

North Carolina EXTENDED CONTENT STANDARDS Mathematics CROSSWALK

North Carolina EXTENDED CONTENT STANDARDS 2017		North Carolina EXTENDED CONTENT STANDARDS 2011	OMITTED AND INTEGRATED STANDARDS
Standards for Mathematical Practice			
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.		Standards were added, omitted and/or integrated to align with the new K-8 Mathematics Standards adopted June 2017 for implementation 2018 – 2019.	
Kindergarten			
Abbreviation	Standard		
Counting and Cardinality		Counting and Cardinality	
Know number names and the counting sequence.			
K.CC.1	Use concrete and pictorial representations to count up to 10 items by ones.	3. Count forward using the 1-10 sequence.	Integrated 1, 2, and 4.
Count to tell the number of objects.			
K.CC.4	Demonstrate one-to-one correspondence by pairing one object with one and only one number and each name with only one object.	5. Understand the relationship between numbers and quantities (0-10); connect counting to cardinality. 6. Count to answer “how many?” questions about as many as 10 things arranged in a line or a rectangular array; given a number from 1-10, count out that many objects or indicate the number of objects.	Integrated a, b, c.
K.CC.5	Count out up to three objects from a larger set, pairing each object with one and only one number name to tell how many.		
Compare Numbers			
K.CC.6	Identify whether the number of objects in one group is more than, less than, or equal to the number of objects in another group, when the quantities are clearly different.	7. Identify whether the number of objects in one group is more, less, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	
Operations and Algebraic Thinking		Operations and Algebraic Thinking	
Understand addition and subtraction.			
K.OA.1	Represent addition as putting together, and subtraction as taking away in everyday activities.	n/a	
Measurement and Data		Measurement and Data	
Describe and compare measurable attributes.			
K.MD.1	Classify objects by attributes, (long, short, heavy, light, big, small).	1. Compare the length of two objects using direct comparison.	omitted 2, 3, and 4 Integrated 5, 6, and 7

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Geometry		Geometry	
Identify and describe shapes.			
K.G.2	Identify shapes of same size and orientation (circle, square, rectangle, triangle).	n/a	Integrated standards 1 and 3 omitted 2
First Grade			
Abbreviation	Standard		
Operations and Algebraic Thinking		Operations and Algebraic Thinking	
Represent and solve problems.		Solve problems involving joining and separating.	
1.OA.1	Represent addition and subtraction with objects, fingers, drawings, or sounds (e.g., claps) within 10.	1. Use informal language (take away, give, add, more, same quantity) to describe the joining situations (putting together) and separating situations (breaking apart).	
Add and subtract within 20.			
1.OA.6	Use manipulatives or visual representations to indicate the number that results when adding "one more" or subtracting "one less".	2. Use joining and separating to solve problems (to at least 10) using objects, representations and numbers using only two sets.	
Analyze addition and subtraction equations within 20.			
1.OA.7	Recognize two groups that have the same or equal quantity.	4. Use objects and representations to make two sets equal.	integrated standard 3
Number and Operation in Base Ten		Number and Operation in Base Ten	
Extend and recognize patterns in the counting sequence.		Extend the counting sequence.	
NC.1.NBT.1	Use concrete and pictorial representations to count up to 20 items by ones.	1. Count forward using the 1-20 sequence.	integrated standards 3, 4 omitted standard 5
NC.1.NBT.7	Count as many as 10 objects and represent the quantity with the corresponding numeral.	2. Write or use an alternative pencil to write numbers 0 - 20.	
Understand place value.			
NC.1.NBT.2	Create sets up to 10.	7. Use a set of objects and separate set into smaller sets (number partners).	integrated standard 8
NC.1.NBT.3	Compare two groups of 10 or fewer items when the number of items in each group is similar.	6. Compare objects, representations and numbers (1-20) using words "more" and "less".	integrated standard 9
Use place value understanding and properties of operations.			
NC.1.NBT.4	Compose numbers less than or equal to five in more than one way.	n/a	
NC.1.NBT.6	Decompose numbers less than or equal to five in more than one way.	n/a	
Measurement and Data		Measurement and Data	
Measure lengths.		Describe similarities and differences in length when measuring objects directly and indirectly.	
NC.1.MD.1	Compare lengths to determine which is longer, shorter, taller, and shorter.	1. Describe length of an object (long/short, big/small).	integrated standard 2
Build understanding of time and money.		Use the concept of time as it relates to sequences.	
NC.1.MD.3	Identify tomorrow, yesterday, today morning, afternoon, day, night and activities that come before, next, and after.	3. Use the words "today, tomorrow and yesterday" to refer to personal activities and events.	omitted standards 4 and 5
Represent and interpret data.			

