

# **APPENDIX M**

## **RAW TO SCALED SCORE LOOK-UP TABLES**

**Table M-1. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 3**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	206	10.0	1
7	206	9.6	1	206	9.1	1
8	206	8.5	1	206	8.0	1
9	208	7.6	1	208	7.0	1
10	208	6.8	1	208	6.3	1
11	210	6.1	1	210	5.6	1
12	210	5.4	1	210	4.9	1
13	212	4.7	1	212	4.3	1
14	212	4.0	1	212	3.8	1
15	214	3.5	1	214	3.4	1
16	214	3.0	1	214	3.0	1
17	216	2.7	1	216	2.8	1
18	216	2.4	1	216	2.5	1
19	218	2.2	1	216	2.3	1
20	218	2.1	1	218	2.2	1
21	218	2.3	1	218	2.3	1
22	220	2.6	2	220	2.6	2
23	220	2.9	2	220	2.8	2
24	222	3.2	2	220	3.1	2
25	222	3.5	2	222	3.4	2
26	224	3.8	2	224	3.7	2
27	226	3.8	2	224	3.8	2
28	226	3.7	2	226	3.7	2
29	228	3.7	2	228	3.7	2
30	228	3.7	2	228	3.7	2
31	230	3.7	2	230	3.7	2
32	232	3.7	2	232	3.8	2
33	232	3.7	2	232	3.9	2
34	234	3.7	2	234	4.0	2
35	236	3.8	2	236	4.1	2
36	238	3.9	2	238	4.3	2
37	238	4.1	2	240	4.7	3
38	240	4.3	3	242	5.0	3
39	242	4.6	3	244	5.5	3
40	246	5.0	3	246	6.1	3
41	248	5.4	3	250	6.8	3
42	250	5.9	3	254	7.4	3
43	254	6.5	3	258	7.6	3
44	258	6.9	3	264	7.9	4

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
45	264	7.5	4	270	8.5	4
46	270	8.9	4	276	10.0	4
47	280	10.0	4	280	10.0	4
48	280	10.0	4	280	10.0	4

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

**Table M-2. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 4**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	9.7	1
3	202	10.0	1	202	8.6	1
4	204	9.1	1	202	7.6	1
5	204	7.9	1	202	6.7	1
6	204	6.9	1	204	6.0	1
7	206	6.0	1	204	5.4	1
8	206	5.2	1	204	4.9	1
9	206	4.5	1	204	4.5	1
10	208	3.8	1	206	4.1	1
11	208	3.3	1	206	3.9	1
12	210	3.0	1	206	3.6	1
13	210	2.7	1	208	3.4	1
14	212	2.6	1	208	3.2	1
15	212	2.4	1	208	3.0	1
16	212	2.3	1	208	2.8	1
17	214	2.2	1	210	2.7	1
18	214	2.1	1	210	2.5	1
19	216	2.1	1	210	2.4	1
20	216	2.0	1	210	2.3	1
21	216	2.0	1	212	2.2	1
22	218	1.9	1	212	2.1	1
23	218	1.9	1	214	2.0	1
24	218	2.3	1	214	2.0	1
25	220	2.9	2	214	1.9	1
26	220	3.5	2	214	1.8	1
27	222	4.1	2	216	1.7	1
28	224	4.7	2	216	1.7	1
29	226	5.3	2	216	1.6	1
30	226	5.5	2	216	1.6	1
31	228	5.5	2	218	1.6	1
32	230	5.6	2	218	1.5	1
33	232	5.6	2	218	1.5	1
34	234	5.6	2	218	1.6	1
35	238	5.5	2	220	2.1	2

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
36	240	5.4	3	220	2.5	2
37	242	5.2	3	220	3.0	2
38	244	5.1	3	222	3.5	2
39	246	5.1	3	222	4.0	2
40	248	5.3	3	224	4.4	2
41	250	5.5	3	226	4.7	2
42	252	5.8	3	226	4.8	2
43	256	6.2	3	228	4.8	2
44	258	6.7	3	230	4.8	2
45	262	7.3	4	232	4.9	2
46	268	7.9	4	232	4.9	2
47	272	8.6	4	234	5.0	2
48	278	9.2	4	236	5.0	2
49	280	9.7	4	238	4.9	2
50	280	10.0	4	240	4.9	3
51	280	10.0	4	240	4.8	3
52	280	10.0	4	242	4.7	3
53	N/A	N/A	N/A	244	4.7	3
54	N/A	N/A	N/A	246	4.8	3
55	N/A	N/A	N/A	248	4.9	3
56	N/A	N/A	N/A	250	5.1	3
57	N/A	N/A	N/A	252	5.3	3
58	N/A	N/A	N/A	254	5.5	3
59	N/A	N/A	N/A	256	5.8	3
60	N/A	N/A	N/A	258	6.1	3
61	N/A	N/A	N/A	260	6.5	4
62	N/A	N/A	N/A	264	6.8	4
63	N/A	N/A	N/A	266	7.2	4
64	N/A	N/A	N/A	270	7.5	4
65	N/A	N/A	N/A	274	7.9	4
66	N/A	N/A	N/A	278	8.2	4
67	N/A	N/A	N/A	280	8.7	4
68	N/A	N/A	N/A	280	9.4	4
69	N/A	N/A	N/A	280	10.0	4
70	N/A	N/A	N/A	280	10.0	4
71	N/A	N/A	N/A	280	10.0	4
72	N/A	N/A	N/A	280	10.0	4

