

2011 Grade 6 Math Item Analysis Multiple Choice Questions

MATH Question 1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	44	.0	.0	.0
*	26	.0	.0	.0
1	10591	4.9	4.9	4.9
2	36142	16.7	16.7	21.7
4	3553	1.6	1.6	23.3
C	165506	76.7	76.7	100.0
Total	215862	100.0	100.0	

MATH Question 2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	56	.0	.0	.0
*	72	.0	.0	.1
2	780	.4	.4	.4
3	15151	7.0	7.0	7.4
4	1069	.5	.5	7.9
A	198734	92.1	92.1	100.0
Total	215862	100.0	100.0	

MATH Question 3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	284	.1	.1	.1
*	35	.0	.0	.1
1	21899	10.1	10.1	10.3
2	35175	16.3	16.3	26.6
4	12998	6.0	6.0	32.6
C	145471	67.4	67.4	100.0
Total	215862	100.0	100.0	

MATH Question 4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	64	.0	.0	.0
*	33	.0	.0	.0
1	4676	2.2	2.2	2.2
3	3610	1.7	1.7	3.9
4	2280	1.1	1.1	4.9
B	205199	95.1	95.1	100.0
Total	215862	100.0	100.0	

MATH Question 5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	211	.1	.1	.1
*	57	.0	.0	.1
1	8609	4.0	4.0	4.1
2	15674	7.3	7.3	11.4
3	44037	20.4	20.4	31.8
D	147274	68.2	68.2	100.0
Total	215862	100.0	100.0	

MATH Question 6

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	306	.1	.1	.1
*	45	.0	.0	.2
1	55299	25.6	25.6	25.8
3	29686	13.8	13.8	39.5
4	18922	8.8	8.8	48.3
B	111604	51.7	51.7	100.0
Total	215862	100.0	100.0	

MATH Question 7

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	146	.1	.1	.1
*	39	.0	.0	.1
1	10536	4.9	4.9	5.0
2	14422	6.7	6.7	11.6
4	30944	14.3	14.3	26.0
C	159775	74.0	74.0	100.0
Total	215862	100.0	100.0	

MATH Question 8

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	345	.2	.2	.2
*	42	.0	.0	.2
1	7423	3.4	3.4	3.6
2	37719	17.5	17.5	21.1
3	48625	22.5	22.5	43.6
D	121708	56.4	56.4	100.0
Total	215862	100.0	100.0	

MATH Question 9

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	138	.1	.1	.1
*	43	.0	.0	.1
1	9498	4.4	4.4	4.5
3	7037	3.3	3.3	7.7
4	3194	1.5	1.5	9.2
B	195952	90.8	90.8	100.0
Total	215862	100.0	100.0	

MATH Question 10

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	214	.1	.1	.1
*	39	.0	.0	.1
1	6988	3.2	3.2	3.4
2	13672	6.3	6.3	9.7
4	38907	18.0	18.0	27.7
C	156042	72.3	72.3	100.0
Total	215862	100.0	100.0	

MATH Question 11

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	280	.1	.1	.1
*	42	.0	.0	.1
2	14766	6.8	6.8	7.0
3	8258	3.8	3.8	10.8
4	56306	26.1	26.1	36.9
A	136210	63.1	63.1	100.0
Total	215862	100.0	100.0	

MATH Question 12

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	84	.0	.0	.0
*	57	.0	.0	.1
1	4885	2.3	2.3	2.3
2	4253	2.0	2.0	4.3
3	6396	3.0	3.0	7.3
D	200187	92.7	92.7	100.0
Total	215862	100.0	100.0	

MATH Question 13

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	118	.1	.1	.1
*	39	.0	.0	.1
1	16478	7.6	7.6	7.7
3	35130	16.3	16.3	24.0
4	3107	1.4	1.4	25.4
B	160990	74.6	74.6	100.0
Total	215862	100.0	100.0	

MATH Question 14

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	300	.1	.1	.1
*	57	.0	.0	.2
1	18338	8.5	8.5	8.7
2	25989	12.0	12.0	20.7
3	11845	5.5	5.5	26.2
D	159333	73.8	73.8	100.0
Total	215862	100.0	100.0	

MATH Question 15

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	191	.1	.1	.1
*	44	.0	.0	.1
1	3413	1.6	1.6	1.7
2	13491	6.2	6.2	7.9
4	66126	30.6	30.6	38.6
C	132597	61.4	61.4	100.0
Total	215862	100.0	100.0	

