

Pre-Formatted Reports: Benchmark Test Item Analysis - New Format

Data Selections

Institution(s): All School Types, All Schools
Benchmark Administration: 09/03/14, 2014-2015 Baseline Math Grade 3
Trend Profile: 2014-2015
Subject: Mathematics
Test Focus: Mathematics
Test Level: All Benchmark Test Levels
Test Category: District Benchmark
Grade: All Grade Levels
Enrollment: Total for 2014-2015

Number of questions: 34
 Number of test-taking students: 1459

Student Responses

Question - Type	Correct		Incorrect	Most Common Mistake		Point Value	Points Achieved / Possible	P-Value/Item Mean	Discrimination
	Rate	Value	Total Rate	Rate	Value				
1 - Multiple Choice	89%	C	11%	4%	D	1	1298 / 1459	0.88	0.41
2 - Multiple Choice	89%	A	11%	4%	D	1	1298 / 1459	0.88	0.46
3 - Multiple Choice	69%	D	31%	15%	B	1	1002 / 1459	0.67	0.50
4 - Multiple Choice	72%	B	28%	13%	A	1	1048 / 1459	0.71	0.43
5 - Multiple Choice	69%	C	31%	24%	B	1	1006 / 1459	0.68	0.47
6 - Multiple Choice	72%	A	28%	15%	D	1	1046 / 1459	0.71	0.36
7 - Multiple Choice	61%	B	39%	16%	D	1	884 / 1459	0.60	0.36
8 - Multiple Choice	65%	C	35%	24%	B	1	949 / 1459	0.64	0.53
9 - Multiple Choice	80%	A	20%	8%	B	1	1171 / 1459	0.79	0.52
10 - Multiple Choice	70%	A	30%	10%	B	1	1019 / 1459	0.69	0.44
11 - Multiple Choice	93%	D	7%	2%	B	1	1359 / 1459	0.91	0.38
12 - Multiple Choice	90%	B	10%	5%	D	1	1313 / 1459	0.89	0.45
13 - Multiple Choice	83%	C	17%	7%	B	1	1215 / 1459	0.82	0.50
14 - Multiple Choice	54%	D	46%	29%	B	1	784 / 1459	0.52	0.51

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15 - Multiple Choice	46%	D	54%	21%	A	1	665 / 1459	0.44	0.52
16 - Multiple Choice	28%	D	72%	41%	C	1	414 / 1459	0.28	0.27
17 - Multiple Choice	52%	A	48%	30%	B	1	757 / 1459	0.51	0.55
18 - Multiple Choice	68%	B	32%	14%	D	1	985 / 1459	0.67	0.53
19 - Multiple Choice	64%	D	36%	17%	B	1	941 / 1459	0.64	0.48
20 - Multiple Choice	53%	B	47%	24%	A	1	768 / 1459	0.52	0.41
21 - Multiple Choice	74%	A	26%	14%	C	1	1074 / 1459	0.72	0.49
22 - Multiple Choice	48%	C	52%	21%	A	1	705 / 1459	0.47	0.55
23 - Multiple Choice	91%	A	9%	4%	C	1	1325 / 1459	0.90	0.41
24 - Multiple Choice	70%	A	30%	19%	C	1	1017 / 1459	0.68	0.53
25 - Multiple Choice	51%	C	49%	29%	A	1	741 / 1459	0.50	0.39
26 - Multiple Choice	11%	A	89%	75%	B	1	157 / 1459	0.11	0.10
27 - Multiple Choice	93%	B	7%	2%	D	1	1351 / 1459	0.91	0.36
28 - Multiple Choice	55%	D	45%	17%	A	1	798 / 1459	0.53	0.56
29 - Multiple Choice	66%	C	34%	13%	B	1	956 / 1459	0.64	0.44
30 - Multiple Choice	34%	A	66%	53%	D	1	490 / 1459	0.33	0.33
31 - Multiple Choice	66%	B	34%	19%	A	1	957 / 1459	0.65	0.51
32 - Multiple Choice	48%	C	52%	25%	B	1	707 / 1459	0.47	0.44
33 - Multiple Choice	70%	A	30%	12%	C	1	1018 / 1459	0.68	0.57
34 - Multiple Choice	35%	B	65%	41%	A	1	505 / 1459	0.34	0.39
Summary	64%		36%				933 / 1459		