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

**Table M-3. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 5**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	9.5	1	204	10.0	1
6	206	8.0	1	206	8.4	1
7	206	6.8	1	206	7.0	1
8	208	5.8	1	208	5.8	1
9	208	5.0	1	208	4.9	1
10	210	4.2	1	208	4.2	1
11	210	3.7	1	210	3.6	1
12	212	3.4	1	210	3.3	1
13	214	3.1	1	212	3.0	1
14	214	2.9	1	212	2.9	1
15	216	2.7	1	214	2.7	1
16	216	2.6	1	214	2.6	1
17	218	2.5	1	216	2.5	1
18	218	2.6	1	216	2.4	1
19	218	3.0	1	218	2.3	1
20	220	3.5	2	218	2.4	1
21	220	3.9	2	218	2.9	1
22	222	4.4	2	220	3.4	2
23	224	4.8	2	220	3.9	2
24	226	5.2	2	222	4.4	2
25	228	5.1	2	224	4.8	2
26	228	5.0	2	226	5.1	2
27	230	5.0	2	228	5.0	2
28	232	4.9	2	230	5.0	2
29	234	4.9	2	230	4.9	2
30	236	4.9	2	232	4.9	2
31	238	4.8	2	234	4.9	2
32	238	4.8	2	236	4.9	2
33	240	4.7	3	238	4.9	2
34	242	4.7	3	240	4.8	3
35	244	4.7	3	240	4.8	3
36	246	4.8	3	242	4.8	3
37	248	4.9	3	244	4.8	3
38	250	5.0	3	246	4.9	3
39	252	5.2	3	248	5.0	3
40	254	5.4	3	250	5.2	3
41	256	5.5	3	252	5.3	3
42	258	5.4	3	254	5.5	3
43	260	5.4	4	258	5.4	3
44	264	5.3	4	260	5.3	4
45	266	5.4	4	262	5.2	4
46	270	5.8	4	266	5.2	4
47	272	6.2	4	268	5.5	4
48	276	6.6	4	272	5.9	4
49	280	7.3	4	276	6.2	4
50	280	8.5	4	280	6.9	4

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
51	280	9.4	4	280	8.8	4
52	280	9.4	4	280	10.0	4

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

**Table M-4. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 6**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	9.9	1	204	10.0	1
5	204	8.5	1	204	8.4	1
6	206	7.3	1	206	7.1	1
7	206	6.3	1	206	6.0	1
8	206	5.5	1	208	5.1	1
9	208	4.8	1	208	4.3	1
10	208	4.2	1	210	3.8	1
11	210	3.6	1	210	3.4	1
12	210	3.3	1	212	3.1	1
13	210	3.0	1	212	2.9	1
14	212	2.8	1	214	2.8	1
15	214	2.7	1	214	2.7	1
16	214	2.5	1	216	2.5	1
17	214	2.4	1	216	2.5	1
18	216	2.3	1	218	2.4	1
19	216	2.2	1	218	2.6	1
20	218	2.1	1	218	3.2	1
21	218	2.1	1	220	3.8	2
22	218	2.7	1	220	4.4	2
23	220	3.4	2	222	5.0	2
24	220	4.0	2	224	5.5	2
25	222	4.6	2	226	6.0	2
26	224	5.3	2	228	5.9	2
27	226	5.9	2	230	5.9	2
28	228	5.8	2	232	5.8	2
29	230	5.8	2	234	5.8	2
30	232	5.8	2	236	5.6	2
31	234	5.8	2	238	5.2	2
32	236	5.5	2	240	5.0	3
33	238	5.2	2	242	4.7	3
34	240	4.9	3	242	4.4	3
35	242	4.6	3	244	4.1	3
36	242	4.3	3	246	4.2	3
37	244	4.0	3	248	4.3	3

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
38	246	4.1	3	248	4.4	3
39	248	4.2	3	250	4.5	3
40	250	4.3	3	252	4.7	3
41	250	4.5	3	254	4.8	3
42	252	4.7	3	256	5.0	3
43	256	4.9	3	258	5.3	3
44	258	5.2	3	260	5.5	4
45	260	5.5	4	264	5.9	4
46	264	5.9	4	266	6.2	4
47	266	6.3	4	270	6.5	4
48	270	6.6	4	274	6.8	4
49	274	7.1	4	278	7.4	4
50	280	7.9	4	280	8.4	4
51	280	10.0	4	280	10.0	4
52	280	10.0	4	280	10.0	4

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

**Table M-5. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 7**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	202	9.2	1
5	204	10.0	1	204	7.8	1
6	206	9.5	1	204	6.7	1
7	206	7.6	1	204	5.8	1
8	208	6.1	1	204	5.2	1
9	208	4.4	1	206	4.7	1
10	208	3.6	1	206	4.3	1
11	210	3.2	1	206	4.0	1
12	212	2.9	1	208	3.8	1
13	212	2.7	1	208	3.6	1
14	214	2.5	1	208	3.4	1
15	214	2.4	1	210	3.1	1
16	216	2.4	1	210	2.9	1
17	216	2.3	1	210	2.7	1
18	216	2.2	1	212	2.5	1
19	218	2.2	1	212	2.3	1
20	218	2.5	1	212	2.2	1
21	220	3.0	2	214	2.1	1
22	220	3.5	2	214	2.0	1
23	222	4.0	2	216	1.9	1
24	222	4.5	2	216	1.8	1

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
25	224	5.0	2	216	1.8	1
26	226	5.1	2	216	1.7	1
27	228	5.1	2	218	1.7	1
28	230	5.0	2	218	1.7	1
29	232	5.0	2	218	1.7	1
30	232	5.0	2	218	2.1	1
31	234	5.0	2	220	2.5	2
32	236	4.7	2	220	2.9	2
33	238	4.4	2	222	3.3	2
34	240	4.1	3	222	3.7	2
35	242	3.8	3	224	4.1	2
36	242	3.4	3	224	4.3	2
37	244	3.2	3	226	4.3	2
38	244	3.2	3	228	4.3	2
39	246	3.3	3	228	4.2	2
40	248	3.3	3	230	4.2	2
41	248	3.4	3	232	4.2	2
42	250	3.6	3	232	4.2	2
43	252	3.7	3	234	4.2	2
44	254	3.9	3	236	4.2	2
45	256	4.1	3	236	4.1	2
46	258	4.4	3	238	3.9	2
47	260	4.8	4	240	3.7	3
48	264	5.3	4	240	3.4	3
49	266	5.9	4	242	3.2	3
50	272	6.6	4	242	3.0	3
51	278	8.8	4	244	2.8	3
52	280	10.0	4	244	2.8	3
53	N/A	N/A	N/A	244	2.9	3
54	N/A	N/A	N/A	246	2.9	3
55	N/A	N/A	N/A	248	3.0	3
56	N/A	N/A	N/A	248	3.1	3
57	N/A	N/A	N/A	250	3.2	3
58	N/A	N/A	N/A	250	3.3	3
59	N/A	N/A	N/A	252	3.4	3
60	N/A	N/A	N/A	254	3.6	3
61	N/A	N/A	N/A	256	3.7	3
62	N/A	N/A	N/A	258	4.0	3
63	N/A	N/A	N/A	260	4.4	4
64	N/A	N/A	N/A	262	4.7	4
65	N/A	N/A	N/A	264	5.1	4
66	N/A	N/A	N/A	268	5.3	4
67	N/A	N/A	N/A	270	5.7	4
68	N/A	N/A	N/A	274	6.3	4
69	N/A	N/A	N/A	280	7.3	4
70	N/A	N/A	N/A	280	8.8	4
71	N/A	N/A	N/A	280	10.0	4
72	N/A	N/A	N/A	280	10.0	4