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NC.1.MD.4	Organize data into categories by sorting.	6. Collect and categorize objects or pictures to answer questions about topics relevant to student.	omitted standard 7
Geometry		Geometry	
Reason with shapes and their attributes.		Compare shapes and their attributes (circles, rectangles, squares and triangles).	
NC.1.G.1	Identify common two-dimensional shapes: square, circle, triangle, and rectangle.	1. Describe attributes of the shape.	omitted standard 4
NC.1.G.2	Sort shapes of same size and orientation (circle, square, rectangle, triangle).	2. Correctly name shapes regardless of their orientations or overall size.	
NC.1.G.3	Put together two pieces to make a shape that relates to the whole.	3. Partition circles and rectangles into two and four equal shares or recognize when circles and squares have been partitioned equally.	
Second Grade			
Abbreviation	Standard		
Operations and Algebraic Thinking		Operations and Algebraic Thinking	
Work with equal groups.		Work with equal groups of objects to gain foundations for multiplication.	
NC.2.OA.3	Equally distribute even numbers of objects (up to 20) between two groups.	3. Share fairly collections of up to 20 items between 2-4 people.	omitted standards 4 and 5 integrated standard 2
NC.2.OA.4	Use addition to find the total number of objects arranged within equal groups up to a total of 20.	1. Use objects and representations to add and subtract groups of objects.	
Number and Operation in Base Ten		Number and Operation in Base Ten	
Understand place value.			
NC.2.NBT.1	Represent numbers up to 30 with sets of tens and ones using objects in columns or arrays.	1. Count (0-30) by indicating one object at a time (one-to-one tagging) using one counting word for every object (synchrony), while keeping track of objects that have and have not been counted.	integrated standard 3 integrated standard 4 omitted standard 7
NC.2.NBT.2	Use concrete and pictorial representations to count up to 30 items by ones.	2. Write or use an alternative pencil to write numbers 0-30.	
NC.2.NBT.3	Count sets (1 to 30) of concrete and pictorial representations, then identify the corresponding numeral.	5. Illustrate whole numbers to 30 using objects, representations and numbers.	
NC.2.NBT.4	Compare sets of numbers or objects to determine greater than, less than, or equal.	6. Compare sets of objects and numbers using appropriate vocabulary (more, less, equal, one more, one less, etc.).	
Use place value understanding and properties of operations.		Use place value understanding to add and subtract.	
NC.2.NBT.5	Model the meaning of the symbols for addition (+) and subtraction (-) by using manipulatives to compose and decompose numbers up to 20.	8. Use part-part-whole relationships (including 2 or more parts) to compose and decompose numbers.	integrated standard 11
NC.2.NBT.6	Identify how many tens and ones are in numbers up to 30.	9. Compare numbers (0-30) in relationship to benchmark number 10.	
NC.2.NBT.7	Use objects, representations, and numbers (0–20) to add and subtract.	10. Use objects, representations and numbers (0-30) to add and subtract.	

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Measurement and Data		Measurement and Data	
Measure and estimate lengths.		Measure lengths in non-standard units.	
NC.2.MD.1	Measure the length of objects using non-standard units.	1. Use nonstandard units to compare length of objects.	
NC.2.MD.3	Order by length using non-standard units.	n/a	
Relate addition and subtraction to length.		Relate addition to length.	
NC.2.MD.5	Increase or decrease length by adding or subtracting units.	2. Add the number of same units to determine the length of a given object.	
NC.2.MD.6	Use a number line to add one more unit of length.	n/a	
Build understanding of time and money.		Work with time and money.	
NC.2.MD.7	Identify on a digital clock the hour that matches a routine activity.	n//a	omitted standards 3, 4, and 5
NC.2.MD.8	Recognize that money has value.	6. Solve word problems using one dollar bills or pennies.	
Represent and interpret data.			
NC.2.MD.10	Create picture graphs from collected measurement data.	7. Organize and represent data using concrete objects to create picture graphs.	omitted standard 8
Geometry		Geometry	
Reason with shapes and their attributes.		Reason with shapes and their attributes (circles, rectangles, squares and triangles).	
NC.2.G.1	Indicate the names of shapes (circle, square, rectangle, and triangle).	1. Use shape names to describe shapes.	omitted standards 3, 4, and 5
NC.2.G.3	Use manipulatives to partition shapes into equal parts.	5. Match 2 halves of a shape to create whole shape.	
Third Grade			
Abbreviation	Standard		
Operations and Algebraic Thinking		Operations and Algebraic Thinking	
Represent and solve problems involving multiplication and division.		Represent and solve problems.	
NC.3.OA.1	Use repeated addition, bar models, and arrays to find a total product when there are repeated equal groups.	3. Build models that represent repeated addition. (i.e., 2 groups of 4 is the same quantity as $4 + 4$).	omitted standards 1, 2, and 4
Explore patterns of numbers			
NC.3.OA.9	Identify arithmetic patterns.	n/a	
Number and Operation in Base Ten		Number and Operation in Base Ten	
Use place value to add and subtract.		Use place value understanding to add and subtract.	
NC.3.NBT.2	Use decade numbers (10, 20, 30) as benchmarks to demonstrate understanding of place value for numbers 0–30.	4. Compare numbers (0-30) in relationship to benchmark numbers 5 and 10.	omitted standards 1, 2, and 3
Generalize place value understanding for multi-digit numbers.			
NC.3.NBT.3	Count by tens using models such as objects, base ten blocks, ten-frames, or money.	n/a	omitted standards 5, 6, 7, and 8

