	1
18	216	2.4	1	216	2.3	1
19	216	2.2	1	216	2.2	1
20	218	2.2	1	216	2.1	1
21	218	2.1	1	218	2	1
22	218	2.7	1	218	1.9	1
23	220	3.2	2	218	2.3	1

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
24	220	3.7	2	220	2.9	2
25	222	4.2	2	220	3.5	2
26	222	4.8	2	220	4	2
27	224	5.3	2	222	4.5	2
28	226	5.6	2	224	5.1	2
29	228	5.6	2	226	5.4	2
30	230	5.6	2	228	5.3	2
31	232	5.6	2	230	5.2	2
32	234	5.6	2	232	5.2	2
33	234	5.7	2	232	5.1	2
34	236	5.9	2	234	5.1	2
35	238	6.2	2	236	5.2	2
36	240	6.5	3	238	5.4	2
37	242	6.7	3	240	5.6	3
38	244	7	3	242	5.8	3
39	248	7.3	3	244	6.1	3
40	250	7.5	3	246	6.4	3
41	252	7.6	3	248	6.5	3
42	256	7.1	3	250	6.7	3
43	258	6.6	3	252	6.9	3
44	260	6.1	4	256	6.4	3
45	262	5.5	4	258	6	3
46	264	5	4	260	5.5	4
47	266	5	4	262	4.9	4
48	268	5.3	4	264	4.5	4
49	272	5.7	4	266	4.8	4
50	274	6.2	4	270	5.2	4
51	278	7	4	272	5.7	4
52	280	8.4	4	276	6.8	4
53	280	10	4	280	9.6	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-16. 2010 MCAS: Raw to Scaled Score Lookup Table – Science and Technology/Engineering Grade 8

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	10	1	204	10	1
6	204	10	1	204	10	1
7	206	10	1	206	10	1
8	206	9.1	1	206	10	1
9	208	5.8	1	206	10	1

<i>Raw Score</i>	<i>2009</i>			<i>2010</i>		
	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>
10	208	4	1	208	8	1
11	210	3.3	1	208	5	1
12	212	2.9	1	210	3.8	1
13	214	2.6	1	212	3.2	1
14	214	2.4	1	212	2.8	1
15	214	2.2	1	214	2.5	1
16	216	2.1	1	214	2.2	1
17	216	1.9	1	216	2.1	1
18	216	1.8	1	216	1.9	1
19	218	1.7	1	216	1.8	1
20	218	1.6	1	218	1.7	1
21	218	1.7	1	218	1.6	1
22	218	2.3	1	218	1.5	1
23	220	2.8	2	218	1.6	1
24	220	3.4	2	220	2.1	2
25	222	4	2	220	2.7	2
26	222	4.5	2	220	3.3	2
27	224	5.1	2	222	3.8	2
28	226	5.4	2	222	4.4	2
29	228	5.3	2	224	4.9	2
30	230	5.3	2	226	5.1	2
31	230	5.3	2	228	5.1	2
32	232	5.2	2	230	5.1	2
33	234	5.2	2	230	5.1	2
34	236	5.1	2	232	5.1	2
35	238	4.9	2	234	5.1	2
36	240	4.7	3	236	5	2
37	240	4.5	3	238	4.9	2
38	242	4.4	3	240	4.7	3
39	244	4.2	3	240	4.6	3
40	244	4.2	3	242	4.5	3
41	246	4.3	3	244	4.3	3
42	248	4.4	3	246	4.3	3
43	250	4.5	3	246	4.4	3
44	252	4.7	3	248	4.5	3
45	254	5	3	250	4.6	3
46	256	5.3	3	252	4.7	3
47	258	5.9	3	254	4.9	3
48	260	6.5	4	256	5.4	3
49	264	7.4	4	260	6.2	4
50	268	8.4	4	264	7.2	4
51	272	9.6	4	268	8.9	4
52	280	10	4	274	10	4
53	280	10	4	280	10	4
54	280	10	4	280	10	4

Performance Levels: 1 = Warning, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-17. 2010 MCAS: Raw to Scaled Score Lookup Table – High School Biology