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



**Table M-6. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 8**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	206	9.9	1
7	206	8.9	1	206	8.0	1
8	208	7.2	1	208	6.4	1
9	208	5.8	1	208	4.9	1
10	210	4.6	1	210	4.0	1
11	210	3.6	1	210	3.5	1
12	212	3.2	1	212	3.2	1
13	212	2.9	1	212	2.9	1
14	214	2.8	1	214	2.8	1
15	216	2.6	1	214	2.6	1
16	216	2.5	1	216	2.5	1
17	216	2.4	1	216	2.4	1
18	218	2.5	1	218	2.3	1
19	218	3.3	1	218	2.6	1
20	220	4.0	2	218	3.1	1
21	220	4.6	2	220	3.6	2
22	222	5.3	2	220	4.1	2
23	224	5.9	2	222	4.6	2
24	226	6.3	2	224	5.1	2
25	228	6.1	2	226	5.4	2
26	230	6.0	2	228	5.3	2
27	232	5.9	2	230	5.3	2
28	234	5.7	2	232	5.2	2
29	236	5.2	2	232	5.2	2
30	238	4.7	2	234	5.3	2
31	240	4.3	3	236	4.9	2
32	242	3.8	3	238	4.6	2
33	242	3.4	3	240	4.2	3
34	244	3.1	3	242	3.8	3
35	244	3.1	3	242	3.5	3
36	246	3.1	3	244	3.2	3
37	246	3.2	3	244	3.3	3
38	248	3.2	3	246	3.3	3
39	250	3.3	3	248	3.4	3
40	250	3.3	3	248	3.5	3
41	252	3.4	3	250	3.7	3
42	254	3.6	3	252	3.8	3
43	256	3.7	3	254	4.0	3
44	256	3.9	3	256	4.1	3
45	258	4.1	3	258	4.3	3

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
46	260	4.4	4	260	4.5	4
47	264	4.7	4	262	4.7	4
48	266	5.0	4	264	5.1	4
49	270	5.5	4	268	5.6	4
50	274	6.3	4	272	6.6	4
51	280	8.4	4	280	9.8	4
52	280	10.0	4	280	10.0	4

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

**Table M-7. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
ELA Grade 10**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	9.2	1	202	10.0	1
3	202	8.3	1	202	8.8	1
4	204	7.4	1	204	7.8	1
5	204	6.7	1	204	6.9	1
6	206	6.1	1	204	6.2	1
7	206	5.6	1	206	5.6	1
8	206	5.2	1	206	5.1	1
9	208	4.8	1	208	4.8	1
10	208	4.5	1	208	4.5	1
11	210	4.3	1	208	4.2	1
12	210	4.1	1	210	4.0	1
13	212	3.9	1	210	3.8	1
14	212	3.7	1	212	3.7	1
15	212	3.5	1	212	3.5	1
16	214	3.3	1	212	3.4	1
17	214	3.1	1	214	3.2	1
18	216	2.9	1	214	3.0	1
19	216	2.8	1	216	2.8	1
20	218	2.7	1	216	2.7	1
21	218	2.9	1	216	2.5	1
22	218	3.2	1	218	2.4	1
23	220	3.6	2	218	2.9	1
24	222	3.9	2	220	3.4	2
25	222	4.3	2	220	3.9	2
26	224	4.6	2	222	4.4	2
27	226	4.6	2	224	4.9	2
28	228	4.6	2	226	5.3	2
29	228	4.5	2	226	5.2	2
30	230	4.5	2	228	5.1	2
31	232	4.4	2	230	5.1	2
32	232	4.4	2	232	5.0	2

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
33	234	4.4	2	234	4.9	2
34	236	4.4	2	234	4.9	2
35	236	4.2	2	236	4.7	2
36	238	4.1	2	238	4.5	2
37	240	3.9	3	238	4.3	2
38	240	3.8	3	240	4.0	3
39	242	3.6	3	242	3.8	3
40	242	3.5	3	242	3.6	3
41	244	3.3	3	244	3.4	3
42	244	3.3	3	244	3.3	3
43	246	3.3	3	246	3.3	3
44	246	3.3	3	246	3.2	3
45	248	3.4	3	248	3.2	3
46	248	3.4	3	248	3.2	3
47	250	3.4	3	250	3.2	3
48	250	3.4	3	250	3.1	3
49	252	3.4	3	252	3.1	3
50	252	3.4	3	252	3.1	3
51	254	3.4	3	254	3.2	3
52	256	3.5	3	254	3.2	3
53	256	3.5	3	256	3.2	3
54	258	3.3	3	256	3.3	3
55	258	3.1	3	258	3.2	3
56	260	2.9	4	258	3.0	3
57	262	2.7	4	260	2.8	4
58	262	2.4	4	260	2.6	4
59	262	2.4	4	262	2.4	4
60	264	2.4	4	262	2.3	4
61	266	2.5	4	264	2.4	4
62	266	2.6	4	264	2.5	4
63	268	2.7	4	266	2.6	4
64	268	2.8	4	268	2.7	4
65	270	2.9	4	268	2.8	4
66	272	3.1	4	270	2.9	4
67	274	3.4	4	272	3.2	4
68	276	3.9	4	274	3.7	4
69	280	4.9	4	278	4.6	4
70	280	6.2	4	280	6.1	4
71	280	6.4	4	280	6.6	4
72	280	6.4	4	280	6.6	4