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Number and Operation - Fractions		Number and Operation - Fractions	
Understand fractions as numbers.		Develop understanding of simple fractions.	
3.NF.1	Differentiate a fractional part from a whole.	1. Identify whole and half using concrete models (use continuous and discrete items).	omitted standard 2
Measurement and Data		Measurement and Data	
Solve problems involving measurement.		Solve problems with measurements involving time and length.	
NC.3.MD.1	Tell time to the hour on a digital clock.	n/a	omitted standards 1 and 2
NC.3.MD.2	Measure the length of objects using standard units.	3. Compare two objects using direct comparison of length.	integrated standards 4 and 5
Represent and interpret data.			
NC.3.MD.3	Use picture or bar graph data to answer questions about data.	6. Organize and represent data using a line plot.	integrated standards 7 and 8
Understand the concept of perimeter.			
NC.3.MD.8	Recognize that perimeter is the distance around a shape.	n/a	
Geometry		Geometry	
Reason with shapes and their attributes.			
NC.3.G.1	Identify the attributes of two dimensional shapes (circle, square, rectangle, triangle, oval, rhombus).	1. Recognize the attributes of a rhombus and other quadrilaterals.	omitted standard 2
Fourth Grade			
Abbreviation	Standard		
Operations and Algebraic Thinking		Operations and Algebraic Thinking	
Represent and solve problems involving multiplication and division.		Understand relationship between multiplication and division.	
NC.4.OA.1	Demonstrate the connection between repeated addition and multiplication. ($2 \times 3 = 2+2+2$).	3. Illustrate multiplication and division by making equal sized groups using models.	integrated standards 4 and 5
NC.4.OA.3	Solve one step word problem using addition or subtraction within 20.	1. Solve addition and subtraction problems when change is unknown (i.e. $8 + ? = 10$, $6 - ? = 3$).	omitted standards 2
Gain familiarity with factors and multiples.			
NC.4.OA.4	Show one way to arrive at a product.	n/a	
Explore patterns of numbers.			
NC.4.OA.5	Use repeating patterns to make predictions.	6. Use repeating shape patterns to make predictions and extend simple repeating patterns.	omitted standard 7
Number and Operation in Base Ten		Number and Operation in Base Ten	
Generalize place value understanding for multi-digit whole numbers.			
NC.4.NBT.2	Use concrete and pictorial representations to count up to 100 items.	1. Illustrate whole numbers to 50 by composing and decomposing numbers.	
NC.4.NBT.7	Round any whole number 0-30 to the nearest ten.	2. Use a number line or hundreds chart to compare numbers greater than, less than or equal to.	