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	10	1	204	10	1
6	206	10	1	206	10	1
7	206	10	1	206	10	1
8	208	10	1	208	10	1
9	208	8.6	1	208	10	1
10	210	4.4	1	208	10	1
11	212	3.4	1	210	4.8	1
12	214	2.9	1	212	3.5	1
13	214	2.5	1	214	2.9	1
14	216	2.3	1	214	2.5	1
15	216	2.1	1	216	2.2	1
16	218	1.9	1	216	2	1
17	218	1.8	1	218	1.8	1
18	218	1.9	1	218	1.7	1
19	218	2.7	1	218	1.6	1
20	220	3.4	2	218	2.3	1
21	220	4.1	2	220	3	2
22	222	4.7	2	220	3.8	2
23	224	5.4	2	222	4.5	2
24	226	6	2	224	5.2	2
25	228	6	2	226	5.9	2
26	230	5.8	2	228	6.1	2
27	232	5.7	2	230	6	2
28	232	5.6	2	230	5.9	2
29	234	5.5	2	232	5.8	2
30	236	5.1	2	234	5.7	2
31	238	4.8	2	236	5.4	2
32	240	4.6	3	238	5.1	2
33	240	4.3	3	240	4.8	3
34	242	4	3	240	4.6	3
35	244	3.8	3	242	4.3	3
36	244	3.6	3	244	4.1	3
37	246	3.6	3	244	3.9	3
38	246	3.6	3	246	4	3
39	248	3.7	3	248	4	3
40	248	3.7	3	248	4.1	3
41	250	3.7	3	250	4.1	3
42	252	3.8	3	252	4.2	3
43	252	3.8	3	252	4.3	3
44	254	3.9	3	254	4.3	3
45	256	4	3	256	4.4	3
46	258	3.8	3	258	4.2	3
47	258	3.6	3	258	4	3

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
48	260	3.4	4	260	3.8	4
49	262	3.1	4	262	3.5	4
50	262	2.9	4	262	3.3	4
51	264	3	4	264	3.3	4
52	266	3.1	4	266	3.4	4
53	266	3.3	4	266	3.6	4
54	268	3.5	4	268	3.8	4
55	270	3.7	4	270	4.1	4
56	272	4.1	4	272	4.4	4
57	276	4.5	4	276	5	4
58	278	5.2	4	280	6	4
59	280	6.8	4	280	8.5	4
60	280	10	4	280	10	4

Performance Levels: 1 = Failing, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-18. 2010 MCAS: Raw to Scaled Score Lookup Table – High School Chemistry

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	10	1	204	10	1
6	206	10	1	204	10	1
7	206	10	1	206	10	1
8	206	10	1	206	10	1
9	208	10	1	208	7.8	1
10	212	3.1	1	212	3.3	1
11	214	2.2	1	214	2.4	1
12	214	1.9	1	214	1.9	1
13	216	1.7	1	216	1.7	1
14	216	1.6	1	216	1.5	1
15	216	1.5	1	216	1.4	1
16	218	1.4	1	218	1.3	1
17	218	1.3	1	218	1.2	1
18	218	1.3	1	218	1.2	1
19	218	1.2	1	218	1.1	1
20	218	1.1	1	218	1.1	1
21	220	2	2	220	1.5	2
22	220	3	2	220	2.4	2
23	220	4	2	220	3.4	2
24	220	4.9	2	220	4.3	2
25	224	5.8	2	222	5.2	2
26	226	6.7	2	224	6	2
27	228	7.4	2	226	6.9	2
28	230	7.2	2	228	7.2	2

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
29	232	7	2	230	7.1	2
30	234	6.8	2	232	7	2
31	236	6.5	2	234	6.8	2
32	238	6.1	2	236	6.5	2
33	240	5.8	3	238	6.3	2
34	242	5.6	3	240	6	3
35	242	5.3	3	242	5.8	3
36	244	5.1	3	244	5.6	3
37	246	5	3	246	5.3	3
38	248	4.9	3	246	5.3	3
39	248	4.9	3	248	5.3	3
40	250	4.9	3	250	5.3	3
41	252	5	3	252	5.4	3
42	254	5	3	252	5.4	3
43	254	5	3	254	5.4	3
44	256	4.5	3	256	4.9	3
45	258	4.1	3	258	4.4	3
46	260	3.6	4	260	4	4
47	260	3.1	4	260	3.4	4
48	262	2.6	4	262	2.9	4
49	262	2.1	4	262	2.4	4
50	262	2.2	4	264	2.5	4
51	264	2.3	4	264	2.6	4
52	264	2.4	4	266	2.7	4
53	266	2.6	4	266	2.9	4
54	268	2.8	4	268	3.1	4
55	268	3.1	4	270	3.3	4
56	270	3.5	4	272	3.7	4
57	272	4	4	274	4.3	4
58	276	4.9	4	276	5.2	4
59	280	7.1	4	280	7.1	4
60	280	10	4	280	10	4

Performance Levels: 1 = Failing, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-19. 2010 MCAS: Raw to Scaled Score Lookup Table – High School Introductory Physics

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	200	10	1	200	10	1
2	202	10	1	202	10	1
3	202	10	1	202	10	1
4	204	10	1	204	10	1
5	204	10	1	204	10	1
6	206	10	1	206	10	1
7	206	10	1	206	10	1
8	208	10	1	208	10	1
9	208	10	1	208	10	1

