2019-20 NC Check-In 3
Grade 5 Mathematics
State Item Statistics

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
Numbers and Operations in Base Ten	**5.NBT.5**	Demonstrate fluency with the multiplication of two whole numbers up to a three-digit number by a two-digit number using the standard algorithm	3	Skill/Concept	81.4
			5	Recall	87.6
			6	Recall	83.8
			9*	Skill/Concept	56.0
			24^	Skill/Concept	88.9
	5.NBT.6	Find quotients with remainders when dividing whole numbers with up to four-digit dividends and two-digit divisors using rectangular arrays, area models, repeated subtraction, partial quotients, and/or the relationship between multiplication and division. Use models to make connections and develop the algorithm.	1	Recall	84.8
			8	Recall	84.3
			10*	Skill/Concept	49.2
			15^	Skill/Concept	43.1
			18^	Skill/Concept	52.0
	5.NBT.7	Compute and solve real-world problems with multi-digit whole numbers and decimal numbers. • Add and subtract decimals to thousandths using models, drawings or strategies based on place value. • Multiply decimals with a product to thousandths using models, drawings, or strategies based on place value. • Divide a whole number by a decimal and divide a decimal by a whole number, using repeated subtraction or area models. Decimals should be limited to hundredths. • Use estimation strategies to assess reasonableness of answers.	2	Skill/Concept	64.6
			11*	Skill/Concept	54.4
			13*^	Skill/Concept	21.5
			17^	Strategic Thinking	20.9
			21^	Skill/Concept	57.2
Number and Operations-Fractions	**5.NF.1**	Add and subtract fractions, including mixed numbers, with unlike denominators using related fractions: halves, fourths and eighths; thirds, sixths, and twelfths; fifths, tenths, and hundredths. • Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. • Solve one- and two-step word problems in context using area and length models to develop the algorithm. Represent the word problem in an equation.	4	Skill/Concept	73.0
			12*^	Skill/Concept	60.4
			20^	Skill/Concept	51.5
			23^	Skill/Concept	69.1
			25^	Skill/Concept	78.6
	5.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction, including mixed numbers. • Use area and length models to multiply two fractions, with the denominators 2, 3, 4. • Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number and when multiplying a given number by a fraction less than 1 results in a product smaller than the given number. • Solve one-step word problems involving multiplication of fractions using models to develop the algorithm.	7	Skill/Concept	61.2
			14*^	Skill/Concept	39.8
			16^	Skill/Concept	64.6
			19^	Skill/Concept	66.7
			22^	Skill/Concept	44.7

* Items marked with an asterisk (*) are gridded response items.

^ Students had access to a calculator when completing items marked with a ^.

Note: Results from NC Check-Ins should not be compared across interims, districts, or the state.

Each math Grade 5 NC Check-In assesses different content standards.