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Use place value understanding and properties of operations to perform multi-digit arithmetic.			
NC.4.NBT.4	Add and subtract two-digit whole numbers.		3. Illustrate multiplication and division by making 2 equal sized groups up to 10.
Number and Operation - Fractions		Number and Operation - Fractions	
Extend understanding of fractions.		Develop understanding of fractions as numbers.	
NC.4.NF.1	Identify models of one half (1/2) and one fourth (1/4).		1. Identify whole, half, and fourth using concrete models (use continuous and discrete items).
			omitted standards 2 and 3
Use unit fractions to understand operations of fractions.			
NC.4.NF.3	Represent one half as one of two parts to make 1 whole.		n/a
Measurement and Data		Measurement and Data	
Solve problems involving measurement.		Solve problems involving measurement time and mass.	
NC.4.MD.1	Identify the smaller measurement unit that comprises a larger unit within a measurement system (inches/foot, centimeter/meter, minutes/hour).		2. Compare two objects using direct comparison of mass.
NC.4.MD.3	Determine the area of a square or rectangle by counting units of measure (unit squares).		4. Use customary unit to measure weight (ounces and pounds).
NC.4.MD.4	Interpret data from a picture or bar graph.		5. Organize and represent data using bar graphs.
			omitted standard 1
			omitted standard 3
			omit standards 6 and 7
Understand angles.			
NC.4.MD.6	Identify angles in geometric shapes.		n/a
Geometry		Geometry	
Classify shapes based on lines and angles in two-dimensional figures.		Identify lines, angles, and properties of a shape (circle, square, rectangle, triangle, and rhombus).	
NC.4.G.1	Recognize parallel lines and intersecting lines.		1. Identify angles in each shape.
NC.4.G.2	Describe the attributes of two dimensional shapes.		2. Describe the attributes of two-dimensional shapes (i.e., number sides and angles, straight vs curved lines).
NC.4.G.3	Use lines of symmetry to partition shapes into equal areas.		n/a
Fifth Grade		Fifth Grade	
Abbreviation	Standard		
Operations and Algebraic Thinking		Operations and Algebraic Thinking	
Understand the properties of multiplication.		Analyze patterns and relationships.	
NC.5.OA.3	Identify and extend numerical patterns.		2. Use repeating shape and numerical patterns to identify the unit, correct errors, and extend the pattern.
			omitted standards 1, 3, and 4
Number and Operation in Base Ten		Number and Operation in Base Ten	
Generalize place value understanding for multi-digit numbers.		Understand the place value system.	
NC.5.NBT.1	Identify equivalent groupings for quantities up to 99.		1. Understand the sequential order of the counting numbers (0-100) and their relative magnitudes.
Generalize place value understanding for multi-digit numbers.			
NC.5.NBT.3	Compare whole numbers up to 100 using symbols (<, >, =).		2. Illustrate whole numbers in groups of one's and ten's by composing and decomposing.

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Compute with multi-digit whole numbers and decimal numbers.			
NC.5.NBT.5	Multiply whole numbers up to 5×5 .	6. Illustrate the concept of multiplication by using equal shares to make 1-5 equal groups. 7. Illustrate the concept of division by making 1-5 equal sized groups and count number of groups.	omitted standards 3, 4, and 5
NC.5.NBT.6	Use fair and equal shares to solve division problems.		
Number and Operation - Fractions			
Add and subtract fractions.		Develop an understanding of addition with fractions.	
NC.5.NF.1	Identify models of halves ($1/2$, $2/2$), fourths ($1/4$, $2/4$, $3/4$, $4/4$), thirds ($1/3$, $2/3$, $3/3$), and tenths ($1/10$, $2/10$, $3/10$, $4/10$, $5/10$, $6/10$, $7/10$, $8/10$, $9/10$, $10/10$).	1. Identify whole, half, fourth and third using concrete models (use continuous and discrete items).	omitted standards 2, 3, and 4
Measurement and Data			
Convert like measurement units within a given measurement system.		Solve measurement problems using time, length, and mass (Customary System).	
NC.5.MD.1	Use standard units to measure weight and length of objects.	2. Compare the weight and length of an object using two different units.	omitted standards 1, 3, and 4
Represent and interpret data.			
NC.5.MD.2	Represent and interpret data on a picture, line plot, or bar graph.	5. Collect, organize and display data on a picture, line plot or bar graph.	integrated standard 6
NC.5.MD.5	Determine the volume of a rectangular prism by counting units of measure (unit cubes).	n/a	
Geometry		Geometry	
Understand the coordinate plane.		Graph points on the coordinate plane.	
NC.5.G.1	Use the x and y axis to locate a point or object on a graph.	1. Plot points in 1st quadrant.	
Classify two-dimensional figures into categories based on their properties.			
NC.5.G.3	Sort two-dimensional figures and identify the attributes (angles, number of sides, corners) they have in common.	2. Classify figures based on angles and parallel sides.	integrated standard 3
Sixth Grade			
Abbreviation	Standard		
Ratio and Proportional Relationships		Ratio and Proportional Relationships	
Understand ratio concepts and use ratio reasoning to solve problems.		Understand ratio concepts	
NC.6.RP.1	Demonstrate a ratio relationship with whole numbers using pictures or numbers.	1. Compare part-part and part-whole relationships (i.e., how many pieces of fruit? How many are apples how many are oranges?). 2. Write ratios to represent relationships between two quantities.	
NC.6.RP.3	Find equivalent ratios by multiplying or dividing the quantities by the same whole number.		
The Number System		The Number System	
Apply and extend previous understandings of multiplication and division to divide fractions		Extend previous understandings of fractions.	
NC.6.NS.1	Compare the relationships between two unit fractions.	1. Compare the relationships between the unit fractions ($1/2$, $1/3$, $1/4$, $1/5$, $1/6$, $1/8$, $1/10$).	omitted standard 2

