

# **Appendix H**

## **ITEM RESPONSE THEORY PARAMETERS**

**Table H-1. 2012 MCAS: IRT Parameters for Dichotomous Items –  
ELA Grade 3**

Item Number	Parameters and Measures of Standard Error						Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)		a	SE (a)	b	SE (b)	c	SE (c)
292666	1.41542	0.02402	-0.71555	0.01607	0.46818	0.00653	292754	1.03085	0.01506	-0.97062	0.01899	0.28848	0.00802
292668	1.19504	0.01531	-1.08770	0.01447	0.20055	0.00708	270147	0.66582	0.01056	-0.81465	0.02603	0.15788	0.00910
292669	0.82573	0.01977	-1.80209	0.05436	0.60391	0.01231	270149	1.22723	0.01728	-1.23179	0.01687	0.27624	0.00803
292673	1.23140	0.01989	-0.45266	0.01523	0.38802	0.00622	270166	0.82449	0.01330	-1.48571	0.03040	0.29662	0.01108
292674	0.64701	0.01332	-0.86292	0.03919	0.35132	0.01109	270156	0.62323	0.00723	-3.10896	0.02665	0.00000	0.00000
292680	1.08300	0.01503	-1.20973	0.01835	0.25089	0.00826	270168	0.99360	0.01337	-1.41617	0.01987	0.19552	0.00873
292677	0.84785	0.01367	-0.77313	0.02301	0.29082	0.00846	270176	0.88303	0.01326	-0.49110	0.01769	0.22251	0.00703
292682	0.80050	0.01591	-0.74594	0.03107	0.43147	0.00914	270185	0.66220	0.01195	-1.25100	0.03784	0.27854	0.01201
292685	0.99907	0.01864	-0.54472	0.02237	0.45080	0.00736	270191	0.83148	0.01228	-1.59019	0.02737	0.21231	0.01069
292686	0.96782	0.01502	-0.61972	0.01866	0.29839	0.00737	270201	1.21056	0.02237	-0.76202	0.02086	0.51332	0.00714
284942	0.43019	0.00642	-4.06667	0.04979	0.00000	0.00000	270198	0.86117	0.01282	-0.78324	0.02044	0.23333	0.00801
284943	1.16116	0.01606	-0.22732	0.01144	0.21752	0.00524	276663	1.40767	0.01899	-1.10064	0.01345	0.25261	0.00703
284948	0.69850	0.01143	-0.79605	0.02649	0.20733	0.00923	276664	1.21426	0.01562	-0.73973	0.01277	0.21267	0.00623
284947	1.08679	0.01476	-0.36556	0.01257	0.20268	0.00567	276673	0.88395	0.01265	-1.17867	0.02212	0.22452	0.00894
284949	0.75256	0.01387	-1.82352	0.04292	0.35466	0.01383	276670	1.15848	0.01798	-0.16178	0.01293	0.29640	0.00551
292742	0.82062	0.01370	-1.37853	0.03092	0.32804	0.01087	276675	0.38202	0.00492	-1.60159	0.02081	0.00000	0.00000
292745	1.22310	0.01867	-1.26567	0.01909	0.34658	0.00851							
292749	0.76035	0.01474	0.33534	0.01634	0.19946	0.00591							
292743	1.20320	0.01951	-1.27726	0.02106	0.39814	0.00876							
292753	0.93944	0.01266	-0.61982	0.01549	0.17595	0.00661							

**Table H-2. 2012 MCAS: IRT Parameters for Polytomous Items –  
ELA Grade 3**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
282176	0.55132	0.00303	-1.76622	0.00841	1.91764	0.01831	-1.91764	0.00883	0	0				
282177	0.63927	0.00337	-1.05695	0.00720	1.16963	0.01123	-1.16963	0.00773	0	0				
286602	0.44852	0.00229	-1.75205	0.01022	2.44889	0.02145	-2.44889	0.01092	0	0				
292758	0.84609	0.00477	-0.91607	0.00592	0.70598	0.00824	-0.70598	0.00615	0	0				
292692	0.67926	0.00254	-0.52400	0.00635	3.46289	0.02048	1.14164	0.00925	-1.32522	0.00780	-3.27932	0.01499	0	0

**Table H-3. 2012 MCAS: IRT Parameters for Dichotomous Items –  
ELA Grade 4**

Item Number	Parameters and Measures of Standard Error						Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)		a	SE (a)	b	SE (b)	c	SE (c)
291341	0.78955	0.01114	-1.02638	0.02560	0.12732	0.01087	277008	0.79269	0.01254	-1.33577	0.03393	0.20702	0.01419
291029	0.98589	0.01492	-0.97632	0.02319	0.27141	0.01005	279972	0.67531	0.01148	-1.38332	0.04352	0.18395	0.01685
291030	1.01069	0.01699	-1.58309	0.03155	0.30769	0.01430	279978	0.67651	0.01251	-0.58827	0.03540	0.27076	0.01161
291031	1.00439	0.01820	-2.16252	0.04100	0.25810	0.02099	279981	0.62373	0.01262	-0.02301	0.03224	0.25408	0.00980
291032	0.85615	0.01484	-0.93198	0.03110	0.34477	0.01133	279987	0.76885	0.01221	-1.54170	0.03755	0.17710	0.01619
291035	0.80567	0.01463	-0.40968	0.02789	0.34605	0.00924	279990	0.45941	0.00538	-1.71900	0.02067	0.00000	0.00000
287663	1.09087	0.01634	-1.15419	0.02196	0.27068	0.01029	279995	0.70401	0.01284	-1.01455	0.04038	0.28892	0.01390
285290	0.59096	0.01059	-1.14843	0.04712	0.15172	0.01670	279994	0.77387	0.01212	-0.86421	0.02861	0.20960	0.01117
285293	0.51484	0.01218	-1.05547	0.07247	0.28394	0.02000	279997	0.82856	0.01193	-0.90571	0.02434	0.16871	0.01025
285296	0.37595	0.01332	-0.21788	0.10494	0.27686	0.02156	280000	0.73353	0.01072	-1.51010	0.03390	0.08774	0.01490
285292	0.62717	0.01036	-0.98672	0.03767	0.13025	0.01388	279999	0.79037	0.01385	-1.54933	0.04222	0.28057	0.01686
285300	0.55157	0.00930	-0.93509	0.04099	0.06198	0.01446	285357	0.71054	0.01345	-1.55855	0.05159	0.30051	0.01876
285302	0.60729	0.00973	-1.09826	0.03828	0.08241	0.01440	285358	0.50348	0.00632	-2.52820	0.02802	0.00000	0.00000
285303	0.70804	0.01149	-0.82504	0.03161	0.19166	0.01181	285361	0.55738	0.01065	-0.99722	0.05042	0.16445	0.01671
285304	0.53903	0.01032	-1.28605	0.05799	0.13094	0.01991	287469	0.52998	0.01215	0.14484	0.03910	0.21924	0.01103
285307	0.59236	0.01094	-1.36217	0.05337	0.17047	0.01909	285366	0.73234	0.01101	-0.18943	0.02055	0.13476	0.00774
276992	0.42351	0.01304	-2.40496	0.18822	0.26336	0.05263							
276987	0.73424	0.01123	-1.73194	0.03913	0.09973	0.01768							
276990	0.53289	0.00572	-1.54423	0.01691	0.00000	0.00000							
277002	0.37640	0.00504	-1.98949	0.02751	0.00000	0.00000							

**Table H-4. 2012 MCAS: IRT Parameters for Polytomous Items –  
ELA Grade 4**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
277009	0.62982	0.00239	0.60063	0.00674	3.50259	0.01505	0.60681	0.00796	-1.12991	0.00953	-2.97949	0.01825	0	0
280003	0.75001	0.00288	0.31234	0.00590	3.53767	0.01695	1.13824	0.00765	-1.23966	0.00822	-3.43624	0.02083	0	0
285310	0.89966	0.00356	0.69791	0.00518	2.85820	0.01051	1.34149	0.00654	-1.25943	0.00854	-2.94025	0.02109	0	0
291040	0.78897	0.00303	-0.18334	0.00549	2.63960	0.01416	1.14199	0.00826	-0.67506	0.00667	-3.10653	0.01367	0	0

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
287974C	0.80048	0.00318	-2.04518	0.00528	3.69241	0.06926	2.50845	0.03356	0.11752	0.01078	-0.67258	0.00827	-2.35480	0.00650
287974T	0.73441	0.00254	0.66715	0.00556	5.55384	0.03825	4.89397	0.02696	2.97902	0.01165	2.37936	0.00953	0.61932	0.00695

Item Number	Parameters and Measures of Standard Error													
	D5	SE (D5)	D6	SE (D6)	D7	SE (D7)	D8	SE (D8)	D9	SE (D9)	D10	SE (D10)		
287974C	-3.29101	0.00730	0	0										
287974T	-0.00840	0.00708	-1.48962	0.00994	-2.53944	0.01561	-5.39148	0.08041	-6.99657	0.21786	0	0		