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

**Table M-8. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 3**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	202	10.0	1	202	10.0	1
2	202	10.0	1	202	10.0	1
3	204	10.0	1	204	10.0	1
4	204	10.0	1	204	10.0	1
5	206	10.0	1	206	10.0	1
6	206	10.0	1	206	10.0	1
7	208	7.4	1	208	8.5	1
8	208	5.0	1	208	6.8	1
9	210	3.9	1	210	5.1	1
10	212	3.3	1	210	4.1	1
11	214	2.9	1	212	3.5	1
12	214	2.6	1	214	3.0	1
13	216	2.4	1	214	2.7	1
14	216	2.2	1	216	2.5	1
15	218	2.1	1	216	2.3	1
16	218	2.5	1	218	2.1	1
17	218	3.3	1	218	2.4	1
18	220	4.2	2	218	3.3	1
19	222	5.0	2	220	4.2	2
20	224	5.8	2	222	5.1	2
21	226	6.6	2	224	6.0	2
22	228	6.8	2	226	6.9	2
23	230	6.8	2	228	7.1	2
24	234	6.8	2	232	7.0	2
25	236	6.6	2	234	6.9	2
26	238	6.4	2	236	6.7	2
27	240	6.2	3	240	6.5	3
28	242	6.1	3	242	6.4	3
29	246	6.0	3	244	6.3	3
30	248	6.1	3	246	6.2	3
31	250	6.3	3	250	6.5	3
32	252	6.6	3	252	6.8	3
33	256	6.3	3	256	6.6	3
34	260	6.0	4	258	6.3	3
35	262	5.6	4	262	5.8	4
36	264	5.3	4	264	5.4	4
37	268	5.9	4	268	5.7	4
38	272	7.1	4	272	6.8	4
39	280	9.9	4	278	9.3	4
40	280	10.0	4	280	10.0	4

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

**Table M-9. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 4**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	204	10.0	1
7	206	10.0	1	206	10.0	1
8	206	7.2	1	206	8.1	1
9	208	4.3	1	208	5.2	1
10	208	3.3	1	208	3.7	1
11	210	2.8	1	210	3.0	1
12	212	2.5	1	212	2.6	1
13	212	2.3	1	212	2.4	1
14	214	2.2	1	214	2.2	1
15	214	2.1	1	214	2.1	1
16	216	2.0	1	214	2.0	1
17	216	1.9	1	216	1.9	1
18	216	1.9	1	216	1.9	1
19	218	1.8	1	216	1.8	1
20	218	1.8	1	218	1.8	1
21	218	2.1	1	218	1.7	1
22	220	2.5	2	218	2.0	1
23	220	2.9	2	220	2.4	2
24	220	3.4	2	220	2.9	2
25	222	3.8	2	220	3.3	2
26	224	4.2	2	222	3.7	2
27	226	4.4	2	224	4.1	2
28	226	4.4	2	224	4.4	2
29	228	4.3	2	226	4.4	2
30	230	4.3	2	228	4.4	2
31	230	4.2	2	228	4.3	2
32	232	4.2	2	230	4.3	2
33	234	4.2	2	232	4.3	2
34	234	4.1	2	232	4.2	2
35	236	4.1	2	234	4.2	2
36	238	4.4	2	234	4.2	2
37	238	4.7	2	236	4.2	2
38	240	5.0	3	238	4.6	2
39	242	5.4	3	238	4.9	2
40	244	5.7	3	240	5.2	3
41	246	6.1	3	242	5.6	3
42	248	6.1	3	244	6.0	3
43	252	6.2	3	246	6.4	3
44	254	6.4	3	248	6.5	3
45	256	5.9	3	252	6.7	3

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
46	258	5.4	3	254	6.7	3
47	260	4.9	4	256	6.2	3
48	262	4.3	4	260	5.7	4
49	264	4.0	4	262	5.2	4
50	266	4.3	4	264	4.8	4
51	270	4.9	4	268	5.3	4
52	272	5.8	4	270	6.5	4
53	278	7.9	4	278	9.6	4
54	280	10.0	4	280	10.0	4

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

**Table M-10. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 5**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	204	10.0	1
7	206	10.0	1	206	10.0	1
8	206	9.4	1	206	9.2	1
9	208	5.3	1	208	5.4	1
10	208	3.8	1	208	3.7	1
11	210	3.1	1	210	3.0	1
12	212	2.7	1	212	2.7	1
13	214	2.4	1	212	2.4	1
14	214	2.2	1	214	2.2	1
15	214	2.0	1	214	2.1	1
16	216	1.9	1	216	2.0	1
17	216	1.8	1	216	1.9	1
18	216	1.7	1	216	1.8	1
19	218	1.6	1	216	1.7	1
20	218	1.6	1	218	1.7	1
21	218	1.8	1	218	1.6	1
22	220	2.5	2	218	1.8	1
23	220	3.2	2	220	2.5	2
24	220	3.9	2	220	3.2	2
25	222	4.5	2	220	3.8	2
26	224	5.2	2	222	4.5	2
27	226	5.8	2	224	5.1	2
28	228	5.8	2	226	5.7	2
29	230	5.7	2	228	5.9	2
30	230	5.6	2	228	5.8	2

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
31	232	5.6	2	230	5.8	2
32	234	5.5	2	232	5.7	2
33	236	5.4	2	234	5.7	2
34	238	5.4	2	236	5.7	2
35	238	5.3	2	238	5.7	2
36	240	5.3	3	240	5.7	3
37	242	5.3	3	240	5.7	3
38	244	5.3	3	242	5.7	3
39	246	5.3	3	244	5.7	3
40	248	5.3	3	246	5.8	3
41	250	5.4	3	248	5.8	3
42	250	5.5	3	250	5.9	3
43	252	5.6	3	252	5.9	3
44	254	5.5	3	254	5.9	3
45	258	5.1	3	256	5.4	3
46	260	4.6	4	260	4.8	4
47	260	4.1	4	260	4.3	4
48	262	3.6	4	262	3.7	4
49	264	3.3	4	264	3.3	4
50	266	3.6	4	266	3.6	4
51	268	4.1	4	268	4.1	4
52	270	5.1	4	270	4.8	4
53	276	7.5	4	276	6.6	4
54	280	10.0	4	280	10.0	4

