

2018-19 NC Check-In 3
Grade 3 Mathematics
State Item Statistics

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
Geometry	3.G.1	Reason with two-dimensional shapes and their attributes. <ul style="list-style-type: none"> Investigate, describe, and reason about composing triangles and quadrilaterals and decomposing quadrilaterals. Recognize and draw examples and non-examples of types of quadrilaterals including rhombuses, rectangles, squares, parallelograms, and trapezoids. 	1	Recall	62.8
			3	Skill/Concept	76.2
			8	Recall	43.5
			9	Skill/Concept	46.3
			16^	Recall	52.5
Measurement and Data	3.MD.7	Relate area to the operations of multiplication and addition. <ul style="list-style-type: none"> Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving problems, and represent whole-number products as rectangular areas in mathematical reasoning. Use tiles and/or arrays to illustrate and explain that the area of a rectangle can be found by partitioning it into two smaller rectangles, and that the area of the large rectangle is the sum of the two smaller rectangles. 	13^	Recall	82.5
			17^	Skill/Concept	79.9
			19^	Skill/Concept	30.7
			21^	Recall	75.0
			22^	Recall	80.1
Number and Operations-Fractions	3.NF.2	Interpret fractions with denominators of 2, 3, 4, 6, and 8 using area and length models. <ul style="list-style-type: none"> Using an area model, explain that the numerator of a fraction represents the number of equal parts of the unit fraction. Using a number line, explain that the numerator of a fraction represents the number of lengths of the unit fraction from 0. 	2	Skill/Concept	40.5
			5	Recall	84.3
			6	Recall	86.2
			10	Recall	58.6
			23^	Recall	84.0
	3.NF.3	Represent equivalent fractions with area and length models by: <ul style="list-style-type: none"> Composing and decomposing fractions into equivalent fractions using related fractions: halves, fourths and eighths; thirds and sixths. Explaining that a fraction with the same numerator and denominator equals one whole. Expressing whole numbers as fractions, and recognize fractions that are equivalent to whole numbers 	7	Recall	77.8
			11	Skill/Concept	46.0
			12	Skill/Concept	34.1
			14^	Recall	25.2
			25^	Skill/Concept	52.9
	3.NF.4	Compare two fractions with the same numerator or the same denominator by reasoning about their size, using area and length models, and using the >, <, and = symbols. Recognize that comparisons are valid only when the two fractions refer to the same whole with denominators: halves, fourths and eighths; thirds and sixths.	4	Skill/Concept	69.5
			15^	Recall	56.1
			18^	Recall	61.1
20^			Skill/Concept	55.6	
24^			Recall	69.2	

* 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 3 NC Check-In assesses different content standards.