**Table H-5. 2012 MCAS: IRT Parameters for Dichotomous Items – ELA Grade 5**

Item Number	Parameters and Measures of Standard Error						Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)		a	SE (a)	b	SE (b)	c	SE (c)
287624	0.40623	0.00607	-3.28596	0.04257	0.00000	0.00000	283510	0.43079	0.00479	-0.94742	0.01420	0.00000	0.00000
287625	0.47800	0.01229	-2.61688	0.15344	0.13420	0.05790	286685	1.07731	0.01808	-0.96498	0.02336	0.39701	0.00899
276325	0.91705	0.01488	-0.81841	0.02458	0.32023	0.00927	286686	0.59716	0.01165	-1.36504	0.05609	0.21040	0.01932
276334	0.74207	0.01230	-0.27775	0.02332	0.21509	0.00818	286687	0.74558	0.01347	-1.62257	0.04689	0.26850	0.01839
276331	0.86868	0.01478	-2.64354	0.05225	0.05843	0.03343	286689	0.63397	0.00992	-0.48351	0.02628	0.08805	0.00944
276343	0.79668	0.01474	-1.09593	0.03699	0.36573	0.01247	286692	0.59472	0.01147	-0.89093	0.04518	0.21036	0.01466
287626	0.73859	0.01155	-0.97899	0.02987	0.17673	0.01161	286694	0.53920	0.01085	-0.30102	0.03853	0.15187	0.01184
276049	0.87250	0.01261	-1.44214	0.02769	0.15240	0.01286	286695	0.62552	0.01098	-0.68571	0.03480	0.16769	0.01192
276051	0.79606	0.01240	-1.39327	0.03302	0.18689	0.01410	286697	0.78165	0.01188	-1.61518	0.03514	0.13053	0.01607
287627	0.70487	0.01191	0.19865	0.01907	0.16038	0.00659	286700	0.49781	0.00593	-2.39490	0.02432	0.00000	0.00000
276119	0.61051	0.01015	-0.49416	0.02972	0.10685	0.01035	286701	0.76749	0.01313	-0.90564	0.03183	0.27949	0.01137
276120	1.01011	0.01486	-1.87411	0.02799	0.13331	0.01535	284538	0.32026	0.00439	-1.12926	0.01998	0.00000	0.00000
276124	0.72947	0.00911	-2.86985	0.02396	0.00000	0.00000	284542	0.51237	0.01028	-0.61209	0.04628	0.11703	0.01448
276125	0.79967	0.00924	-2.59272	0.01928	0.00000	0.00000	284540	0.36935	0.00470	-1.60686	0.02169	0.00000	0.00000
276128	0.64632	0.01191	-0.36830	0.03121	0.21964	0.01010	284545	0.66908	0.01220	-0.37595	0.03014	0.23492	0.00982
276127	0.52922	0.00606	-2.29545	0.02213	0.00000	0.00000	284546	0.49579	0.01127	-0.06669	0.04276	0.16400	0.01219
283505	0.38712	0.00462	-0.99908	0.01593	0.00000	0.00000							
283507	0.64151	0.01232	-2.25665	0.07400	0.14369	0.03321							
283508	0.70907	0.01313	0.13214	0.02251	0.23840	0.00729							
283509	0.81484	0.01457	0.04501	0.02040	0.29471	0.00675							

**Table H-6. 2012 MCAS: IRT Parameters for Polytomous Items –  
ELA Grade 5**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
276129	0.94586	0.00361	-0.14885	0.00452	2.31098	0.01078	0.86930	0.00661	-0.82468	0.00596	-2.35560	0.00979	0	0
276348	0.63350	0.00238	-1.05711	0.00669	3.37329	0.02609	1.14342	0.01120	-1.02311	0.00788	-3.49360	0.01209	0	0
283516	0.85165	0.00326	0.25035	0.00516	2.94539	0.01223	1.10470	0.00685	-1.08992	0.00738	-2.96017	0.01680	0	0
286706	0.75314	0.00287	0.07245	0.00573	3.53317	0.01738	0.81972	0.00733	-1.20012	0.00783	-3.15276	0.01656	0	0

**Table H-7. 2012 MCAS: IRT Parameters for Dichotomous Items –  
ELA Grade 6**

Parameters and Measures of Standard Error							Parameters and Measures of Standard Error						
Item Number	a	SE (a)	b	SE (b)	c	SE (c)	Item Number	a	SE (a)	b	SE (b)	c	SE (c)
292307	0.64800	0.01150	0.15039	0.02427	0.15484	0.00825	292384	0.79244	0.01350	-0.73503	0.03115	0.29087	0.01133
292309	0.39502	0.00521	-2.09776	0.02804	0.00000	0.00000	292328	0.53289	0.00654	-2.45077	0.02636	0.00000	0.00000
292311	0.79589	0.01477	-1.22182	0.04230	0.35373	0.01526	292329	0.73727	0.01253	-1.35159	0.04225	0.21952	0.01721
292313	1.15247	0.01361	0.10554	0.00927	0.10925	0.00411	292332	1.28811	0.01962	-1.10826	0.01905	0.30413	0.00961
292317	0.69775	0.01668	-0.10575	0.03919	0.46202	0.00960	292334	0.28622	0.00448	-1.58709	0.02961	0.00000	0.00000
292319	1.00913	0.01425	-0.60844	0.01862	0.23289	0.00816	292338	0.95466	0.01556	-1.48115	0.03269	0.27158	0.01520
285577	0.74709	0.01164	-1.61460	0.04056	0.11637	0.01893	292339	0.70874	0.01159	-0.85279	0.03376	0.18779	0.01287
285580	0.40080	0.00482	-1.13017	0.01781	0.00000	0.00000	292341	0.70081	0.01095	-1.37917	0.03935	0.11133	0.01703
285583	0.82261	0.01336	-0.62598	0.02704	0.26863	0.01018	292346	0.55191	0.00673	-2.45782	0.02581	0.00000	0.00000
285585	0.63245	0.01155	-1.80566	0.06270	0.13600	0.02671	292350	0.46774	0.01100	-0.41673	0.05999	0.14578	0.01721
285586	0.68567	0.01292	-0.48208	0.03548	0.28286	0.01151	292351	0.68978	0.00806	-2.42748	0.02185	0.00000	0.00000
285590	1.03767	0.01737	-1.22256	0.02851	0.35228	0.01224	266494	0.82162	0.01290	0.10919	0.01786	0.19731	0.00666
285596	0.53637	0.00588	-1.78903	0.01896	0.00000	0.00000	266498	0.96504	0.01464	0.07386	0.01546	0.24247	0.00604
285598	0.57483	0.01227	-0.13109	0.03979	0.23361	0.01180	266509	0.81626	0.01328	-0.52094	0.02599	0.26369	0.00967
285597	0.76111	0.01425	0.16865	0.02323	0.28822	0.00755	266504	1.18053	0.01852	-1.08039	0.02175	0.33070	0.01012
285599	1.31828	0.01625	-0.26356	0.01051	0.18018	0.00517	266527	0.73802	0.01383	0.03133	0.02567	0.28682	0.00830
292372	0.38791	0.01294	-2.46647	0.23569	0.16672	0.07042							
292375	0.67860	0.01363	0.53071	0.02228	0.22775	0.00712							
292381	0.50890	0.00982	-0.62233	0.04764	0.07524	0.01566							
292378	0.43237	0.01094	-0.89213	0.08604	0.13116	0.02449							

**Table H-8. 2012 MCAS: IRT Parameters for Polytomous Items –  
ELA Grade 6**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
285611	0.81994	0.00311	-0.38639	0.00521	2.85785	0.01726	0.96808	0.00817	-1.05213	0.00645	-2.77379	0.01027	0	0
292323	0.91977	0.00358	-0.71998	0.00472	2.61983	0.01831	0.92105	0.00847	-0.82180	0.00586	-2.71908	0.00836	0	0
292354	0.85500	0.00323	-0.23601	0.00493	2.41202	0.01300	0.88129	0.00746	-0.84772	0.00621	-2.44558	0.00938	0	0
292389	0.81558	0.00308	-0.07726	0.00513	2.28934	0.01163	0.90460	0.00741	-0.89064	0.00655	-2.30330	0.00960	0	0

**Table H-9. 2012 MCAS: IRT Parameters for Dichotomous Items –  
ELA Grade 7**

Parameters and Measures of Standard Error							Parameters and Measures of Standard Error						
Item Number	a	SE (a)	b	SE (b)	c	SE (c)	Item Number	a	SE (a)	b	SE (b)	c	SE (c)
292812	0.70205	0.01136	-0.75740	0.03344	0.11693	0.01390	279227	0.47574	0.00539	-1.19935	0.01660	0.00000	0.00000
292815	0.28060	0.01377	-0.79527	0.25802	0.04625	0.05635	279237	0.98433	0.01531	-1.57014	0.03281	0.13650	0.01916
292817	0.79392	0.01418	-1.26772	0.04361	0.23607	0.01918	277046	0.59266	0.01083	-1.55162	0.06392	0.00000	0.02971
292820	0.62221	0.01191	-1.20302	0.05675	0.13611	0.02299	277019	0.81009	0.01451	-1.73149	0.05238	0.16299	0.02764
292821	0.24966	0.01673	-0.85656	0.40592	0.15699	0.07079	277023	0.40991	0.01174	-0.43283	0.08993	0.09914	0.02516
292823	0.44228	0.00649	-2.70107	0.03726	0.00000	0.00000	277025	0.78339	0.01197	0.17528	0.01773	0.13980	0.00693
280268	0.78379	0.00831	-1.84424	0.01573	0.00000	0.00000	277039	0.40373	0.01087	0.05261	0.06572	0.03404	0.01892
280272	0.90920	0.01349	-1.85749	0.03639	0.00000	0.02351	277040	0.49395	0.01101	-1.60266	0.09637	0.00000	0.03931
280270	0.47928	0.00574	-1.70297	0.02124	0.00000	0.00000	277042	0.25605	0.00452	-1.35459	0.03128	0.00000	0.00000
280271	0.49688	0.01250	-0.79312	0.07899	0.20151	0.02384	277047	0.55807	0.01215	-1.53298	0.08410	0.11909	0.03369
280275	0.74044	0.01079	-1.18354	0.03297	0.02616	0.01599	277049	0.75895	0.01418	-2.27298	0.07427	0.00825	0.04882
280277	0.98671	0.01409	-1.38235	0.02679	0.09988	0.01526	266605	0.72952	0.01225	-1.06419	0.03938	0.14946	0.01716
280279	0.69762	0.00823	-2.20311	0.02105	0.00000	0.00000	266608	0.38351	0.01346	-0.37092	0.11805	0.19380	0.02812
280280	0.70689	0.01113	-1.28699	0.04033	0.04396	0.01935	266609	0.73653	0.01832	1.31334	0.01849	0.27463	0.00536
280267	0.53448	0.01037	-1.23623	0.06475	0.00562	0.02629	266612	0.17990	0.00424	0.46877	0.02561	0.00000	0.00000
280281	0.54377	0.01303	0.44682	0.03668	0.20244	0.01087	266614	0.78453	0.01301	-0.33191	0.02602	0.22207	0.01003
280287	0.77159	0.01441	-1.82835	0.06048	0.15639	0.03175							
279221	0.87619	0.01302	-0.85896	0.02589	0.16332	0.01203							
279223	0.61686	0.01221	-0.41402	0.04139	0.20131	0.01407							
279225	0.49215	0.00529	-0.79137	0.01324	0.00000	0.00000							

**Table H-10. 2012 MCAS: IRT Parameters for Polytomous Items –  
ELA Grade 7**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
277055	1.01601	0.00396	-0.51199	0.00418	2.30299	0.01476	0.62146	0.00687	-0.75133	0.00534	-2.17312	0.00685	0	0
279239	1.13178	0.00437	0.03065	0.00383	2.04223	0.00944	0.82018	0.00584	-0.71993	0.00510	-2.14248	0.00819	0	0
280290	1.19843	0.00483	-0.57806	0.00369	2.01155	0.01274	0.79841	0.00695	-0.61830	0.00482	-2.19166	0.00619	0	0
292825	1.06879	0.00421	-0.45423	0.00412	2.22741	0.01360	0.94361	0.00737	-0.67603	0.00519	-2.49499	0.00785	0	0