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

**Table M-11. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 6**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	204	10.0	1	204	10.0	1
7	206	10.0	1	206	7.9	1
8	206	5.4	1	206	5.5	1
9	208	3.8	1	206	4.0	1
10	210	3.1	1	208	3.3	1
11	212	2.7	1	210	2.9	1
12	212	2.4	1	212	2.6	1
13	214	2.2	1	212	2.3	1
14	214	2.0	1	214	2.1	1
15	214	1.9	1	214	2.0	1

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
16	216	1.8	1	214	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	218	1.5	1	218	1.5	1
21	218	1.5	1	218	1.5	1
22	218	1.4	1	218	1.5	1
23	218	2.0	1	218	1.8	1
24	220	2.8	2	220	2.7	2
25	220	3.6	2	220	3.5	2
26	220	4.4	2	220	4.4	2
27	222	5.1	2	222	5.2	2
28	224	5.9	2	224	6.0	2
29	226	6.5	2	226	6.8	2
30	228	6.4	2	228	6.9	2
31	230	6.4	2	230	6.8	2
32	232	6.3	2	232	6.7	2
33	234	6.2	2	234	6.5	2
34	236	6.1	2	236	6.3	2
35	238	5.9	2	238	6.1	2
36	240	5.7	3	240	5.9	3
37	242	5.6	3	242	5.7	3
38	244	5.4	3	244	5.6	3
39	246	5.3	3	246	5.4	3
40	248	5.3	3	248	5.5	3
41	250	5.3	3	250	5.5	3
42	252	5.4	3	252	5.5	3
43	254	5.4	3	254	5.6	3
44	256	5.2	3	256	5.3	3
45	258	4.7	3	258	4.8	3
46	260	4.2	4	260	4.3	4
47	262	3.7	4	262	3.7	4
48	262	3.2	4	262	3.2	4
49	264	3.0	4	264	3.1	4
50	266	3.3	4	266	3.4	4
51	268	3.7	4	268	3.8	4
52	270	4.4	4	270	4.6	4
53	274	6.3	4	276	6.7	4
54	280	10.0	4	280	10.0	4

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



**Table M-12. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 7**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	202	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	204	10.0	1
7	206	10.0	1	206	10.0	1
8	206	5.6	1	206	4.8	1
9	210	3.4	1	206	3.1	1
10	212	2.7	1	208	2.6	1
11	212	2.4	1	210	2.4	1
12	214	2.1	1	212	2.2	1
13	214	1.9	1	212	2.1	1
14	216	1.8	1	212	2.0	1
15	216	1.7	1	214	1.9	1
16	216	1.6	1	214	1.8	1
17	216	1.5	1	214	1.7	1
18	218	1.5	1	216	1.7	1
19	218	1.4	1	216	1.6	1
20	218	1.4	1	216	1.6	1
21	218	1.6	1	218	1.5	1
22	220	2.4	2	218	1.5	1
23	220	3.2	2	218	1.5	1
24	220	3.9	2	218	1.6	1
25	222	4.6	2	220	2.4	2
26	224	5.4	2	220	3.2	2
27	226	6.1	2	220	4.0	2
28	228	6.2	2	222	4.7	2
29	230	6.1	2	224	5.5	2
30	232	6.1	2	226	6.2	2
31	234	6.0	2	228	6.3	2
32	234	5.9	2	230	6.3	2
33	236	5.7	2	232	6.2	2
34	238	5.5	2	234	6.1	2
35	240	5.3	3	236	5.9	2
36	242	5.1	3	238	5.7	2
37	244	4.9	3	240	5.5	3
38	244	4.8	3	242	5.3	3
39	246	4.8	3	242	5.1	3
40	248	4.8	3	244	4.9	3
41	250	4.9	3	246	4.9	3
42	252	4.9	3	248	4.9	3
43	254	5.0	3	250	5.0	3
44	254	5.1	3	252	5.1	3
45	256	4.7	3	254	5.2	3

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
46	260	4.3	4	256	5.2	3
47	260	3.9	4	258	4.8	3
48	262	3.5	4	260	4.4	4
49	264	3.2	4	262	4.0	4
50	266	3.5	4	264	3.6	4
51	268	3.9	4	266	4.0	4
52	270	4.7	4	268	4.9	4
53	274	6.6	4	274	7.1	4
54	280	10.0	4	280	10.0	4

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

**Table M-13. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 8**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	204	10.0	1	204	10.0	1
7	206	10.0	1	206	10.0	1
8	206	7.7	1	206	9.5	1
9	208	4.2	1	208	4.5	1
10	210	3.0	1	210	3.2	1
11	212	2.5	1	212	2.6	1
12	212	2.1	1	212	2.2	1
13	214	1.9	1	214	1.9	1
14	214	1.8	1	214	1.7	1
15	214	1.7	1	216	1.6	1
16	216	1.6	1	216	1.5	1
17	216	1.6	1	216	1.5	1
18	216	1.5	1	216	1.4	1
19	218	1.5	1	218	1.4	1
20	218	1.4	1	218	1.3	1
21	218	1.4	1	218	1.3	1
22	218	1.4	1	218	1.3	1
23	220	2.3	2	220	2.1	2
24	220	3.1	2	220	3.0	2
25	220	4.0	2	220	3.8	2
26	222	4.8	2	222	4.7	2
27	224	5.6	2	224	5.5	2
28	226	6.4	2	226	6.3	2
29	228	6.4	2	228	6.8	2
30	230	6.4	2	230	6.7	2

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
31	232	6.3	2	232	6.7	2
32	234	6.2	2	234	6.7	2
33	236	6.0	2	236	6.5	2
34	238	5.8	2	238	6.3	2
35	240	5.7	3	240	6.1	3
36	242	5.5	3	240	5.9	3
37	244	5.4	3	242	5.8	3
38	246	5.4	3	244	5.6	3
39	248	5.4	3	246	5.5	3
40	250	5.5	3	248	5.5	3
41	252	5.6	3	250	5.5	3
42	254	5.7	3	252	5.5	3
43	256	5.4	3	252	5.6	3
44	258	4.9	3	254	5.6	3
45	260	4.5	4	256	5.2	3
46	262	4.0	4	260	4.8	4
47	264	3.5	4	260	4.4	4
48	264	3.6	4	262	4.0	4
49	266	3.8	4	264	3.6	4
50	268	4.2	4	266	4.0	4
51	272	4.8	4	268	4.5	4
52	274	5.9	4	272	5.5	4
53	280	8.4	4	276	7.8	4
54	280	10.0	4	280	10.0	4