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Compute fluently with multi-digit numbers and find common factors and multiples.		Multiply with numbers 0-10.	
NC.6.NS.2	Apply the concept of fair share and equal shares to divide.	n/a	
NC.6.NS.3	Solve two-factor multiplication problems with products up to 50 using concrete objects and using a calculator.	3. Solve multiplication problems when groups and size of groups is known but the whole is unknown ($a \times b = ?$).	
Apply and extend previous understandings of numbers to the system of rational numbers.			
NC.6.NS.5	Use integers to describe real world context, include zero and negative numbers.	5. Compare temperatures including negatives (use a nondigital thermometer).	omitted standard 4
Expressions and Equations		Expressions and Equations	
Apply and extend previous understandings of arithmetic to algebraic expressions.			
NC.6.EE.1	Identify equivalent number sentences.	1. Write, read, and evaluate addition and subtraction expressions in which letters stand for numbers; (i.e., 2 numbers with one number being represented by one letter (fixed variable $7+X=9$ where x can only be one number)).	
NC.6.EE.3	Apply the properties of addition to identify equivalent numerical expressions.	n/a	
Reason about one-variable inequalities.			
NC.6.EE.7	Identify an equation that represents a real-world problem in which variables are used to represent numbers.	n/a	
Geometry		Geometry	
Solve real-world and mathematical problems involving area, surface area, and volume.		Solve real-world and mathematical problems involving area, and perimeter.	
NC.6.G.1	Solve real-world and mathematical problems about area using unit squares.	2. Partition rectangular figures into rows and columns of same-size squares without gaps and overlaps and count them to find the area.	omitted standard 1
Statistics and Probability		Statistics and Probability	
Develop understanding of statistical variability.			
NC.6.SP.1	Display data on a graph or table that shows variability in the data.	1. Develop and implement a survey to collect data.	integrated standard 2
Summarize and describe distributions.			
NC.6.SP.4	Summarize data distributions shown in graphs or tables.	3. Summarize numerical data sets in relation to their context by reporting the number of observations.	
Seventh Grade		Seventh Grade	
Abbreviation	Standard		
Ratio and Proportional Relationships		Ratio and Proportional Relationships	
Analyze proportional relationships and use them to solve real-world and mathematical problems.		Understand ratio concepts and use ratio reasoning to solve problems.	
NC.7.RP.1	Model part-to-whole and part-to-part ratios to compare two measures of the same type.	1. Model equivalent ratios (i.e., 2:1 two reds and 1 blue; If I put down to more red blocks how many blue blocks should be added?).	
The Number System		The Number System	
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.		Apply and extend previous understandings of operations with fractions and whole numbers.	