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
288032C	1.07471	0.00460	-1.95309	0.00416	2.76584	0.06479	2.26863	0.04219	0.16312	0.01006	-0.45511	0.00762	-2.03345	0.00515
288032T	1.02519	0.00360	0.38526	0.00404	4.33817	0.03261	3.95760	0.02449	2.50958	0.01019	1.99312	0.00811	0.37179	0.00534

Item Number	Parameters and Measures of Standard Error											
	D5	SE (D5)	D6	SE (D6)	D7	SE (D7)	D8	SE (D8)	D9	SE (D9)	D10	SE (D10)
288032C	-2.70905	0.00530	0	0								
288032T	-0.20791	0.00533	-1.60664	0.00771	-2.38917	0.01179	-4.17083	0.04593	-4.79572	0.07837	0	0

**Table H-11. 2012 MCAS: IRT Parameters for Dichotomous Items –  
ELA Grade 8**

Item Number	Parameters and Measures of Standard Error						Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)		a	SE (a)	b	SE (b)	c	SE (c)
293338	0.29577	0.00606	-3.59330	0.07267	0.00000	0.00000	275983	1.01327	0.01620	-1.12222	0.02763	0.28224	0.01325
293343	0.83633	0.01567	-0.93393	0.03745	0.35527	0.01415	275976	0.84291	0.01342	-0.37059	0.02289	0.21292	0.00955
293340	0.98391	0.02122	-1.39005	0.04600	0.50647	0.01635	275981	0.65458	0.00691	-1.51687	0.01550	0.00000	0.00000
293342	0.96776	0.01389	-0.61204	0.02002	0.19902	0.00944	275995	1.05497	0.01472	-0.30423	0.01550	0.20538	0.00738
293347	0.93588	0.01276	-0.15875	0.01505	0.13395	0.00690	276005	0.72493	0.01220	-1.13543	0.03936	0.16257	0.01698
293349	1.09855	0.01556	-0.62778	0.01784	0.23515	0.00884	276010	0.98211	0.01551	-1.73650	0.03430	0.15818	0.01956
275961	0.66890	0.01215	-1.20654	0.04781	0.16966	0.01958	276026	0.72545	0.00825	-2.03822	0.01925	0.00000	0.00000
275980	0.73358	0.01201	-1.23500	0.03903	0.13883	0.01752	276028	0.63077	0.01235	-0.62104	0.04223	0.19789	0.01508
275968	0.46565	0.00608	-1.99109	0.02587	0.00000	0.00000	276024	0.96189	0.01338	-0.58099	0.01893	0.17149	0.00904
275978	1.17126	0.01662	-1.05769	0.01976	0.21639	0.01083	276033	1.09604	0.01585	-0.61486	0.01831	0.25266	0.00891
276464	0.87634	0.01315	-0.56989	0.02256	0.19005	0.01005	283639	1.04680	0.01906	-1.39145	0.03500	0.37437	0.01593
275974	0.66434	0.01219	-0.58832	0.03669	0.18317	0.01374	283648	0.72707	0.01310	-0.69682	0.03554	0.23480	0.01362

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
294564	1.28134	0.01592	-0.72417	0.01323	0.15535	0.00754
283656	0.97451	0.01442	-0.77601	0.02238	0.22432	0.01060
294079	1.25933	0.01511	-0.71168	0.01265	0.12586	0.00717
283661	1.09907	0.01534	-0.19458	0.01419	0.21412	0.00677
283663	1.03145	0.01452	-0.54764	0.01798	0.20885	0.00867
294082	0.60664	0.00664	-1.57475	0.01696	0.00000	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
283665	1.15539	0.01797	-1.38164	0.02531	0.24269	0.01404
291936	0.48500	0.00805	-3.32762	0.04925	0.00000	0.00000
291940	0.75881	0.01412	-1.32789	0.04738	0.26955	0.01953
291946	0.41689	0.01210	-0.30825	0.07941	0.11246	0.02215
291952	0.24285	0.00475	-1.40395	0.03429	0.00000	0.00000
291958	1.03968	0.01424	-0.85840	0.01954	0.17646	0.01004

**Table H-12. 2012 MCAS: IRT Parameters for Polytomous Items – ELA Grade 8**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
276022	0.95204	0.00363	-0.64947	0.00441	2.29310	0.01608	0.71982	0.00756	-0.74645	0.00544	-2.26646	0.00711	0	0
276039	0.93673	0.00356	-0.56566	0.00457	2.43145	0.01654	0.93973	0.00803	-0.74823	0.00552	-2.62294	0.00869	0	0
283668	1.01452	0.00388	-0.36772	0.00408	1.97846	0.01165	0.46902	0.00610	-0.61315	0.00514	-1.83433	0.00648	0	0
293352	0.90524	0.00355	-1.14122	0.00491	2.30091	0.02117	1.06194	0.01094	-0.55619	0.00621	-2.80666	0.00747	0	0

**Table H-13. 2012 MCAS: IRT Parameters for Dichotomous Items – ELA Grade 10**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
293560	0.67982	0.00000	0.62056	0.00000	0.20290	0.00000
293565	0.87636	0.00000	-0.53329	0.00000	0.17036	0.00000
293568	1.13125	0.00000	0.02394	0.00000	0.23944	0.00000
293569	1.04752	0.00000	-0.11310	0.00000	0.20726	0.00000
293572	1.29051	0.00000	0.41744	0.00000	0.22221	0.00000
293577	1.51376	0.00000	0.00101	0.00000	0.22094	0.00000
293575	1.03327	0.00000	0.57161	0.00000	0.10841	0.00000
293561	1.29395	0.00000	0.43796	0.00000	0.15311	0.00000
279460	0.65772	0.00000	0.39595	0.00000	0.14648	0.00000
279454	1.13562	0.00000	0.43574	0.00000	0.20192	0.00000
279457	0.91303	0.00000	0.31019	0.00000	0.16865	0.00000
279462	0.86833	0.00000	0.70815	0.00000	0.16502	0.00000
293044	1.11346	0.00000	0.02367	0.00000	0.19559	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
293864	0.63998	0.00000	0.83244	0.00000	0.11268	0.00000
293052	1.50912	0.00000	0.79709	0.00000	0.21411	0.00000
293866	1.35028	0.00000	-0.10887	0.00000	0.16370	0.00000
286009	0.99835	0.00000	0.83651	0.00000	0.24965	0.00000
286011	1.10060	0.00000	0.21475	0.00000	0.21559	0.00000
286015	2.23827	0.00000	0.39088	0.00000	0.23825	0.00000
286016	1.46233	0.00000	-0.07948	0.00000	0.23224	0.00000
286019	1.42733	0.00000	0.66545	0.00000	0.22870	0.00000
286023	1.35444	0.00000	0.09080	0.00000	0.22986	0.00000
286027	1.56672	0.00000	1.05838	0.00000	0.10371	0.00000
286031	2.48254	0.00000	0.15054	0.00000	0.25322	0.00000
280613	0.88738	0.00000	0.15091	0.00000	0.23421	0.00000
280614	1.03248	0.00000	0.81218	0.00000	0.27123	0.00000

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
280628	1.79715	0.00000	0.54333	0.00000	0.35099	0.00000
280627	1.26277	0.00000	0.39429	0.00000	0.23296	0.00000
280629	1.72487	0.00000	0.07333	0.00000	0.25434	0.00000
280617	0.60583	0.00000	-0.41204	0.00000	0.27699	0.00000
280631	1.40259	0.00000	-0.06514	0.00000	0.16801	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
280632	1.52248	0.00000	0.70680	0.00000	0.25038	0.00000
257574	1.27266	0.00000	-0.19200	0.00000	0.15915	0.00000
257575	0.90450	0.00000	-0.18628	0.00000	0.18525	0.00000
257579	1.35476	0.00000	0.69408	0.00000	0.36638	0.00000
257581	0.85799	0.00000	-0.06707	0.00000	0.27162	0.00000

**Table H-14. 2012 MCAS: IRT Parameters for Polytomous Items – ELA Grade 10**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
280634	1.77771	0	0.70552	0	1.32870	0	0.49781	0	-0.38894	0	-1.43757	0	0	0
286033	1.82063	0	0.87019	0	0.99883	0	0.46624	0	-0.29596	0	-1.16911	0	0	0
293055	1.71776	0	0.70123	0	1.48374	0	0.64185	0	-0.47015	0	-1.65544	0	0	0
293580	1.67964	0	0.67119	0	1.35533	0	0.53358	0	-0.39800	0	-1.49091	0	0	0

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
292762C	1.98106	0.00931	-0.28609	0.00248	1.56969	0.05065	1.30093	0.03389	0.05330	0.00700	-0.25616	0.00522	-1.13686	0.00305
292762T	1.87451	0.00681	1.11308	0.00228	2.50800	0.02454	2.32815	0.01924	1.50790	0.00741	1.21964	0.00566	0.30558	0.00320

Item Number	Parameters and Measures of Standard Error													
	D5	SE (D5)	D6	SE (D6)	D7	SE (D7)	D8	SE (D8)	D9	SE (D9)	D10	SE (D10)		
292762C	-1.53091	0.00291	0	0										
292762T	-0.07354	0.00300	-0.96275	0.00403	-1.44435	0.00621	-2.54117	0.02752	-2.84745	0.04394	0	0		

**Table H-15. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 3**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
227130	0.86604	0.01502	-1.41297	0.03896	0.27641	0.01719
281097	0.89332	0.01378	-1.90821	0.03741	0.06623	0.02159
207140	0.78852	0.01095	-1.62197	0.03218	0.00000	0.01652

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
260979	0.72032	0.01208	-0.69790	0.03240	0.19292	0.01248
287132	0.72872	0.01154	-0.18274	0.02293	0.14377	0.00879
253572	0.88854	0.01126	-1.52606	0.02378	0.00000	0.01222