MATH Question 16

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	177	.1	.1	.1
*	36	.0	.0	.1
1	16981	7.9	7.9	8.0
3	20607	9.5	9.5	17.5
4	96954	44.9	44.9	62.4
B	81107	37.6	37.6	100.0
Total	215862	100.0	100.0	

MATH Question 17

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	193	.1	.1	.1
*	67	.0	.0	.1
1	52007	24.1	24.1	24.2
3	12544	5.8	5.8	30.0
4	45190	20.9	20.9	51.0
B	105861	49.0	49.0	100.0
Total	215862	100.0	100.0	

MATH Question 18

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	182	.1	.1	.1
*	61	.0	.0	.1
1	38102	17.7	17.7	17.8
2	12345	5.7	5.7	23.5
3	31935	14.8	14.8	38.3
D	133237	61.7	61.7	100.0
Total	215862	100.0	100.0	

MATH Question 19

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	170	.1	.1	.1
*	55	.0	.0	.1
2	31917	14.8	14.8	14.9
3	17024	7.9	7.9	22.8
4	45051	20.9	20.9	43.6
A	121645	56.4	56.4	100.0
Total	215862	100.0	100.0	

MATH Question 20

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	197	.1	.1	.1
*	40	.0	.0	.1
2	17411	8.1	8.1	8.2
3	12676	5.9	5.9	14.0
4	30535	14.1	14.1	28.2
A	155003	71.8	71.8	100.0
Total	215862	100.0	100.0	

MATH Question 21

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	228	.1	.1	.1
*	49	.0	.0	.1
1	55168	25.6	25.6	25.7
2	19446	9.0	9.0	34.7
3	29059	13.5	13.5	48.2
D	111912	51.8	51.8	100.0
Total	215862	100.0	100.0	

MATH Question 22

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	109	.1	.1	.1
*	45	.0	.0	.1
2	10368	4.8	4.8	4.9
3	7741	3.6	3.6	8.5
4	5264	2.4	2.4	10.9
A	192335	89.1	89.1	100.0
Total	215862	100.0	100.0	

MATH Question 23

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	484	.2	.2	.2
*	77	.0	.0	.3
1	12708	5.9	5.9	6.1
3	43948	20.4	20.4	26.5
4	47866	22.2	22.2	48.7
B	110779	51.3	51.3	100.0
Total	215862	100.0	100.0	

MATH Question 24

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	300	.1	.1	.1
*	61	.0	.0	.2
1	47844	22.2	22.2	22.3
2	58716	27.2	27.2	49.5
4	25853	12.0	12.0	61.5
C	83088	38.5	38.5	100.0
Total	215862	100.0	100.0	

MATH Question 25

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	394	.2	.2	.2
*	72	.0	.0	.2
1	25552	11.8	11.8	12.1
2	37267	17.3	17.3	29.3
3	34074	15.8	15.8	45.1
D	118503	54.9	54.9	100.0
Total	215862	100.0	100.0	

MATH Question 26

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	351	.2	.2	.2
*	61	.0	.0	.2
2	17171	8.0	8.0	8.1
3	42081	19.5	19.5	27.6
4	7231	3.3	3.3	31.0
A	148967	69.0	69.0	100.0
Total	215862	100.0	100.0	

MATH Question 27

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	315	.1	.1	.1
*	90	.0	.0	.2
1	4833	2.2	2.2	2.4
2	26744	12.4	12.4	14.8
3	28683	13.3	13.3	28.1
D	155197	71.9	71.9	100.0
Total	215862	100.0	100.0	

MATH Question 28

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	251	.1	.1	.1
*	45	.0	.0	.1
1	5326	2.5	2.5	2.6
3	5227	2.4	2.4	5.0
4	2605	1.2	1.2	6.2
B	202408	93.8	93.8	100.0
Total	215862	100.0	100.0	

MATH Question 29

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	492	.2	.2	.2
*	59	.0	.0	.3
1	14416	6.7	6.7	6.9
2	27750	12.9	12.9	19.8
4	19555	9.1	9.1	28.8
C	153590	71.2	71.2	100.0
Total	215862	100.0	100.0	

