

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

### Data Selections

**Institution(s):** All School Types,All Schools  
**Benchmark Administration:** 10/28/14, 2014-2015 Benchmark 1 Math5  
**Trend Profile:** 2014-2015  
**Subject:** Mathematics  
**Test Focus:** Mathematics  
**Test Level:** All Benchmark Test Levels  
**Test Category:** District Benchmark  
**Grade:** All Grade Levels  
**Enrollment:** Current

Number of questions: 30  
 Number of test-taking students: 1310

### 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	74%	B	26%	18%	C	1	965 / 1310	0.71	0.47
2 - Multiple Choice	76%	D	24%	16%	B	1	992 / 1310	0.73	0.54
3 - Multiple Choice	89%	C	11%	5%	B	1	1165 / 1310	0.88	0.43
4 - Multiple Choice	48%	B	52%	44%	A	1	627 / 1310	0.45	0.63
5 - Multiple Choice	71%	D	29%	21%	C	1	933 / 1310	0.72	0.54
6 - Multiple Choice	34%	B	66%	48%	C	1	450 / 1310	0.32	0.38
7 - Multiple Choice	40%	C	60%	26%	A	1	529 / 1310	0.42	0.39
8 - Multiple Choice	33%	B	67%	33%	C	1	427 / 1310	0.29	0.24
9 - Multiple Choice	81%	C	19%	9%	D	1	1056 / 1310	0.79	0.48
10 - Multiple Choice	66%	B	34%	14%	D	1	861 / 1310	0.64	0.50
11 - Multiple Choice	55%	A	45%	23%	B	1	718 / 1310	0.55	0.43
12 - Multiple Choice	60%	D	40%	26%	B	1	792 / 1310	0.62	0.57
13 - Multiple Choice	48%	B	52%	38%	A	1	626 / 1310	0.47	0.44
14 - Multiple Choice	86%	A	14%	8%	B	1	1132 / 1310	0.86	0.50
15 - Multiple Choice	55%	D	45%	27%	C	1	722 / 1310	0.52	0.47
16 - Multiple Choice	75%	A	25%	12%	C	1	980 / 1310	0.73	0.45
17 - Multiple Choice	77%	C	23%	10%	D	1	1015 / 1310	0.78	0.58
18 - Multiple Choice	58%	D	42%	17%	A	1	765 / 1310	0.58	0.57

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19 - Multiple Choice	79%	A	21%	12%	C	1	1037 / 1310	0.80	0.29
20 - Multiple Choice	55%	D	45%	28%	C	1	723 / 1310	0.53	0.51
21 - Multiple Choice	73%	A	27%	12%	B	1	956 / 1310	0.71	0.52
22 - Multiple Choice	80%	A	20%	10%	C	1	1043 / 1310	0.79	0.42
23 - Multiple Choice	72%	B	28%	10%	C	1	939 / 1310	0.68	0.48
24 - Multiple Choice	74%	A	26%	19%	D	1	972 / 1310	0.72	0.54
25 - Multiple Choice	56%	D	44%	32%	B	1	738 / 1310	0.51	0.48
26 - Multiple Choice	49%	A	51%	22%	B	1	642 / 1310	0.47	0.41
27 - Multiple Choice	47%	B	53%	28%	C	1	616 / 1310	0.18	-0.11
28 - Multiple Choice	71%	B	29%	16%	A	1	935 / 1310	0.69	0.50
29 - Multiple Choice	64%	A	36%	24%	B	1	836 / 1310	0.62	0.51
30 - Multiple Choice	34%	A	66%	54%	B	1	440 / 1310	0.35	0.51
<b>Summary</b>	<b>63%</b>		<b>37%</b>				<b>821 / 1310</b>		

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
<b>1 - Multiple Choice</b>	<b>CCSS.Math.Content.5.NBT.B.5</b>	Fluently multiply multi-digit whole numbers using the standard algorithm.
<b>2 - Multiple Choice</b>	<b>CCSS.Math.Content.5.NBT.B.5</b>	Fluently multiply multi-digit whole numbers using the standard algorithm.
<b>3 - Multiple Choice</b>	<b>CCSS.Math.Content.5.NBT.B.6</b>	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
<b>4 - Multiple Choice</b>	<b>CCSS.Math.Content.5.NBT.B.6</b>	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
<b>5 - Multiple Choice</b>	<b>CCSS.Math.Content.5.NBT.B.6</b>	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
<b>6 - Multiple Choice</b>	<b>CCSS.Math.Content.5.NBT.A.1</b>	Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

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- 7 - Multiple Choice** **CCSS.Math.Content.5.NBT.A.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
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- 8 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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- 9 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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- 10 - Multiple Choice** **CCSS.Math.Content.5.NBT.A.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
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- 11 - Multiple Choice** **CCSS.Math.Content.5.NBT.A.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
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- 12 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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- 13 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
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- 14 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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- 15 - Multiple Choice** **CCSS.Math.Content.5.NBT.A.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
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- 16 - Multiple Choice** **CCSS.Math.Content.5.NBT.A.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
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- 17 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
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- 18 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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- 19 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.5** Fluently multiply multi-digit whole numbers using the standard algorithm.
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- 20 - Multiple Choice** **CCSS.Math.Content.5.NBT.B.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
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- 21 - Multiple Choice CCSS.Math.Content.5.NBT.A.3** Read, write, and compare decimals to thousandths.
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- 22 - Multiple Choice CCSS.Math.Content.5.NBT.A.3** Read, write, and compare decimals to thousandths.
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- 23 - Multiple Choice CCSS.Math.Content.5.NBT.A.4** Use place value understanding to round decimals to any place.
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- 24 - Multiple Choice CCSS.Math.Content.5.NBT.A.3** Read, write, and compare decimals to thousandths.
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- 25 - Multiple Choice CCSS.Math.Content.5.NBT.A.4** Use place value understanding to round decimals to any place.
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- 26 - Multiple Choice CCSS.Math.Content.5.NBT.A.4** Use place value understanding to round decimals to any place.
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- 27 - Multiple Choice CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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- 28 - Multiple Choice CCSS.Math.Content.5.NBT.A.3** Read, write, and compare decimals to thousandths.
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- 29 - Multiple Choice CCSS.Math.Content.5.NBT.A.4** Use place value understanding to round decimals to any place.
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- 30 - Multiple Choice CCSS.Math.Content.5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used.
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