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
207697	0.67861	0.00960	-2.95209	0.03165	0.00000	0.00000
203592	0.72519	0.01432	-0.92800	0.04448	0.33923	0.01505
282999	0.73583	0.01065	-0.22145	0.02019	0.08917	0.00804
281208	0.63165	0.01377	-0.99735	0.05788	0.32533	0.01817
206966	1.10208	0.02230	-0.73229	0.02881	0.54068	0.00917
253706	0.68507	0.01429	-0.72071	0.04551	0.34929	0.01421
207004	1.09069	0.01447	-1.36344	0.02026	0.10121	0.01129
207704	0.59901	0.00691	-2.08889	0.02127	0.00000	0.00000
218450	0.77665	0.01796	-0.58092	0.04372	0.50933	0.01137
207000	0.49035	0.01092	-0.68212	0.06141	0.11248	0.01951
282103	0.70990	0.01437	-0.87904	0.04569	0.34757	0.01496
206962	0.77745	0.01405	-1.94894	0.05563	0.16193	0.02811
287168	0.89737	0.01116	-0.87704	0.01865	0.06319	0.00882

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
260526	1.06371	0.01355	-0.46960	0.01444	0.14952	0.00694
198165	1.00712	0.01591	-0.83171	0.02394	0.30341	0.01038
261005	0.92218	0.01557	-1.09851	0.03148	0.31255	0.01326
252342	0.80201	0.01261	-1.18010	0.03330	0.17484	0.01486
252964	0.72544	0.01269	-1.14410	0.04144	0.21705	0.01660
281985	1.18261	0.01609	0.78364	0.00782	0.11054	0.00310
207015	0.95816	0.01290	-0.92307	0.02053	0.13936	0.00998
227298	0.67833	0.00622	0.41676	0.00758	0.00000	0.00000
260581	0.80398	0.00744	-1.23613	0.01098	0.00000	0.00000
203636	0.57491	0.00578	-0.95015	0.01240	0.00000	0.00000
203603	0.62384	0.00586	-0.41250	0.00920	0.00000	0.00000
253576	0.81460	0.00796	-1.55750	0.01284	0.00000	0.00000
283009	0.87573	0.00748	-0.75687	0.00817	0.00000	0.00000

**Table H-16. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 3**

Item Number	Parameters and Measures of Standard Error									
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)
207951	0.85086	0.00462	-0.66281	0.00579	0.83229	0.00849	-0.83229	0.00620	0	0
253597	0.41927	0.00210	-1.24052	0.01064	2.02493	0.01829	-2.02493	0.01144	0	0
281227	0.81675	0.00493	-0.42915	0.00617	0.45456	0.00731	-0.45456	0.00642	0	0
287161	0.75412	0.00399	-0.04441	0.00595	0.77460	0.00760	-0.77460	0.00694	0	0

**Table H-17. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 4**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
258289	1.07887	0.01601	-1.48265	0.02890	0.06665	0.01921
247575	0.82664	0.01779	-0.82196	0.04738	0.41065	0.01675
227571	1.00081	0.02523	0.23663	0.02764	0.57851	0.00712
280787	0.90194	0.01436	-0.08585	0.02029	0.19808	0.00887
247596	0.99707	0.01470	-0.00395	0.01615	0.18478	0.00748
299678	0.39227	0.00543	-0.76392	0.01807	0.00000	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
250326	0.67304	0.00755	-1.57407	0.01779	0.00000	0.00000
258281	0.94144	0.01546	0.11127	0.01827	0.23152	0.00779
218954	0.67979	0.01408	0.51388	0.02333	0.14909	0.00878
280718	0.69367	0.01546	0.10291	0.03405	0.27050	0.01153
227393	1.00704	0.01210	-0.37612	0.01422	0.05256	0.00715
227403	1.44906	0.01867	0.76977	0.00642	0.11305	0.00307

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
293984	0.95703	0.01459	-0.10769	0.01854	0.19679	0.00842
286762	0.71252	0.00710	-0.99032	0.01224	0.00000	0.00000
258243	0.53221	0.00587	0.04974	0.00952	0.00000	0.00000
272123	0.87453	0.01737	-0.56795	0.03618	0.38216	0.01336
227375	0.80363	0.01439	-1.20372	0.04567	0.18106	0.02234
227397	0.52558	0.01715	-0.01636	0.07174	0.33438	0.01839
279761	1.38470	0.01775	0.21047	0.00918	0.17869	0.00487
227399	0.45632	0.01538	-0.00630	0.08215	0.20240	0.02237
272162	1.02777	0.01875	0.62310	0.01401	0.27588	0.00570
258273	0.93307	0.01651	0.43744	0.01635	0.24038	0.00669
279769	1.41355	0.02803	0.66111	0.01218	0.45007	0.00457
227395	0.93648	0.01584	0.42235	0.01549	0.21106	0.00653
247474	0.78242	0.01326	-0.70423	0.03412	0.16184	0.01528

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
227368	0.69915	0.01455	-1.86120	0.08422	0.08920	0.04667
299679	0.83539	0.01217	-0.19459	0.01986	0.09416	0.00901
258196	0.58406	0.01577	-0.35770	0.06397	0.31125	0.01885
247533	0.67493	0.01488	-1.43211	0.07641	0.21739	0.03309
247731	1.20053	0.02054	0.49270	0.01274	0.32060	0.00540
247680	0.80838	0.01617	0.43919	0.02117	0.24953	0.00794
280790	0.96049	0.01664	0.41987	0.01579	0.24250	0.00655
279786	0.69926	0.00670	-0.54309	0.00978	0.00000	0.00000
227469	0.69714	0.00726	-1.23257	0.01425	0.00000	0.00000
258230	0.96805	0.00832	-0.57001	0.00773	0.00000	0.00000
279788	0.73342	0.00741	-1.15269	0.01310	0.00000	0.00000
247653	0.63005	0.00629	0.11094	0.00812	0.00000	0.00000
258227	0.55345	0.00613	-0.86126	0.01405	0.00000	0.00000

**Table H-18. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 4**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
227301	0.96325	0.00388	0.01540	0.00430	1.47637	0.00852	0.36624	0.00588	-0.46794	0.00537	-1.37467	0.00621	0	0
258282	0.99359	0.00466	-0.73165	0.00471	1.25409	0.01074	0.36493	0.00720	-0.48772	0.00563	-1.13129	0.00530	0	0
281896	1.12955	0.00505	-0.70139	0.00404	1.56813	0.01237	0.36994	0.00675	-0.64369	0.00499	-1.29438	0.00482	0	0
287488	0.81837	0.00309	-0.14658	0.00511	2.01160	0.01205	0.88802	0.00780	-0.60114	0.00617	-2.29849	0.00903	0	0

**Table H-19. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 5**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
287261	0.60526	0.00783	-2.35845	0.02702	0.00000	0.00000
280479	0.89233	0.01240	-1.27737	0.02751	0.09357	0.01468
217382	0.94923	0.01182	-0.84645	0.01881	0.07441	0.00966
272771	0.89739	0.01701	-0.72149	0.03469	0.41434	0.01244
280507	1.15393	0.01574	0.58683	0.00958	0.16164	0.00414
249061	0.70903	0.01032	-1.56712	0.03904	0.01918	0.01952

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
287253	0.29410	0.00549	-2.96658	0.05772	0.00000	0.00000
206921	1.23370	0.01687	-0.09515	0.01278	0.23768	0.00619
249097	0.72194	0.01255	-1.15717	0.04448	0.20330	0.01889
261216	0.54508	0.00623	-1.57642	0.01905	0.00000	0.00000
221451	1.00064	0.01438	-0.27318	0.01787	0.22078	0.00807
204816	0.74197	0.01203	-0.78037	0.03386	0.17754	0.01420

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
280477	1.05068	0.01357	-0.17827	0.01401	0.15086	0.00670
206950	1.55613	0.02057	-0.23977	0.01028	0.23762	0.00573
272775	1.08192	0.01463	0.36725	0.01115	0.16347	0.00492
217317	0.70763	0.01093	-0.69098	0.03127	0.11349	0.01319
273790	0.97897	0.01552	-1.08281	0.02895	0.26118	0.01410
273791	1.23924	0.01727	-0.71831	0.01671	0.23187	0.00905
221174	0.69278	0.01175	-1.27471	0.04632	0.14783	0.02044
287414	0.64723	0.01444	0.33776	0.03255	0.28616	0.00987
272773	0.94189	0.01285	-0.17538	0.01658	0.15496	0.00749
287177	1.02883	0.01456	-1.13158	0.02364	0.16393	0.01291
280821	0.77486	0.01550	0.97698	0.01650	0.20970	0.00568
204724	0.85365	0.01121	-0.59228	0.02029	0.08885	0.00951
221182	1.07061	0.01284	-0.27594	0.01281	0.10354	0.00635

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
280694	0.85507	0.01426	-1.63101	0.04259	0.18563	0.02224
207079	0.82689	0.01542	-0.44100	0.03227	0.36063	0.01134
287185	1.18024	0.01637	0.75505	0.00886	0.15375	0.00370
260821	0.64379	0.01231	-0.55165	0.04260	0.22268	0.01504
272786	1.56294	0.02142	0.36060	0.00850	0.25253	0.00415
261196	0.90126	0.01498	0.25853	0.01811	0.26090	0.00690
260699	0.53071	0.00986	-1.72634	0.07399	0.00000	0.03193
262237	0.67350	0.00609	-0.12920	0.00811	0.00000	0.00000
287618	0.91448	0.00736	0.23029	0.00595	0.00000	0.00000
221209	0.90463	0.00742	-0.26480	0.00675	0.00000	0.00000
287263	0.67472	0.00724	-1.60811	0.01649	0.00000	0.00000
280734	0.70440	0.00705	-1.29331	0.01341	0.00000	0.00000
280500	0.60158	0.00576	0.34206	0.00823	0.00000	0.00000

**Table H-20. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 5**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
207696	1.16128	0.00540	-0.04726	0.00395	1.11739	0.00674	-0.06417	0.00491	-0.35011	0.00482	-0.70311	0.00490	0	0
287266	1.09832	0.00437	0.14021	0.00385	1.64890	0.00796	0.22261	0.00517	-0.33931	0.00501	-1.53220	0.00642	0	0
287620	1.08356	0.00464	-0.08071	0.00401	1.22208	0.00732	0.07678	0.00527	-0.05256	0.00519	-1.24631	0.00558	0	0
287660	1.01200	0.00421	-0.27104	0.00431	1.30261	0.00839	0.34201	0.00602	0.03492	0.00567	-1.67953	0.00622	0	0