P-value represents an item's difficulty as evaluated by dividing the total number of correct responses by the total number of students tested. P-value is calculated for true/false, multiple choice, gridded or hot spot-single response items.

Item Mean is the average score for student responses to an open response question or to a multi-part question. Item Mean is calculated for inline response, matching or hot spot-multiple selections items.

Discrimination or Item Total Score Correlation is the correlation between the question score and the overall test score and indicates the extent to which success on an item corresponds to success on the test.

Standards Alignment to NC Standards

Question	ID	Standard Description
1 - Multiple Choice	CCSS.Math.Content.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. See standard 1.OA.6 for a list of mental strategies.

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- 2 - Multiple Choice** **CCSS.Math.Content.2.OA.B.2** Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. See standard 1.OA.6 for a list of mental strategies.
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- 3 - Multiple Choice** **CCSS.Math.Content.2.MD.C.7** Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
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- 4 - Multiple Choice** **CCSS.Math.Content.2.MD.A.2** Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
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- 5 - Multiple Choice** **CCSS.Math.Content.2.NBT.B.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
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- 6 - Multiple Choice** **CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 7 - Multiple Choice** **CCSS.Math.Content.2.OA.C.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
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- 8 - Multiple Choice** **CCSS.Math.Content.2.OA.C.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
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- 9 - Multiple Choice** **CCSS.Math.Content.2.MD.C.8** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?
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- 10 - Multiple Choice** **CCSS.Math.Content.2.MD.D.9** Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
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- 11 - Multiple Choice** **CCSS.Math.Content.2.G.A.3** Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
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- 12 - Multiple Choice** **CCSS.Math.Content.2.NBT.B.9** Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects.
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- 13 - Multiple Choice** **CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 14 - Multiple Choice** **CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 15 - Multiple Choice** **CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 16 - Multiple Choice** **CCSS.Math.Content.2.NBT.B.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
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- 17 - Multiple Choice** **CCSS.Math.Content.2.NBT.A.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.
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- 18 - Multiple Choice CCSS.Math.Content.2.OA.C.3** Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
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- 19 - Multiple Choice CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 20 - Multiple Choice CCSS.Math.Content.2.NBT.A.2** Count within 1000; skip-count by 5s, 10s, and 100s.
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- 21 - Multiple Choice CCSS.Math.Content.2.NBT.B.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
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- 22 - Multiple Choice CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 23 - Multiple Choice CCSS.Math.Content.2.G.A.3** Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
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- 24 - Multiple Choice CCSS.Math.Content.2.MD.C.7** Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
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- 25 - Multiple Choice CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 26 - Multiple Choice CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 27 - Multiple Choice CCSS.Math.Content.2.G.A.3** Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
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- 28 - Multiple Choice CCSS.Math.Content.2.OA.A.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
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- 29 - Multiple Choice CCSS.Math.Content.2.NBT.B.6** Add up to four two-digit numbers using strategies based on place value and properties of operations.
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- 30 - Multiple Choice CCSS.Math.Content.2.G.A.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Sizes are compared directly or visually, not compared by measuring.
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- 31 - Multiple Choice CCSS.Math.Content.2.NBT.A.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
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- 32 - Multiple Choice CCSS.Math.Content.2.NBT.A.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.
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- 33 - Multiple Choice CCSS.Math.Content.2.G.A.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles,

quadrilaterals, pentagons, hexagons, and cubes. Sizes are compared directly or visually, not compared by measuring.

34 - Multiple Choice CCSS.Math.Content.2.NBT.B.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