MATH Question 30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	272	.1	.1	.1
*	45	.0	.0	.1
2	1942	.9	.9	1.0
3	50932	23.6	23.6	24.6
4	7301	3.4	3.4	28.0
A	155370	72.0	72.0	100.0
Total	215862	100.0	100.0	

MATH Question 31

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	264	.1	.1	.1
*	50	.0	.0	.1
2	46666	21.6	21.6	21.8
3	13673	6.3	6.3	28.1
4	52612	24.4	24.4	52.5
A	102597	47.5	47.5	100.0
Total	215862	100.0	100.0	

MATH Question 32

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	271	.1	.1	.1
*	70	.0	.0	.2
1	12407	5.7	5.7	5.9
2	37109	17.2	17.2	23.1
3	22874	10.6	10.6	33.7
D	143131	66.3	66.3	100.0
Total	215862	100.0	100.0	

MATH Question 33

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	538	.2	.2	.2
*	69	.0	.0	.3
1	21163	9.8	9.8	10.1
2	22831	10.6	10.6	20.7
4	43370	20.1	20.1	40.8
C	127891	59.2	59.2	100.0
Total	215862	100.0	100.0	

MATH Question 34

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	518	.2	.2	.2
*	82	.0	.0	.3
2	18222	8.4	8.4	8.7
3	10188	4.7	4.7	13.4
4	28652	13.3	13.3	26.7
A	158200	73.3	73.3	100.0
Total	215862	100.0	100.0	

MATH Question 35

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	435	.2	.2	.2
*	43	.0	.0	.2
1	6444	3.0	3.0	3.2
2	8622	4.0	4.0	7.2
4	12314	5.7	5.7	12.9
C	188004	87.1	87.1	100.0
Total	215862	100.0	100.0	

MATH Question 36

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	763	.4	.4	.4
*	72	.0	.0	.4
1	82773	38.3	38.3	38.7
3	40951	19.0	19.0	57.7
4	20522	9.5	9.5	67.2
B	70781	32.8	32.8	100.0
Total	215862	100.0	100.0	

MATH Question 37

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	617	.3	.3	.3
*	101	.0	.0	.3
1	5512	2.6	2.6	2.9
2	5739	2.7	2.7	5.5
3	39483	18.3	18.3	23.8
D	164410	76.2	76.2	100.0
Total	215862	100.0	100.0	

MATH Question 38

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1118	.5	.5	.5
*	62	.0	.0	.5
1	46410	21.5	21.5	22.0
3	28067	13.0	13.0	35.0
4	44825	20.8	20.8	55.8
B	95380	44.2	44.2	100.0
Total	215862	100.0	100.0	

MATH Question 39

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	960	.4	.4	.4
*	49	.0	.0	.5
1	8849	4.1	4.1	4.6
2	31605	14.6	14.6	19.2
3	24691	11.4	11.4	30.6
D	149708	69.4	69.4	100.0
Total	215862	100.0	100.0	

MATH Question 40

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1448	.7	.7	.7
*	56	.0	.0	.7
1	23495	10.9	10.9	11.6
2	47675	22.1	22.1	33.7
4	92624	42.9	42.9	76.6
C	50564	23.4	23.4	100.0
Total	215862	100.0	100.0	

2011 Grade 6 Math Constructed Response Items

Descriptive Statistics

	N	Mean	Std. Deviation
MATH Question 41	215480	1.42	.855
MATH Question 42	215374	1.36	.832
MATH Question 43	215492	1.66	.664
MATH Question 44	213556	1.15	.810
MATH Question 45	215379	1.44	.851
MATH Question 46	214635	.61	.849
MATH Question 47	214773	1.87	1.153
MATH Question 48	215515	2.40	.916
MATH Question 49	215379	1.50	1.232
MATH Question 50	215121	1.45	.955
Valid N (listwise)	211584		

2011 Grade 6 Math SPIs

Descriptive Statistics

	N	Mean		Std.
	Statistic	Statistic	Std. Error	Statistic
MATH Standard 1 Performance Index	215859	60.16	.047	21.724
MATH Standard 2 Performance Index	215859	65.09	.055	25.486
MATH Standard 3 Performance Index	215859	65.63	.045	21.031
MATH Standard 4 Performance Index	215859	66.70	.044	20.581
MATH Standard 5 Performance Index	215859	69.73	.040	18.421
Valid N (listwise)	215859			