**Table H-21. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 6**

Item Number	Parameters and Measures of Standard Error						Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)		a	SE (a)	b	SE (b)	c	SE (c)
229732	0.72335	0.01319	-1.34272	0.05607	0.16980	0.02696	251299	1.34453	0.01587	0.13028	0.00911	0.12149	0.00500
299675	0.51950	0.00966	-3.26490	0.05780	0.00000	0.00000	272187	0.94337	0.02120	0.36821	0.02517	0.47528	0.00767
222282	1.05362	0.01810	0.24848	0.01770	0.33058	0.00726	234403	1.57745	0.02782	0.94144	0.00891	0.34976	0.00380
272281	1.09974	0.01509	-0.11653	0.01530	0.18007	0.00777	217519	0.57029	0.01232	-0.60308	0.05916	0.15106	0.02152
217541	0.90890	0.01504	-0.14690	0.02359	0.24921	0.01016	282264	0.75728	0.01163	-0.34425	0.02669	0.09201	0.01196
229001	1.01386	0.01602	-0.98593	0.02987	0.21572	0.01625	264751	0.99699	0.01342	0.31168	0.01244	0.11230	0.00589

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
288283	0.77822	0.01370	0.54706	0.01849	0.14935	0.00749
288380	1.31192	0.01628	-0.45143	0.01309	0.13049	0.00776
299677	0.78931	0.01708	-0.41112	0.04283	0.40020	0.01433
264397	1.24402	0.01859	0.29608	0.01254	0.27652	0.00596
289746	0.92331	0.01568	-1.22166	0.03966	0.22355	0.02113
264267	1.07453	0.01474	-0.34711	0.01748	0.16685	0.00913
289744	1.00916	0.01233	0.04011	0.01242	0.06862	0.00611
251397	1.15768	0.01523	0.06672	0.01252	0.16243	0.00643
272290	0.88273	0.01645	0.69473	0.01667	0.23759	0.00658
282265	0.99713	0.01866	0.19647	0.02128	0.38016	0.00796
266109	1.20039	0.01821	0.03135	0.01521	0.29394	0.00722
251301	0.90391	0.01637	-0.29948	0.02896	0.32714	0.01161
288280	1.23901	0.01624	0.23744	0.01077	0.17396	0.00555

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
272175	0.97696	0.01623	-0.92835	0.03242	0.25610	0.01640
222289	1.06841	0.01816	-1.07195	0.03246	0.28591	0.01732
251458	0.83042	0.01468	0.36483	0.02026	0.21147	0.00814
217478	0.79802	0.01533	0.51273	0.02113	0.23158	0.00805
229878	1.03761	0.01452	-0.86717	0.02326	0.13154	0.01329
282152	0.86388	0.01281	-1.21578	0.03404	0.09304	0.01909
272289	0.74281	0.01312	-0.64980	0.03878	0.18380	0.01671
288294	1.17304	0.00921	0.23714	0.00496	0.00000	0.00000
266130	0.94229	0.00790	-0.11972	0.00659	0.00000	0.00000
265897	1.31605	0.01048	-0.18880	0.00537	0.00000	0.00000
282250	0.75284	0.00717	-0.68912	0.01046	0.00000	0.00000
217604	1.11898	0.00975	-0.68809	0.00777	0.00000	0.00000
282349	1.07593	0.00900	0.89954	0.00537	0.00000	0.00000

**Table H-22. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 6**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
251347	1.13290	0.00450	-0.05208	0.00372	1.45237	0.00858	0.65835	0.00605	-0.56396	0.00474	-1.54676	0.00559	0	0
251576	1.24299	0.00523	-0.21558	0.00350	1.32958	0.00857	0.24883	0.00527	-0.35513	0.00455	-1.22328	0.00463	0	0
272189	1.19909	0.00491	-0.21504	0.00360	1.47343	0.00935	0.26708	0.00542	-0.25732	0.00475	-1.48318	0.00505	0	0
282475	1.30259	0.00607	-0.13881	0.00361	0.97731	0.00678	0.24575	0.00500	-0.48817	0.00431	-0.73489	0.00431	0	0

**Table H-23. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 7**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
235466	0.95287	0.01330	-1.12653	0.02453	0.16477	0.01275
288413	1.01582	0.01412	-0.41866	0.01784	0.19711	0.00864
249213	0.86041	0.01660	-0.63673	0.03512	0.41222	0.01228
281673	1.12180	0.01393	-0.12902	0.01204	0.13164	0.00610
259270	1.49401	0.02280	-0.04270	0.01207	0.35863	0.00584
299957	1.09204	0.01648	-0.97503	0.02337	0.27583	0.01196

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
228031	1.16482	0.01536	0.02677	0.01181	0.17668	0.00584
281682	1.08930	0.01890	-0.39558	0.02249	0.40547	0.00901
259247	0.97852	0.01524	0.03440	0.01705	0.24450	0.00730
260331	1.29953	0.02528	0.51966	0.01369	0.45105	0.00486
259283	1.14571	0.01521	-0.03598	0.01249	0.18105	0.00617
299632	1.05992	0.01647	0.34757	0.01327	0.23529	0.00572

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
219458	1.02347	0.01332	-0.03005	0.01315	0.13296	0.00629
260381	0.95490	0.01529	0.18618	0.01649	0.23835	0.00687
208664	1.02610	0.01304	-0.14975	0.01349	0.12411	0.00658
272142	1.03919	0.01603	-0.08443	0.01717	0.27193	0.00752
228010	1.41491	0.02106	-0.43292	0.01458	0.32970	0.00758
208497	1.35658	0.01706	-0.32194	0.01143	0.18265	0.00642
282293	0.99737	0.01706	0.10172	0.01836	0.32093	0.00724
299633	1.00623	0.01412	-0.05374	0.01511	0.18220	0.00700
219460	1.23180	0.02008	0.67672	0.01034	0.26181	0.00438
281698	0.68488	0.01312	-0.12297	0.03201	0.23917	0.01121
299634	0.88720	0.01628	0.49197	0.01721	0.26328	0.00650
261645	1.34463	0.01573	0.22195	0.00795	0.11240	0.00407
272453	0.69762	0.01420	-0.45823	0.04067	0.33024	0.01337

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
299635	1.30160	0.01884	0.63644	0.00871	0.19663	0.00397
261082	0.48168	0.00544	-0.20941	0.01094	0.00000	0.00000
261059	1.02983	0.01623	0.21655	0.01499	0.25384	0.00638
288703	1.46916	0.01903	0.41809	0.00777	0.17893	0.00392
261649	1.29984	0.02040	0.53982	0.01030	0.27711	0.00453
272712	1.17739	0.02064	0.72190	0.01139	0.29269	0.00456
260373	0.88203	0.01653	0.08581	0.02296	0.33968	0.00824
249217	1.02615	0.00867	-0.60888	0.00713	0.00000	0.00000
281493	0.45116	0.00531	-0.00250	0.01086	0.00000	0.00000
260415	0.97555	0.00894	-1.01546	0.00927	0.00000	0.00000
290129	0.48857	0.00549	0.29807	0.00973	0.00000	0.00000
299665	0.81343	0.00705	-0.21301	0.00711	0.00000	0.00000
219537	0.87714	0.00872	-1.33230	0.01210	0.00000	0.00000

**Table H-24. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 7**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
205650	0.69843	0.00281	-0.73794	0.00594	2.73139	0.02105	0.08510	0.00796	-0.54221	0.00721	-2.27428	0.00815	0	0
250462	1.01785	0.00456	-0.58599	0.00438	1.72162	0.01230	-0.10988	0.00573	-0.34080	0.00547	-1.27094	0.00531	0	0
261632	0.99892	0.00489	-1.17122	0.00504	1.49568	0.01498	0.15637	0.00755	-0.42187	0.00618	-1.23018	0.00538	0	0
288736	1.33225	0.00586	0.09454	0.00331	0.85151	0.00534	0.11372	0.00436	-0.09635	0.00427	-0.86889	0.00458	0	0

**Table H-25. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 8**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
219602	0.89047	0.01925	-0.28214	0.03657	0.49562	0.01104
272938	1.16309	0.01584	-0.34293	0.01595	0.19397	0.00838
264757	0.68761	0.00640	-0.56533	0.01004	0.00000	0.00000
253029	1.48636	0.01754	0.28907	0.00780	0.14735	0.00417
229725	0.81014	0.02035	0.26160	0.03608	0.53855	0.00870
219627	0.70429	0.01320	-0.97486	0.05209	0.19720	0.02257

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
265341	0.91705	0.01488	0.40087	0.01739	0.24615	0.00689
284201	1.25747	0.01438	0.16681	0.00904	0.09893	0.00462
252998	0.73960	0.01170	-0.49838	0.03163	0.11396	0.01405
264724	0.90789	0.01396	-0.16085	0.02185	0.21439	0.00958
264730	0.47591	0.00532	-0.48218	0.01318	0.00000	0.00000
265342	0.96458	0.01707	0.20374	0.02087	0.35875	0.00766

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
264789	1.30529	0.01655	0.89328	0.00745	0.12651	0.00322
287511	1.10040	0.01633	0.81406	0.01075	0.20282	0.00445
283260	1.00234	0.01521	0.08593	0.01743	0.24952	0.00755
264772	0.95916	0.01614	0.73478	0.01465	0.25678	0.00559
229595	0.74591	0.01083	-1.18916	0.03705	0.00793	0.01995
275023	1.27011	0.01667	0.00332	0.01191	0.20280	0.00614
273668	1.30336	0.01411	-0.18391	0.00926	0.05833	0.00497
265340	0.82586	0.01210	-0.02749	0.02044	0.12707	0.00893
253761	0.93417	0.01624	0.05746	0.02258	0.33418	0.00857
276329	1.41881	0.01999	1.06570	0.00752	0.17860	0.00310
284195	0.88573	0.01417	0.79083	0.01389	0.17391	0.00546
252997	0.89210	0.01342	-0.21099	0.02201	0.18561	0.00988
284139	1.32356	0.01613	-0.00122	0.01026	0.15021	0.00552

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
226984	1.49455	0.02016	-0.15222	0.01123	0.24366	0.00625
253824	1.32828	0.01690	-0.32166	0.01249	0.16440	0.00707
219622	1.37471	0.01554	0.15553	0.00825	0.10591	0.00437
284130	1.43387	0.02054	0.98463	0.00789	0.20970	0.00335
264720	0.98420	0.01405	0.17636	0.01547	0.18839	0.00690
284200	1.47544	0.01831	0.47792	0.00786	0.17759	0.00399
275024	1.18007	0.01650	0.44598	0.01136	0.22489	0.00515
228379	0.66323	0.00808	-1.90222	0.02206	0.00000	0.00000
272947	0.71520	0.00659	-0.61819	0.00998	0.00000	0.00000
219697	0.87469	0.00778	-0.77098	0.00922	0.00000	0.00000
275051	0.68278	0.00614	-0.10344	0.00824	0.00000	0.00000
283286	1.19588	0.00962	-0.39507	0.00610	0.00000	0.00000
219707	1.05610	0.00820	0.58785	0.00524	0.00000	0.00000