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

**Table M-14. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
Mathematics Grade 10**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	202	10.0	1	202	10.0	1
2	202	10.0	1	202	10.0	1
3	204	10.0	1	204	10.0	1
4	204	10.0	1	204	10.0	1
5	206	10.0	1	206	10.0	1
6	206	9.3	1	206	10.0	1
7	208	6.1	1	208	7.7	1
8	208	4.3	1	208	4.9	1
9	210	3.5	1	210	3.6	1
10	212	3.0	1	212	2.9	1
11	214	2.7	1	214	2.6	1
12	214	2.5	1	214	2.4	1
13	216	2.4	1	216	2.3	1
14	216	2.3	1	216	2.2	1
15	218	2.2	1	218	2.1	1

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
16	218	2.1	1	218	2.3	1
17	218	2.7	1	218	3.2	1
18	220	3.4	2	220	4.0	2
19	220	4.0	2	222	4.8	2
20	222	4.7	2	224	5.6	2
21	224	5.4	2	226	6.2	2
22	226	6.0	2	228	6.5	2
23	228	6.0	2	230	6.3	2
24	230	6.0	2	232	6.2	2
25	232	5.9	2	234	6.1	2
26	234	5.9	2	236	5.9	2
27	234	5.8	2	236	5.8	2
28	236	5.8	2	238	5.7	2
29	238	5.7	2	240	5.6	3
30	240	5.7	3	242	5.5	3
31	242	5.7	3	244	5.4	3
32	244	5.6	3	244	5.4	3
33	246	5.6	3	246	5.3	3
34	248	5.6	3	248	5.2	3
35	248	5.6	3	250	5.2	3
36	250	5.6	3	250	5.1	3
37	252	5.6	3	252	5.1	3
38	254	5.6	3	254	5.0	3
39	256	5.2	3	256	5.0	3
40	258	4.6	3	256	4.4	3
41	260	3.9	4	258	3.9	3
42	260	3.3	4	260	3.3	4
43	260	2.6	4	260	2.8	4
44	262	2.0	4	260	2.2	4
45	262	1.6	4	262	1.7	4
46	262	1.6	4	262	1.4	4
47	262	1.6	4	262	1.4	4
48	264	1.7	4	262	1.5	4
49	264	1.7	4	264	1.5	4
50	264	1.8	4	264	1.6	4
51	266	1.8	4	264	1.6	4
52	266	1.9	4	264	1.7	4
53	268	1.9	4	266	1.8	4
54	268	2.0	4	266	1.9	4
55	268	2.1	4	268	2.1	4
56	270	2.3	4	268	2.3	4
57	272	2.5	4	270	2.6	4
58	274	3.0	4	272	3.3	4
59	276	4.3	4	274	5.0	4
60	280	10.0	4	280	10.0	4

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

**Table M-15. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
STE Grade 5**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	204	10.0	1	204	9.0	1
7	206	10.0	1	206	7.9	1
8	206	8.9	1	206	6.9	1
9	208	7.3	1	208	5.9	1
10	208	5.9	1	208	5.1	1
11	210	4.6	1	208	4.4	1
12	210	3.8	1	210	3.8	1
13	212	3.4	1	210	3.3	1
14	212	3.1	1	210	3.0	1
15	214	2.8	1	212	2.8	1
16	214	2.6	1	214	2.6	1
17	216	2.5	1	214	2.5	1
18	216	2.3	1	214	2.4	1
19	216	2.2	1	216	2.2	1
20	218	2.1	1	216	2.1	1
21	218	2.1	1	218	2.0	1
22	218	2.6	1	218	1.9	1
23	220	3.0	2	218	2.2	1
24	220	3.4	2	220	2.8	2
25	220	3.9	2	220	3.4	2
26	222	4.3	2	220	4.0	2
27	224	4.7	2	222	4.6	2
28	226	5.1	2	224	5.1	2
29	226	5.0	2	226	5.5	2
30	228	5.0	2	228	5.4	2
31	230	4.9	2	230	5.4	2
32	232	4.9	2	232	5.3	2
33	232	4.9	2	234	5.3	2
34	234	4.9	2	234	5.3	2
35	236	5.0	2	236	5.5	2
36	238	5.2	2	238	5.7	2
37	238	5.5	2	240	5.9	3
38	240	5.7	3	242	6.1	3
39	242	6.0	3	244	6.4	3
40	244	6.3	3	248	6.7	3
41	248	6.6	3	250	6.8	3
42	250	6.8	3	252	7.0	3
43	252	7.0	3	256	6.6	3
44	254	6.8	3	258	6.1	3
45	258	6.3	3	260	5.6	4

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
46	260	5.9	4	262	5.1	4
47	262	5.4	4	264	4.6	4
48	264	4.9	4	266	5.0	4
49	266	5.2	4	270	5.3	4
50	270	5.7	4	272	5.8	4
51	274	6.5	4	276	6.4	4
52	278	7.7	4	280	7.5	4
53	280	10.0	4	280	9.9	4
54	280	10.0	4	280	10.0	4

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

**Table M-16. 2016 MCAS: Raw to Scaled Score Look-Up Table – STE Grade 8**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	204	10.0	1	204	10.0	1
7	206	9.9	1	206	10.0	1
8	206	7.5	1	206	8.4	1
9	206	5.3	1	206	5.4	1
10	208	3.9	1	208	3.7	1
11	210	3.2	1	210	2.9	1
12	210	2.8	1	210	2.5	1
13	212	2.5	1	212	2.3	1
14	214	2.3	1	212	2.1	1
15	214	2.1	1	214	2.0	1
16	214	2.0	1	214	1.9	1
17	216	1.9	1	216	1.8	1
18	216	1.8	1	216	1.8	1
19	216	1.7	1	216	1.7	1
20	218	1.7	1	216	1.7	1
21	218	1.6	1	218	1.7	1
22	218	1.6	1	218	1.6	1
23	218	1.7	1	218	1.8	1
24	220	2.3	2	220	2.5	2
25	220	2.9	2	220	3.1	2
26	220	3.5	2	220	3.8	2
27	222	4.1	2	222	4.4	2
28	224	4.6	2	224	5.0	2
29	224	5.2	2	226	5.6	2
30	226	5.4	2	228	5.5	2

