

**2018-19 NC Check-In 1
Grade 4 Mathematics
State Item Statistics**

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
Numbers and Algebraic Thinking	4.OA.1	Interpret a multiplication equation as a comparison. Multiply or divide to solve word problems involving multiplicative comparisons using models and equations with a symbol for the unknown number. Distinguish multiplicative comparison from additive comparison	1	Recall	75.5
			2	Skill/Concept	62.4
			6	Skill/Concept	74.3
			7	Skill/Concept	58.8
			8	Skill/Concept	51.5
	4.OA.3	Solve two-step word problems involving the four operations with whole numbers. <ul style="list-style-type: none"> Use estimation strategies to assess reasonableness of answers. Interpret remainders in word problems. Represent problems using equations with a letter standing for the unknown quantity. 	3	Skill/Concept	63.1
			4	Skill/Concept	39.9
			5	Skill/Concept	63.8
			9	Skill/Concept	49.2
	4.OA.4	Find all factor pairs for whole numbers up to and including 50 to: <ul style="list-style-type: none"> Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number is a multiple of a given one-digit number. Determine if the number is prime or composite. 	14^	Recall	60.1
			15^	Recall	74.9
			19^	Recall	77.6
			20^	Recall	74.8
21^			Recall	34.9	
Measurement and Data	4.MD.3	Solve problems with area and perimeter. <ul style="list-style-type: none"> Find areas of rectilinear figures with known side lengths. Solve problems involving a fixed area and varying perimeters and a fixed perimeter and varying areas. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. 	16^	Skill/Concept	33.4
			17^	Recall	62.0
			18^	Skill/Concept	55.9
			24^	Skill/Concept	67.5
			25^	Skill/Concept	55.4
	4.MD.4	Represent and interpret data using whole numbers. <ul style="list-style-type: none"> Collect data by asking a question that yields numerical data. Make a representation of data and interpret data in a frequency table, scaled bar graph, and/or line plot. Determine whether a survey question will yield categorical or numerical data. 	11^	Skill/Concept	74.4
			12^	Skill/Concept	66.4
			13^	Recall	67.9
			22^	Skill/Concept	79.8
			23^	Recall	88.8

* 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 4 NC Check-In assesses different content standards.