**Table H-26. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 8**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
228439	1.33086	0.00562	-0.25190	0.00333	1.16813	0.00746	0.36350	0.00527	-0.32975	0.00444	-1.20188	0.00450	0	0
264746	1.28136	0.00530	0.09210	0.00336	1.29163	0.00686	0.14274	0.00466	-0.25260	0.00443	-1.18176	0.00490	0	0
265966	0.90102	0.00404	0.37595	0.00503	2.25832	0.01063	-0.50250	0.00587	-0.62876	0.00594	-1.12706	0.00651	0	0
287605	1.32947	0.00548	0.01871	0.00329	1.38894	0.00732	0.20565	0.00470	-0.13699	0.00442	-1.45759	0.00509	0	0

**Table H-27. 2012 MCAS: IRT Parameters for Dichotomous Items – Mathematics Grade 10**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
287431	1.69128	0.00000	0.30321	0.00000	0.18675	0.00000
288120	0.96535	0.00000	-0.21988	0.00000	0.10705	0.00000
287682	2.27038	0.00000	1.82448	0.00000	0.34642	0.00000
281525	1.31462	0.00000	1.29173	0.00000	0.19709	0.00000
287444	1.20610	0.00000	0.93864	0.00000	0.38228	0.00000
260876	1.35764	0.00000	0.69131	0.00000	0.18731	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
288125	0.96154	0.00000	0.54437	0.00000	0.36490	0.00000
273625	1.56979	0.00000	0.76719	0.00000	0.16624	0.00000
287454	1.15257	0.00000	0.54908	0.00000	0.22018	0.00000
287457	1.19356	0.00000	0.10045	0.00000	0.22856	0.00000
287668	1.49589	0.00000	0.23626	0.00000	0.22289	0.00000
253844	2.82893	0.00000	1.42687	0.00000	0.09641	0.00000

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
287724	1.38355	0.00000	0.89779	0.00000	0.22240	0.00000
278456	1.74726	0.00000	0.26787	0.00000	0.27164	0.00000
281735	0.92912	0.00000	0.05972	0.00000	0.14242	0.00000
274073	1.97189	0.00000	0.25298	0.00000	0.14937	0.00000
288070	0.87054	0.00000	-0.13463	0.00000	0.00000	0.00000
293323	1.65137	0.00000	0.45086	0.00000	0.31645	0.00000
281647	1.47539	0.00000	0.40857	0.00000	0.25152	0.00000
287666	1.14093	0.00000	1.04897	0.00000	0.29992	0.00000
287919	1.01066	0.00000	1.33304	0.00000	0.23913	0.00000
288055	1.00588	0.00000	0.20006	0.00000	0.21772	0.00000
287931	0.77691	0.00000	0.33952	0.00000	0.18030	0.00000
253251	0.80938	0.00000	1.40722	0.00000	0.23286	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
282086	0.62691	0.00000	0.47006	0.00000	0.19119	0.00000
281702	2.13976	0.00000	1.10306	0.00000	0.33271	0.00000
287725	1.41829	0.00000	1.90784	0.00000	0.35526	0.00000
281712	2.58382	0.00000	1.41118	0.00000	0.36324	0.00000
253249	1.28037	0.00000	1.18979	0.00000	0.31610	0.00000
271552	1.75206	0.00000	1.24969	0.00000	0.37188	0.00000
268495	0.94491	0.00000	0.61358	0.00000	0.29687	0.00000
287929	1.05747	0.00000	1.42445	0.00000	0.23306	0.00000
287738	1.30687	0.00000	0.62932	0.00000	0.00000	0.00000
261492	1.45134	0.00000	0.65888	0.00000	0.00000	0.00000
287462	1.29547	0.00000	1.15365	0.00000	0.00000	0.00000
250662	1.51593	0.00000	0.67334	0.00000	0.00000	0.00000

**Table H-28. 2012 MCAS: IRT Parameters for Polytomous Items – Mathematics Grade 10**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
276483	1.72653	0	0.79244	0	0.81698	0	0.11294	0	-0.20384	0	-0.72607	0	0	0
287466	1.66532	0	0.44003	0	1.11909	0	0.15278	0	-0.37623	0	-0.89565	0	0	0
287750	1.87188	0	0.98755	0	1.70970	0	0.52101	0	-0.95489	0	-1.27581	0	0	0
288048	1.80217	0	0.34183	0	0.79803	0	0.26263	0	-0.21192	0	-0.84875	0	0	0
288088	1.19215	0	-0.04557	0	1.10268	0	0.36975	0	-0.27508	0	-1.19735	0	0	0
288089	1.37114	0	0.25424	0	1.01769	0	0.30894	0	-0.24962	0	-1.07702	0	0	0

**Table H-29. 2012 MCAS: IRT Parameters for Dichotomous Items – STE Grade 5**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
273729	0.57707	0.00952	-3.64212	0.04670	0.00000	0.00000
273737	0.59284	0.01036	-1.36382	0.05102	0.09666	0.02003
273715	0.67971	0.01186	0.14634	0.02192	0.15059	0.00768
289158	0.66543	0.01741	0.96878	0.02194	0.28156	0.00647
273775	0.73636	0.01332	-0.23217	0.02730	0.26471	0.00921

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
281799	0.27857	0.00460	-1.95715	0.03487	0.00000	0.00000
291238	0.93476	0.01636	-1.27563	0.03396	0.36203	0.01367
291176	0.92693	0.01436	-0.80917	0.02431	0.27580	0.01002
273741	0.84770	0.01868	0.58880	0.01958	0.37543	0.00578
264891	0.72217	0.01235	0.41081	0.01733	0.14037	0.00620

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
281837	0.94219	0.01415	-1.89166	0.03288	0.13227	0.01847
245353	0.56654	0.01237	-0.05666	0.03804	0.20698	0.01147
245514	0.79080	0.01484	-0.26331	0.02763	0.34148	0.00891
288140	1.00957	0.01453	-1.02216	0.02201	0.22873	0.01030
264826	0.75064	0.01311	-2.07858	0.05532	0.16708	0.02727
273770	1.02076	0.01609	-0.50679	0.02009	0.32796	0.00793
281801	0.80660	0.01240	-1.26057	0.03243	0.18527	0.01431
281800	0.51972	0.01147	-2.41616	0.11514	0.07496	0.04922
245522	0.63458	0.00883	-3.05712	0.03207	0.00000	0.00000
273725	0.91118	0.01739	0.70135	0.01449	0.27446	0.00491
288177	0.90618	0.02285	1.30209	0.01463	0.29576	0.00411
264838	0.70254	0.01319	-0.89462	0.04094	0.29495	0.01396
264831	0.97345	0.01338	0.33354	0.01115	0.13468	0.00448
291260	0.83676	0.01163	-0.20438	0.01690	0.13007	0.00683

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
264816	0.53720	0.01254	0.52316	0.02985	0.14944	0.00923
273784	0.49600	0.00615	-2.37402	0.02612	0.00000	0.00000
288603	0.88107	0.01433	0.42391	0.01425	0.19821	0.00528
273754	0.76964	0.01358	-1.39624	0.04312	0.27772	0.01722
288205	0.60257	0.01225	-1.53381	0.06669	0.23528	0.02383
273730	0.54764	0.01059	-1.09695	0.05529	0.12420	0.01934
245524	0.65177	0.01187	-1.09674	0.04541	0.21347	0.01653
288204	0.97922	0.01659	0.48046	0.01362	0.26274	0.00495
264882	0.77882	0.01300	-1.33583	0.03866	0.23694	0.01610
227839	0.64780	0.01061	-1.38315	0.04412	0.10610	0.01832
288150	0.50409	0.01194	-2.61474	0.13905	0.08321	0.05933
281887	0.98972	0.01417	0.06486	0.01364	0.19999	0.00554
227877	0.56223	0.00959	-1.35013	0.05041	0.03952	0.01979
291376	0.70935	0.01510	-0.03825	0.03117	0.35231	0.00906

**Table H-30. 2012 MCAS: IRT Parameters for Polytomous Items – STE Grade 5**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
264893	0.76350	0.00321	0.65832	0.00552	1.31977	0.00718	0.68407	0.00669	-0.39752	0.00716	-1.60632	0.01032	0	0
273720	0.81127	0.00325	0.23074	0.00505	1.59562	0.00804	0.42284	0.00643	-0.50693	0.00652	-1.51154	0.00824	0	0
281811	0.72454	0.00301	0.42587	0.00578	2.00484	0.00910	-0.07110	0.00702	-0.65711	0.00749	-1.27662	0.00868	0	0
288176	0.74221	0.00289	-0.24533	0.00548	1.84769	0.01048	0.61803	0.00750	-0.57182	0.00681	-1.89390	0.00843	0	0

**Table H-31. 2012 MCAS: IRT Parameters for Dichotomous Items – STE Grade 8**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
282001	0.74302	0.01260	-1.26820	0.04434	0.12545	0.02154
282058	1.32245	0.01652	-0.06145	0.01011	0.17246	0.00535
288316	0.90119	0.01318	-0.53910	0.02207	0.16489	0.01039
226412	0.75314	0.01307	-0.49046	0.03143	0.19894	0.01276
265302	0.62078	0.01578	0.75054	0.02731	0.22450	0.00888

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
290150	0.79112	0.01463	-0.10653	0.02683	0.26991	0.00996
288300	0.96156	0.01518	0.08083	0.01680	0.23675	0.00709
288303	0.55492	0.01123	-1.62592	0.08048	0.01194	0.03665
288323	0.73461	0.01729	0.27088	0.03074	0.36985	0.00923
291963	0.86538	0.01445	0.05215	0.01993	0.22876	0.00802