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
31	228	5.4	2	230	5.4	2
32	230	5.4	2	230	5.3	2
33	232	5.3	2	232	5.2	2
34	232	5.3	2	234	5.1	2
35	234	5.3	2	236	4.9	2
36	236	5.1	2	238	4.7	2
37	238	4.9	2	240	4.5	3
38	240	4.7	3	242	4.3	3
39	242	4.6	3	242	4.1	3
40	242	4.4	3	244	3.8	3
41	244	4.2	3	246	3.8	3
42	246	4.3	3	246	3.9	3
43	246	4.3	3	248	3.9	3
44	248	4.4	3	250	4.0	3
45	250	4.6	3	252	4.1	3
46	252	4.8	3	254	4.4	3
47	254	5.0	3	256	4.7	3
48	256	5.6	3	258	5.4	3
49	260	6.4	4	260	6.3	4
50	264	7.5	4	264	7.5	4
51	268	9.2	4	270	9.0	4
52	276	10.0	4	278	10.0	4
53	280	10.0	4	280	10.0	4
54	280	10.0	4	280	10.0	4

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

**Table M-17. 2016 MCAS: Raw to Scaled Score Look-Up Table – High School Biology**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	206	10.0	1
7	206	10.0	1	206	10.0	1
8	208	10.0	1	208	10.0	1
9	208	10.0	1	208	10.0	1
10	210	10.0	1	210	9.0	1
11	210	6.4	1	212	4.0	1
12	212	4.0	1	214	2.9	1
13	214	3.0	1	214	2.4	1
14	216	2.5	1	216	2.1	1
15	216	2.2	1	216	1.9	1

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
16	218	1.9	1	218	1.8	1
17	218	1.7	1	218	1.7	1
18	218	1.7	1	218	1.6	1
19	218	2.5	1	218	2.3	1
20	220	3.2	2	220	3.0	2
21	220	4.0	2	220	3.8	2
22	222	4.7	2	222	4.5	2
23	224	5.4	2	224	5.1	2
24	226	6.1	2	226	5.8	2
25	228	6.2	2	228	6.0	2
26	230	6.0	2	228	5.9	2
27	232	5.9	2	230	5.8	2
28	234	5.9	2	232	5.7	2
29	234	5.7	2	234	5.6	2
30	236	5.4	2	236	5.4	2
31	238	5.1	2	238	5.1	2
32	240	4.8	3	238	4.8	2
33	242	4.6	3	240	4.5	3
34	242	4.3	3	242	4.3	3
35	244	4.1	3	242	4.0	3
36	244	4.0	3	244	3.8	3
37	246	4.0	3	246	3.8	3
38	248	4.0	3	246	3.8	3
39	248	4.0	3	248	3.8	3
40	250	4.1	3	248	3.9	3
41	252	4.1	3	250	3.9	3
42	252	4.2	3	252	4.0	3
43	254	4.2	3	252	4.0	3
44	256	4.3	3	254	4.1	3
45	256	4.2	3	256	4.2	3
46	258	3.9	3	258	4.0	3
47	260	3.7	4	258	3.8	3
48	260	3.5	4	260	3.5	4
49	262	3.2	4	262	3.3	4
50	264	3.0	4	262	3.0	4
51	264	3.1	4	264	3.1	4
52	266	3.2	4	266	3.2	4
53	268	3.3	4	268	3.4	4
54	268	3.5	4	270	3.6	4
55	270	3.7	4	272	3.8	4
56	272	3.9	4	274	4.1	4
57	276	4.3	4	276	4.5	4
58	278	5.1	4	280	5.7	4
59	280	7.0	4	280	8.4	4
60	280	10.0	4	280	8.7	4

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



**Table M-18. 2016 MCAS: Raw to Scaled Score Look-Up Table –  
High School Chemistry**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	204	10.0	1	204	10.0	1
7	206	10.0	1	206	10.0	1
8	206	10.0	1	206	10.0	1
9	206	5.4	1	206	10.0	1
10	210	3.3	1	210	4.2	1
11	212	2.6	1	212	2.8	1
12	214	2.2	1	214	2.2	1
13	214	2.0	1	214	1.9	1
14	216	1.7	1	216	1.7	1
15	216	1.6	1	216	1.5	1
16	216	1.5	1	216	1.4	1
17	216	1.4	1	216	1.3	1
18	218	1.3	1	218	1.2	1
19	218	1.2	1	218	1.1	1
20	218	1.2	1	218	1.1	1
21	218	1.1	1	218	1.0	1
22	218	1.1	1	218	1.0	1
23	220	1.6	2	220	1.4	2
24	220	2.6	2	220	2.4	2
25	220	3.6	2	220	3.3	2
26	220	4.5	2	220	4.2	2
27	222	5.4	2	222	5.1	2
28	224	6.4	2	224	6.0	2
29	228	7.3	2	226	6.9	2
30	230	7.2	2	228	7.0	2
31	232	7.2	2	230	6.9	2
32	234	7.0	2	232	6.9	2
33	236	6.7	2	234	6.6	2
34	238	6.4	2	238	6.3	2
35	240	6.2	3	240	6.1	3
36	242	5.9	3	240	5.9	3
37	244	5.7	3	242	5.6	3
38	246	5.4	3	244	5.4	3
39	246	5.4	3	246	5.3	3
40	248	5.4	3	248	5.3	3
41	250	5.5	3	250	5.3	3
42	252	5.5	3	250	5.4	3
43	254	5.6	3	252	5.5	3
44	256	5.2	3	254	5.5	3
45	258	4.7	3	256	5.0	3