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
10	210	10	1	210	10	1
11	212	3.9	1	210	6.5	1
12	214	2.8	1	214	3.6	1
13	214	2.3	1	214	2.7	1
14	216	2	1	216	2.2	1
15	216	1.8	1	216	1.9	1
16	218	1.7	1	218	1.7	1
17	218	1.5	1	218	1.6	1
18	218	1.5	1	218	1.5	1
19	218	2.2	1	218	2	1
20	220	3	2	220	2.7	2
21	220	3.8	2	220	3.5	2
22	222	4.6	2	220	4.2	2
23	224	5.3	2	222	4.9	2
24	226	6	2	224	5.6	2
25	228	6.2	2	226	6.3	2
26	230	6.1	2	228	6.2	2
27	230	6	2	230	6.1	2
28	232	5.9	2	232	6	2
29	234	5.7	2	234	5.9	2
30	236	5.5	2	234	5.8	2
31	238	5.3	2	236	5.6	2
32	240	5	3	238	5.4	2
33	240	4.8	3	240	5.2	3
34	242	4.6	3	242	5	3
35	244	4.4	3	242	4.8	3
36	244	4.3	3	244	4.6	3
37	246	4.3	3	246	4.5	3
38	248	4.3	3	246	4.5	3
39	248	4.3	3	248	4.5	3
40	250	4.3	3	250	4.6	3
41	252	4.3	3	250	4.6	3
42	252	4.3	3	252	4.6	3
43	254	4.3	3	254	4.6	3
44	256	4.3	3	256	4.7	3
45	256	4.1	3	256	4.4	3
46	258	3.8	3	258	4.1	3
47	260	3.5	4	260	3.8	4
48	260	3.2	4	262	3.5	4
49	262	2.9	4	262	3.2	4
50	262	2.6	4	264	2.9	4
51	264	2.7	4	264	3	4
52	266	2.8	4	266	3.2	4
53	266	3	4	268	3.3	4
54	268	3.1	4	268	3.6	4
55	270	3.4	4	270	3.8	4
56	270	3.7	4	272	4.2	4
57	274	4.1	4	276	4.8	4
58	276	5	4	280	5.8	4

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
59	280	6.9	4	280	8.1	4
60	280	10	4	280	10	4

Performance Levels: 1 = Failing, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced

Table N-20. 2010 MCAS: Raw to Scaled Score Lookup Table – High School Technology/Engineering

Raw Score	2009			2010		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10	1	200	10	1
1	202	4.6	1	202	4.5	1
2	206	3.3	1	206	3.3	1
3	208	2.8	1	208	2.7	1
4	208	2.5	1	208	2.4	1
5	210	2.2	1	210	2.2	1
6	210	2.1	1	210	2	1
7	212	2	1	212	1.9	1
8	212	1.9	1	212	1.8	1
9	214	1.8	1	214	1.8	1
10	214	1.7	1	214	1.7	1
11	214	1.6	1	214	1.6	1
12	214	1.6	1	214	1.6	1
13	216	1.6	1	216	1.6	1
14	216	1.5	1	216	1.5	1
15	216	1.5	1	216	1.5	1
16	216	1.5	1	216	1.5	1
17	218	1.4	1	218	1.5	1
18	218	1.4	1	218	1.4	1
19	218	1.4	1	218	1.4	1
20	218	1.4	1	218	1.4	1
21	218	1.8	1	218	1.9	1
22	220	2.5	2	220	2.7	2
23	220	3.2	2	220	3.4	2
24	220	3.9	2	220	4.1	2
25	222	4.6	2	222	4.8	2
26	224	5.3	2	224	5.5	2
27	226	6	2	226	6.2	2
28	228	6.4	2	228	6.5	2
29	228	6.4	2	230	6.5	2
30	230	6.4	2	232	6.5	2
31	232	6.5	2	232	6.6	2
32	234	6.3	2	234	6.3	2
33	236	5.9	2	236	5.9	2
34	238	5.5	2	238	5.5	2
35	240	5.1	3	240	5.1	3
36	240	4.6	3	242	4.7	3
37	242	4.2	3	242	4.3	3
38	242	3.8	3	244	3.9	3

<i>Raw Score</i>	<i>2009</i>			<i>2010</i>		
	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>	<i>Scaled Score</i>	<i>Standard Error</i>	<i>Performance Level</i>
39	244	3.6	3	244	3.7	3
40	246	3.7	3	246	3.7	3
41	246	3.7	3	246	3.8	3
42	248	3.8	3	248	3.8	3
43	248	3.9	3	248	3.9	3
44	250	4	3	250	4	3
45	252	4.1	3	250	4.1	3
46	252	4.2	3	252	4.2	3
47	254	4.4	3	254	4.4	3
48	256	4.5	3	256	4.5	3
49	258	4.4	3	256	4.5	3
50	260	4.3	4	258	4.3	3
51	260	4.1	4	260	4.2	4
52	262	4	4	262	4.1	4
53	264	3.9	4	262	4	4
54	266	4.2	4	264	4	4
55	268	4.6	4	266	4.3	4
56	270	5	4	268	4.8	4
57	274	5.6	4	272	5.4	4
58	278	6.5	4	276	6.3	4
59	280	8.5	4	280	8.3	4
60	280	10	4	280	10	4

Performance Levels: 1 = Failing, 2 = Needs Improvement, 3 = Proficient, 4 = Advanced