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
282002	0.56949	0.00628	-1.32890	0.01601	0.00000	0.00000
229468	1.33609	0.02934	1.16718	0.01067	0.36112	0.00346
299826	1.08397	0.01932	-0.77270	0.02728	0.41032	0.01144
282023	0.81313	0.01390	-0.12832	0.02391	0.22435	0.00951
273915	0.65936	0.01178	-0.70645	0.03997	0.12192	0.01636
273934	0.72405	0.01111	-1.58362	0.04375	0.00000	0.02391
289753	1.44345	0.02487	0.98621	0.00839	0.26315	0.00328
273938	0.94650	0.01817	-1.37789	0.04431	0.35324	0.02042
265219	1.20897	0.02066	-0.05004	0.01667	0.40708	0.00667
291915	0.27069	0.00488	-1.26103	0.02989	0.00000	0.00000
288350	0.36930	0.00542	-1.65979	0.02749	0.00000	0.00000
282037	0.84163	0.01301	-1.51889	0.03855	0.07727	0.02209
273971	0.80485	0.01340	-0.40049	0.02697	0.20755	0.01120
265269	0.96272	0.01504	-0.89301	0.02698	0.23264	0.01321

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
246307	0.98821	0.01761	0.23711	0.01766	0.32941	0.00669
246372	0.67648	0.01321	-0.30338	0.03600	0.21133	0.01313
288305	0.83498	0.01294	-0.18677	0.02110	0.16601	0.00905
229370	0.43088	0.01311	-0.30318	0.08668	0.12912	0.02467
282029	0.74891	0.01367	0.08923	0.02434	0.20507	0.00919
288328	0.91011	0.01336	-1.15754	0.02888	0.12022	0.01567
288322	1.25343	0.02369	0.87213	0.01090	0.33378	0.00403
289680	0.94353	0.01555	0.54965	0.01339	0.19708	0.00547
281078	1.41245	0.02014	0.52931	0.00848	0.22977	0.00395
281958	1.14807	0.02130	0.98296	0.01056	0.25910	0.00394
291993	0.68030	0.01183	-0.79039	0.03924	0.12072	0.01662
227944	1.22109	0.01711	-0.57878	0.01622	0.24465	0.00859
288347	1.07191	0.01515	0.32509	0.01145	0.17175	0.00518
265216	0.78606	0.01389	-0.32978	0.02869	0.24002	0.01125

**Table H-32. 2012 MCAS: IRT Parameters for Polytomous Items – STE Grade 8**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
265215	1.06411	0.00420	0.72719	0.00392	1.47410	0.00590	0.36960	0.00497	-0.52232	0.00568	-1.32139	0.00798	0	0
282019	1.00381	0.00403	0.54871	0.00412	1.23200	0.00599	0.46981	0.00522	-0.32853	0.00543	-1.37328	0.00766	0	0
288318	0.68981	0.00253	0.57824	0.00588	2.48056	0.01062	0.67403	0.00713	-0.86500	0.00803	-2.28959	0.01317	0	0
290236	0.85655	0.00346	0.16324	0.00473	1.36990	0.00763	0.32716	0.00602	-0.37085	0.00590	-1.32621	0.00706	0	0

**Table H-33. 2012 MCAS: IRT Parameters for Dichotomous Items – High School Biology**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
279804	1.07459	0.00000	-0.17175	0.00000	0.35347	0.00000
261253	0.72902	0.00000	-0.52923	0.00000	0.17561	0.00000
290983	0.85987	0.00000	-0.22464	0.00000	0.30804	0.00000
283215	1.20398	0.00000	-0.40995	0.00000	0.21084	0.00000
273543	0.98833	0.00000	-2.29451	0.00000	0.24344	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
290943	1.01943	0.00000	-0.80838	0.00000	0.26158	0.00000
234782	1.15327	0.00000	0.22173	0.00000	0.19045	0.00000
289990	1.04665	0.00000	1.24750	0.00000	0.18676	0.00000
289988	1.52237	0.00000	-0.11364	0.00000	0.32489	0.00000
289986	1.76250	0.00000	1.31705	0.00000	0.33218	0.00000

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
289981	0.73760	0.00000	0.23531	0.00000	0.25345	0.00000
290993	0.73374	0.00000	-1.15087	0.00000	0.16956	0.00000
283136	0.78998	0.00000	-1.53949	0.00000	0.17653	0.00000
290952	0.86191	0.00000	-0.01030	0.00000	0.26473	0.00000
290982	0.91649	0.00000	-0.74188	0.00000	0.21082	0.00000
235183	1.53326	0.00000	0.08388	0.00000	0.30810	0.00000
283217	0.75606	0.00000	-0.44225	0.00000	0.17625	0.00000
288171	1.08685	0.00000	-0.73084	0.00000	0.15919	0.00000
283207	0.97506	0.00000	0.58402	0.00000	0.16051	0.00000
290258	0.74948	0.00000	-0.08810	0.00000	0.35711	0.00000
283167	1.08143	0.00000	0.28690	0.00000	0.26551	0.00000
290931	1.08491	0.00000	-1.16241	0.00000	0.30604	0.00000
290024	1.00457	0.00000	0.01029	0.00000	0.46857	0.00000
242858	1.66650	0.00000	0.36164	0.00000	0.34221	0.00000
289297	0.86295	0.00000	-0.33762	0.00000	0.33389	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
279496	1.15070	0.00000	-0.92210	0.00000	0.15455	0.00000
209074	0.78629	0.00000	-1.05337	0.00000	0.23938	0.00000
208194	0.75673	0.00000	-0.28055	0.00000	0.16638	0.00000
283200	1.51647	0.00000	-0.01073	0.00000	0.16315	0.00000
289215	0.88329	0.00000	-0.96632	0.00000	0.21401	0.00000
289289	1.13185	0.00000	-0.49079	0.00000	0.13083	0.00000
273544	1.21161	0.00000	0.05498	0.00000	0.35602	0.00000
285636	1.15023	0.00000	-1.07068	0.00000	0.17446	0.00000
273302	1.53604	0.00000	-0.08296	0.00000	0.09576	0.00000
273533	1.57675	0.00000	-0.18748	0.00000	0.32020	0.00000
256955	1.28589	0.00000	0.45110	0.00000	0.26524	0.00000
283151	1.57744	0.00000	1.10339	0.00000	0.32787	0.00000
234783	1.48715	0.00000	-0.31373	0.00000	0.20009	0.00000
235186	0.73233	0.00000	-0.58264	0.00000	0.25745	0.00000
279796	0.89972	0.00000	-0.48247	0.00000	0.20175	0.00000

**Table H-34. 2012 MCAS: IRT Parameters for Polytomous Items – High School Biology**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
234808	1.19265	0	1.17610	0	1.60841	0	0.42396	0	-0.48068	0	-1.55169	0	0	0
261447	1.24349	0	0.88997	0	1.58328	0	0.56520	0	-0.57268	0	-1.57580	0	0	0
279498	0.71740	0	0.34853	0	1.86380	0	0.52749	0	-0.55059	0	-1.84070	0	0	0
289994	1.10263	0	0.41873	0	2.05891	0	0.40663	0	-0.58022	0	-1.88532	0	0	0
291007	1.06579	0	0.17656	0	1.69835	0	0.70979	0	-0.50653	0	-1.90160	0	0	0

**Table H-35. 2012 MCAS: IRT Parameters for Dichotomous Items – High School Chemistry**

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
252678	1.32919	0.00000	-0.31589	0.00000	0.28925	0.00000
229504	1.15011	0.00000	0.07615	0.00000	0.19535	0.00000
260036	0.56529	0.00000	0.86617	0.00000	0.23313	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
229678	1.00470	0.00000	-0.69456	0.00000	0.25323	0.00000
216946	1.60070	0.00000	-0.30809	0.00000	0.32456	0.00000
252153	1.31499	0.00000	0.77907	0.00000	0.23668	0.00000

continued

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
206670	1.09770	0.00000	0.77082	0.00000	0.12044	0.00000
275846	1.09506	0.00000	-0.18998	0.00000	0.21778	0.00000
261470	0.93597	0.00000	0.10163	0.00000	0.23387	0.00000
281962	1.65144	0.00000	0.92088	0.00000	0.17347	0.00000
287584	1.90442	0.00000	1.02262	0.00000	0.18101	0.00000
288254	1.05183	0.00000	0.17725	0.00000	0.23187	0.00000
287569	1.12122	0.00000	-0.01278	0.00000	0.19381	0.00000
275840	0.89001	0.00000	1.29865	0.00000	0.29332	0.00000
260041	1.68389	0.00000	1.18056	0.00000	0.29276	0.00000
258965	0.71954	0.00000	-0.52613	0.00000	0.27108	0.00000
216949	1.00596	0.00000	0.42571	0.00000	0.16808	0.00000
260762	1.28561	0.00000	0.75435	0.00000	0.41107	0.00000
264340	0.90048	0.00000	-0.87162	0.00000	0.24768	0.00000
229235	1.39963	0.00000	0.23444	0.00000	0.26622	0.00000
264310	1.17789	0.00000	-0.61521	0.00000	0.24588	0.00000
216947	1.47905	0.00000	1.11402	0.00000	0.20739	0.00000
252564	1.00692	0.00000	0.86464	0.00000	0.19574	0.00000

Item Number	Parameters and Measures of Standard Error					
	a	SE (a)	b	SE (b)	c	SE (c)
229517	1.12829	0.00000	-1.11707	0.00000	0.15386	0.00000
287582	1.19159	0.00000	0.17083	0.00000	0.28855	0.00000
258930	1.63622	0.00000	0.78028	0.00000	0.16195	0.00000
216953	1.30877	0.00000	-0.01409	0.00000	0.18536	0.00000
258937	1.30257	0.00000	0.06465	0.00000	0.23560	0.00000
273206	1.59866	0.00000	0.08429	0.00000	0.20485	0.00000
275834	1.03626	0.00000	0.63754	0.00000	0.29812	0.00000
275928	1.25088	0.00000	0.02957	0.00000	0.24232	0.00000
258935	1.39872	0.00000	1.03226	0.00000	0.26332	0.00000
251804	1.08416	0.00000	-0.29139	0.00000	0.23936	0.00000
229652	1.23061	0.00000	-0.59721	0.00000	0.22294	0.00000
275857	1.34518	0.00000	0.01566	0.00000	0.21823	0.00000
274061	1.25570	0.00000	0.27304	0.00000	0.25866	0.00000
281286	1.11688	0.00000	0.37862	0.00000	0.25007	0.00000
246822	1.22224	0.00000	1.25956	0.00000	0.18022	0.00000
208301	0.99788	0.00000	-0.92118	0.00000	0.20580	0.00000
273212	0.78483	0.00000	1.54076	0.00000	0.27141	0.00000