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
46	260	4.2	4	258	4.5	3
47	260	3.6	4	260	3.9	4
48	262	3.1	4	262	3.4	4
49	262	2.5	4	262	2.8	4
50	264	2.6	4	262	2.5	4
51	264	2.7	4	264	2.6	4
52	266	2.8	4	266	2.6	4
53	266	2.9	4	266	2.8	4
54	268	3.0	4	268	2.9	4
55	270	3.2	4	270	3.1	4
56	270	3.4	4	270	3.5	4
57	274	3.9	4	274	4.0	4
58	276	4.8	4	276	4.9	4
59	280	7.2	4	280	6.9	4
60	280	10.0	4	280	10.0	4

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

**Table M-19. 2016 MCAS: Raw to Scaled Score Look-Up Table – High School Introductory Physics**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	200	10.0	1	200	10.0	1
2	202	10.0	1	202	10.0	1
3	202	10.0	1	202	10.0	1
4	204	10.0	1	204	10.0	1
5	204	10.0	1	204	10.0	1
6	206	10.0	1	206	10.0	1
7	206	10.0	1	206	10.0	1
8	208	10.0	1	208	10.0	1
9	208	10.0	1	208	10.0	1
10	210	7.1	1	210	10.0	1
11	212	3.7	1	210	5.7	1
12	214	2.8	1	214	3.2	1
13	214	2.3	1	214	2.3	1
14	216	2.0	1	216	1.9	1
15	216	1.9	1	216	1.7	1
16	218	1.7	1	218	1.6	1
17	218	1.6	1	218	1.5	1
18	218	1.5	1	218	1.4	1
19	218	1.8	1	218	1.7	1
20	220	2.6	2	220	2.6	2
21	220	3.3	2	220	3.4	2
22	220	4.1	2	220	4.2	2
23	222	4.8	2	222	5.0	2
24	224	5.4	2	224	5.7	2

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
25	226	6.1	2	226	6.1	2
26	228	6.0	2	228	5.9	2
27	230	5.8	2	230	5.8	2
28	232	5.7	2	232	5.7	2
29	234	5.6	2	234	5.7	2
30	234	5.5	2	236	5.5	2
31	236	5.3	2	238	5.2	2
32	238	5.1	2	240	5.0	3
33	240	4.9	3	240	4.8	3
34	242	4.7	3	242	4.6	3
35	242	4.5	3	244	4.5	3
36	244	4.3	3	244	4.3	3
37	246	4.3	3	246	4.3	3
38	246	4.3	3	248	4.3	3
39	248	4.3	3	248	4.3	3
40	250	4.3	3	250	4.4	3
41	250	4.4	3	252	4.4	3
42	252	4.4	3	252	4.4	3
43	254	4.5	3	254	4.4	3
44	256	4.5	3	256	4.4	3
45	258	4.2	3	258	4.1	3
46	258	3.9	3	258	3.8	3
47	260	3.6	4	260	3.4	4
48	262	3.3	4	262	3.1	4
49	262	3.0	4	262	2.8	4
50	264	3.0	4	264	2.7	4
51	266	3.1	4	264	2.7	4
52	266	3.3	4	266	2.8	4
53	268	3.5	4	266	2.9	4
54	270	3.8	4	268	3.1	4
55	272	4.1	4	270	3.3	4
56	274	4.5	4	272	3.6	4
57	278	4.9	4	274	4.1	4
58	280	5.3	4	276	4.9	4
59	280	6.8	4	280	7.0	4
60	280	8.6	4	280	10.0	4

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

**Table M-20. 2016 MCAS: Raw to Scaled Score Look-Up Table – High School Technology/Engineering**

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
0	200	10.0	1	200	10.0	1
1	202	4.5	1	202	4.6	1
2	206	3.3	1	206	3.3	1
3	206	2.7	1	208	2.7	1

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
4	208	2.4	1	208	2.4	1
5	210	2.2	1	210	2.2	1
6	210	2.0	1	210	2.0	1
7	212	1.9	1	212	1.9	1
8	212	1.8	1	212	1.8	1
9	212	1.7	1	214	1.7	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	214	1.5	1	216	1.5	1
14	216	1.5	1	216	1.5	1
15	216	1.5	1	216	1.5	1
16	216	1.4	1	216	1.4	1
17	216	1.4	1	218	1.4	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	1.4	1	218	1.6	1
22	218	1.5	1	220	2.3	2
23	220	2.2	2	220	3.0	2
24	220	2.9	2	220	3.6	2
25	220	3.6	2	222	4.3	2
26	222	4.3	2	222	5.0	2
27	222	5.0	2	224	5.7	2
28	224	5.7	2	226	6.3	2
29	226	6.4	2	228	6.3	2
30	228	6.4	2	230	6.4	2
31	230	6.5	2	232	6.4	2
32	232	6.5	2	234	6.4	2
33	234	6.5	2	236	6.1	2
34	236	6.1	2	238	5.7	2
35	238	5.7	2	238	5.3	2
36	240	5.3	3	240	4.9	3
37	240	4.9	3	242	4.5	3
38	242	4.4	3	242	4.1	3
39	242	4.0	3	244	3.7	3
40	244	3.7	3	244	3.7	3
41	246	3.8	3	246	3.8	3
42	246	3.9	3	246	3.9	3
43	248	4.0	3	248	4.0	3
44	248	4.1	3	250	4.1	3
45	250	4.2	3	250	4.2	3
46	252	4.4	3	252	4.4	3
47	254	4.6	3	254	4.5	3
48	256	4.7	3	256	4.7	3
49	256	4.6	3	258	4.5	3
50	258	4.5	3	260	4.4	4
51	260	4.3	4	260	4.3	4

continued

Raw Score	2016			2015		
	Scaled Score	Standard Error	Performance Level	Scaled Score	Standard Error	Performance Level
52	262	4.2	4	262	4.1	4
53	264	4.0	4	264	4.0	4
54	266	4.3	4	266	4.2	4
55	268	4.7	4	268	4.5	4
56	270	5.1	4	270	4.9	4
57	274	5.7	4	274	5.5	4
58	278	6.5	4	278	6.3	4
59	280	8.4	4	280	8.2	4
60	280	10.0	4	280	10.0	4

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