NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION IN TRACE Reports

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 1

Trend Profile: 2014-2015 Subject: Mathematics Test Focus: Mathematics Test Level: All Benchmark Test Levels Test Carcons: District Benchmark

Test Category: District Benchmark Grade: 01 Enrollment: Total for 2014-2015

Number of questions: 23

Number of test-taking students: 1414

Student Responses

Question - Type	Correct		Incorrect	Most Common Mistake		Daint	Points	P- Value/	
	Rate	Value	Total Rate	Rate	Value	Point Value	Achieved / Possible	Item Mean	Discriminati on
1 - Multiple Choice	67%	Α	33%	33%	В	1	950 / 1414	0.67	0.49
2 - Multiple Choice	82%	A	18%	18%	В	1	1161 / 1414	0.82	0.63
3 - Multiple Choice	69%	Α	31%	31%	В	1	979 / 1414	0.69	0.61
4 - Multiple Choice	80%	A	20%	20%	В	1	1135 / 1414	0.80	0.58
5 - Multiple Choice	84%	A	16%	15%	В	1	1192 / 1414	0.84	0.56
6 - Multiple Choice	69%	A	31%	30%	В	1	981 / 1414	0.69	0.55
7 - Multiple Choice	85%	A	15%	15%	В	1	1203 / 1414	0.85	0.55
8 - Multiple Choice	79%	A	21%	20%	В	1	1122 / 1414	0.80	0.53
9 - Multiple Choice	61%	Α	39%	39%	В	1	864 / 1414	0.61	0.46
10 - Multiple Choice	93%	A	7%	7%	В	1	1315 / 1414	0.93	0.39
11 - Multiple Choice	99%	A	1%	1%	В	1	1393 / 1414	0.98	0.21
12 - Multiple Choice	83%	A	17%	17%	В	1	1167 / 1414	0.82	0.40
13 - Multiple Choice	82%	A	18%	18%	В	1	1163 / 1414	0.82	0.46
14 - Multiple Choice	88%	A	12%	12%	В	1	1243 / 1414	0.88	0.50
15 - Multiple Choice	84%	Α	16%	16%	В	1	1183 /	0.83	0.31

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							1414		
16 - Multiple Choice	85%	A	15%	15%	В	1	1201 / 1414	0.85	0.56
17 - Multiple Choice	85%	A	15%	15%	В	1	1204 / 1414	0.84	0.50
18 - Multiple Choice	92%	A	8%	8%	В	1	1304 / 1414	0.92	0.41
19 - Multiple Choice	92%	A	8%	8%	В	1	1295 / 1414	0.91	0.44
20 - Multiple Choice	98%	A	2%	2%	В	1	1390 / 1414	0.98	0.22
21 - Multiple Choice	99%	A	1%	1%	В	1	1393 / 1414	0.98	0.28
22 - Multiple Choice	92%	A	8%	8%	В	1	1298 / 1414	0.91	0.45
23 - Multiple Choice	32%	A	68%	68%	В	1	454 / 1414	0.32	0.44
Summary	82%		18%				1156 / 1414		

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 Common Core State Standards

Question	ID Standard Description
1 - Multiple Choice	CCSS.Math.Content.K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
2 - Multiple Choice	CCSS.Math.Content.K.CC.A.1 Count to 100 by ones and by tens.
3 - Multiple Choice	CCSS.Math.Content.K.CC.A.1 Count to 100 by ones and by tens.
4 - Multiple Choice	CCSS.Math.Content.K.CC.A.1 Count to 100 by ones and by tens.
5 - Multiple Choice	CCSS.Math.Content.K.CC.A.2Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
6 - Multiple Choice	CCSS.Math.Content.K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
7 - Multiple Choice	CCSS.Math.Content.K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
8 - Multiple Choice	CCSS.Math.Content.K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

9 - Multiple Choice CCSS.Math.Content.K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each

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composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

- 10 Multiple Choice CCSS.Math.Content.K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- **11 Multiple Choice CCSS.Math.Content.K.G.B.5** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- **12 Multiple Choice CCSS.Math.Content.K.G.B.5** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- 13 Multiple Choice CCSS.Math.Content.K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- **14 Multiple Choice CCSS.Math.Content.K.CC.A.3** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- **15 Multiple Choice CCSS.Math.Content.K.G.A.1** Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- **16 Multiple Choice CCSS.Math.Content.K.OA.A.2** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- 17 Multiple Choice CCSS.Math.Content.K.CC.B.4cUnderstand that each successive number name refers to a quantity that is one larger.
- 18 Multiple Choice CCSS.Math.Content.K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- 19 Multiple Choice CCSS.Math.Content.K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
- 20 Multiple Choice CCSS.Math.Content.K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
- 21 Multiple Choice CCSS.Math.Content.K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. Include groups with up to ten objects.
- 22 Multiple Choice CCSS.Math.Content.K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.
- **23 Multiple Choice CCSS.Math.Content.K.OA.A.3** Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).