**Table H-36. 2012 MCAS: IRT Parameters for Polytomous Items – High School Chemistry**

Item Number	Parameters and Measures of Standard Error													
	a	SE (a)	b	SE (b)	D0	SE (D0)	D1	SE (D1)	D2	SE (D2)	D3	SE (D3)	D4	SE (D4)
206688	1.34831	0	0.79650	0	0.75318	0	0.18005	0	-0.22299	0	-0.71024	0	0	0
261154	0.79480	0	-0.57105	0	1.44934	0	0.52829	0	-0.45528	0	-1.52235	0	0	0
281306	1.64746	0	0.76710	0	0.76095	0	0.32014	0	-0.15064	0	-0.93045	0	0	0
287607	1.65439	0	0.68566	0	0.79313	0	0.23906	0	-0.19253	0	-0.83966	0	0	0
287891	1.22899	0	0.38628	0	1.41842	0	0.44046	0	-0.66352	0	-1.19536	0	0	0

**Table H-37. 2012 MCAS: IRT Parameters for Dichotomous Items –  
High School Introductory Physics**

<i>Parameters and Measures of Standard Error</i>							<i>Parameters and Measures of Standard Error</i>						
<i>Item Number</i>	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>	<i>Item Number</i>	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
288376	1.08616	0.00000	-0.56781	0.00000	0.31290	0.00000	287385	0.62903	0.00000	1.71643	0.00000	0.26070	0.00000
287221	1.05224	0.00000	0.81852	0.00000	0.19528	0.00000	287234	0.50301	0.00000	0.18845	0.00000	0.42016	0.00000
272642	0.59588	0.00000	0.25536	0.00000	0.29400	0.00000	287057	0.98868	0.00000	-0.89528	0.00000	0.23085	0.00000
280856	1.03173	0.00000	0.04143	0.00000	0.17957	0.00000	287308	1.26908	0.00000	-0.22828	0.00000	0.21143	0.00000
281909	1.46263	0.00000	0.84191	0.00000	0.34402	0.00000	280439	0.76209	0.00000	-0.24685	0.00000	0.24578	0.00000
287317	0.75556	0.00000	0.14839	0.00000	0.19661	0.00000	280971	0.69410	0.00000	-0.20180	0.00000	0.22859	0.00000
287200	1.41251	0.00000	-0.07249	0.00000	0.40182	0.00000	280955	1.18489	0.00000	0.40836	0.00000	0.41018	0.00000
280867	1.08938	0.00000	0.41796	0.00000	0.25477	0.00000	288357	1.51268	0.00000	0.02001	0.00000	0.17165	0.00000
272664	0.66195	0.00000	0.27025	0.00000	0.22202	0.00000	280959	0.56286	0.00000	0.31795	0.00000	0.32847	0.00000
286518	0.54917	0.00000	-0.37843	0.00000	0.18689	0.00000	287043	0.58820	0.00000	-0.57581	0.00000	0.26969	0.00000
287327	0.90498	0.00000	-0.96328	0.00000	0.17515	0.00000	287394	0.75963	0.00000	0.83188	0.00000	0.23395	0.00000
206583	0.98138	0.00000	-0.49622	0.00000	0.19350	0.00000	208523	1.17841	0.00000	-0.19574	0.00000	0.28488	0.00000
272740	1.04203	0.00000	1.28081	0.00000	0.17271	0.00000	287301	1.19664	0.00000	-0.73865	0.00000	0.20694	0.00000
280842	0.73969	0.00000	-0.44585	0.00000	0.24463	0.00000	280847	0.95565	0.00000	-0.85476	0.00000	0.40215	0.00000
230911	0.94132	0.00000	-1.23238	0.00000	0.25795	0.00000	287035	0.82686	0.00000	-0.27484	0.00000	0.11296	0.00000
272746	1.01573	0.00000	0.68538	0.00000	0.22413	0.00000	272679	0.89922	0.00000	0.38892	0.00000	0.21532	0.00000
235319	1.06068	0.00000	0.46115	0.00000	0.22263	0.00000	287053	1.02227	0.00000	1.41577	0.00000	0.24632	0.00000
272652	0.82182	0.00000	0.27794	0.00000	0.19423	0.00000	272647	1.29273	0.00000	0.86030	0.00000	0.28751	0.00000
288368	1.21835	0.00000	0.98183	0.00000	0.16195	0.00000							
280461	1.18396	0.00000	1.01545	0.00000	0.38249	0.00000							
287226	0.83217	0.00000	-0.73887	0.00000	0.16117	0.00000							
246993	0.40511	0.00000	0.54378	0.00000	0.27577	0.00000							

**Table H-38. 2012 MCAS: IRT Parameters for Polytomous Items –  
High School Introductory Physics**

<i>Parameters and Measures of Standard Error</i>														
<i>Item Number</i>	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>D0</i>	<i>SE (D0)</i>	<i>D1</i>	<i>SE (D1)</i>	<i>D2</i>	<i>SE (D2)</i>	<i>D3</i>	<i>SE (D3)</i>	<i>D4</i>	<i>SE (D4)</i>
247000	1.25365	0	1.10966	0	2.02360	0	0.66983	0	-0.69438	0	-1.99904	0	0	0
287215	1.17785	0	0.88003	0	1.57019	0	0.61188	0	-0.83286	0	-1.34921	0	0	0
287406	1.59084	0	-0.27449	0	0.86369	0	0.24216	0	-0.28983	0	-0.81602	0	0	0
288393	1.55520	0	0.36749	0	0.93856	0	0.24917	0	-0.17264	0	-1.01509	0	0	0
293154	1.45836	0	0.72993	0	1.41686	0	0.64076	0	-0.57850	0	-1.47912	0	0	0

**Table H-39. 2012 MCAS: IRT Parameters for Dichotomous Items – High School Technology/Engineering**

<i>Item</i>		<i>Parameters and Measures of Standard Error</i>					<i>Item</i>		<i>Parameters and Measures of Standard Error</i>				
<i>Number</i>	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>	<i>Number</i>	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>c</i>	<i>SE (c)</i>
209217	1.00000	0.00000	-1.15578	0.00000	0.00000	0.00000	281410	1.00000	0.00000	-0.55736	0.00000	0.00000	0.00000
287859	1.00000	0.00000	-0.31811	0.00000	0.00000	0.00000	273142	1.00000	0.00000	-0.87039	0.00000	0.00000	0.00000
287815	1.00000	0.00000	-0.04494	0.00000	0.00000	0.00000	248599	1.00000	0.00000	-0.05713	0.00000	0.00000	0.00000
251766	1.00000	0.00000	-0.07185	0.00000	0.00000	0.00000	293178	1.00000	0.00000	-0.75344	0.00000	0.00000	0.00000
265123	1.00000	0.00000	0.21544	0.00000	0.00000	0.00000	208123	1.00000	0.00000	0.33879	0.00000	0.00000	0.00000
268349	1.00000	0.00000	-0.52764	0.00000	0.00000	0.00000	287840	1.00000	0.00000	0.81534	0.00000	0.00000	0.00000
261742	1.00000	0.00000	0.77832	0.00000	0.00000	0.00000	283485	1.00000	0.00000	-0.57986	0.00000	0.00000	0.00000
274592	1.00000	0.00000	-0.42872	0.00000	0.00000	0.00000	268475	1.00000	0.00000	-0.32987	0.00000	0.00000	0.00000
283454	1.00000	0.00000	-0.27217	0.00000	0.00000	0.00000	265033	1.00000	0.00000	0.02407	0.00000	0.00000	0.00000
292771	1.00000	0.00000	-0.64294	0.00000	0.00000	0.00000	288405	1.00000	0.00000	-0.72201	0.00000	0.00000	0.00000
260806	1.00000	0.00000	-0.92015	0.00000	0.00000	0.00000	274625	1.00000	0.00000	-0.91551	0.00000	0.00000	0.00000
215955	1.00000	0.00000	-0.81012	0.00000	0.00000	0.00000	274586	1.00000	0.00000	0.18172	0.00000	0.00000	0.00000
281414	1.00000	0.00000	0.23496	0.00000	0.00000	0.00000	273072	1.00000	0.00000	-0.63017	0.00000	0.00000	0.00000
221623	1.00000	0.00000	0.11475	0.00000	0.00000	0.00000	208445	1.00000	0.00000	0.02572	0.00000	0.00000	0.00000
289930	1.00000	0.00000	0.43342	0.00000	0.00000	0.00000	208088	1.00000	0.00000	-0.07093	0.00000	0.00000	0.00000
265179	1.00000	0.00000	-0.12348	0.00000	0.00000	0.00000	281394	1.00000	0.00000	-0.85537	0.00000	0.00000	0.00000
206601	1.00000	0.00000	-0.10705	0.00000	0.00000	0.00000	290851	1.00000	0.00000	0.06463	0.00000	0.00000	0.00000
206611	1.00000	0.00000	-0.75692	0.00000	0.00000	0.00000	208116	1.00000	0.00000	0.07963	0.00000	0.00000	0.00000
274635	1.00000	0.00000	-1.15740	0.00000	0.00000	0.00000							
271563	1.00000	0.00000	0.48185	0.00000	0.00000	0.00000							
287858	1.00000	0.00000	-0.48903	0.00000	0.00000	0.00000							
251760	1.00000	0.00000	-0.51415	0.00000	0.00000	0.00000							

**Table H-40. 2012 MCAS: IRT Parameters for Polytomous Items – High School Technology/Engineering**

<i>Item</i>		<i>Parameters and Measures of Standard Error</i>												
<i>Number</i>	<i>a</i>	<i>SE (a)</i>	<i>b</i>	<i>SE (b)</i>	<i>D0</i>	<i>SE (D0)</i>	<i>D1</i>	<i>SE (D1)</i>	<i>D2</i>	<i>SE (D2)</i>	<i>D3</i>	<i>SE (D3)</i>	<i>D4</i>	<i>SE (D4)</i>
206792	1	0	1.16932	0	1.52721	0	0.63600	0	-0.96532	0	-1.19790	0	0	0
260819	1	0	-0.28450	0	1.42353	0	0.47288	0	-0.45982	0	-1.43659	0	0	0
281497	1	0	0.93077	0	1.13307	0	0.31000	0	-0.42427	0	-1.01880	0	0	0
285994	1	0	-1.10544	0	2.34953	0	0.47997	0	-0.66270	0	-2.16679	0	0	0
293033	1	0	0.16573	0	1.30915	0	0.43566	0	-0.40476	0	-1.34005	0	0	0