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NC.7.NS.1	Add fractions with like denominators (halves, thirds, fourths, and tenths) with sums less than or equal to one.		1. Subtract fractions with like denominators (halves, thirds, fourths, fifths, sixths, eighths, and tenths) by modeling with fraction bars.	
NC.7.NS.2	a. Solve multiplication problems with products up to 100 using a calculator. b. Solve division problems with divisors up to five and also with a divisor of 10 without remainders. c. Express any remainder as a fraction.		2. Use all operations to solve problems with whole numbers (0-100).	
NC.7.NS.3	Solve one-step real-world problems involving decimal numbers to the tenths place.		n/a	
Expressions and Equations			Expressions and Equations	
Use properties of operations to generate equivalent expressions.				
NC.7.EE.1	Use one of the four operations to determine if expressions are equivalent.		2. Use concrete objects and representations to illustrate addition of 3 or more numbers, regardless of which pair is added first, equal the cardinal number (associative).	omitted standard 1
NC.7.EE.2	Identify arithmetic sequences where the difference between two consecutive terms is constant.		3. Use concrete objects and representations to illustrate multiplication of 2 numbers regardless of order equal the cardinal number (commutative).	
Solve real-world and mathematical problems using numerical and algebraic expressions, equations, and inequalities.			Solve real-life and mathematical addition and subtraction problems using numerical and algebraic equations.	
NC.7.EE.4	Use the concept of equality with models to solve one-step addition and subtraction equations.		5. Use the concept of equality to solve problems with unknown quantities.	integrated standard 4
Geometry			Geometry	
Draw, construct, and describe geometrical figures and describe the relationships between				
NC.7.G.1	Identify two similar geometric shapes that are proportional in size and in the same orientation.		n/a	
NC.7.G.2	Recognize geometric shapes with given conditions.		n/a	
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.			Solve real-life and mathematical problems involving area.	
NC.7.G.4	Determine the perimeter of a rectangle by adding the measures of the sides.		n/a	
NC.7.G.5	Recognize angles that are acute, obtuse, and right.		n/a	
NC.7.G.6	Determine the area of a rectangle using the formula for length \times width, and confirm the result using tiling or partitioning into unit squares.		1. Use rectangles and multiplication to solve area problems.	
Statistics and Probability			Statistics and Probability	
Use random sampling to draw inferences about a population.				
NC.7.SP.1	Answer a question related to the collected data from an experiment, given model of data, or from data collected by the student.		3. Interpret the results of the sampling.	integrated standards 1 and 2
Draw informal comparative inferences about two populations.				
NC.7.SP.3	Compare two sets of data within a single data display such as a picture graph, line plot, or bar graph.		4. Compare data from two picture graphs, line plots, or bar graphs.	

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Investigate chance processes and develop, use, and evaluate probability models.			
NC.7.SP.5	Describe the probability of events occurring as possible or impossible.		5. Understand the events of probability as being possible or impossible.
Eighth Grade			
Abbreviation	Standard		
The Number System			The Number System
Know that there are numbers that are not rational, and approximate them by rational			
NC.8.NS.1	Subtract fractions with like denominators (halves, thirds, fourths, and tenths) with minuends less than or equal to one.	n/a	
NC.8.NS.2	a. Express a fraction with a denominator of 100 as a decimal. b. Compare decimal quantities using less than (<), greater than (>), or equal to (=), in real-world examples to the hundredths place.	n/a	
Expressions and Equations			Expressions and Equations
Work with radicals and integer exponents.			
NC.8.EE.1	Identify the meaning of an exponent (limited to single digits and exponents of 2).	n/a	
NC.8.EE.3	Compose and decompose whole numbers up to 999.	n/a	
NC.8.EE.5	Given a table or graph with identified points, determine a ratio that describes the relationship between quantities.	2. Graph equivalent ratios in the first quadrant.	omitted standard 1
Analyze and solve linear equations and inequalities and pairs of simultaneous linear equations.			
NC.8.EE.7	Solve simple algebraic equations with one variable using addition and subtraction.		3. Use equations to solve problems using all operations when a part is unknown.
Functions			Functions
Define, evaluate, and compare functions.			
NC.8.F.2	Given a linear function table containing at least 2 complete ordered pairs, identify a missing number that completes another ordered pair (limited to linear functions).	n/a	
Use functions to model relationships between quantities.			
NC.8.F.4	Determine the values or rule of a function using a graph or a table.	n/a	
NC.8.F.5	Describe how a graph represents a relationship between two quantities as increasing or decreasing.	n/a	

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Geometry			Geometry	
Understand congruence and similarity using physical models, transparencies, or geometry			Understand congruence using physical models.	
NC.8.G.2	Identify congruent shapes after transformation (translation, rotation, and reflection).		2. Understand congruence in polygons with different orientations (proximity, position, directions and turns).	omitted standard 1
NC.8.G.4	Identify similar shapes after dilation (resizing).		n/a	
NC.8.G.5	Compare any angle to a right angle, and describe the angle as greater than, less than, or congruent to a right angle.		n/a	
Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.			Solve real-world and mathematical problems involving volume of right rectangular prisms.	
NC.8.G.9	Use the formula for volume to solve real-world and mathematical problems (limited to volume of rectangular prisms).		4. Measure volumes of right rectangular figures by counting unit cubes.	integrated standard 3
Statistics and Probability			Statistics and Probability	
Investigate patterns of association in bivariate data.				
NC.8.SP.1	Construct a graph or table from given categorical data and compare data categorized in the graph or table.		1. Describe trends such as positive, negative or no association given a scatter plot.	