5th Grade Math
2023 - 2024 NE CARES Pacing Guide

Resources Provided by NC Department of Public Instruction (NCDPI):

Quick Reference Guide for NC Standard Course of Study	NC Standard Course of Study(3rd-5th grade math only)	Unpacking Document	EOG Test Specifications	NC Check-In 2.0 Information	Released EOG	5th Grade Math Games

Other Resources:

NC Tools for Teachers	NC2ML Instructional Framework	NC2ML Resources for Grades K-5	Standards for Mathematical Practice

School Year at a Glance:

Domain/Cluster/Strand	Standards			
	1st Nine Weeks	2nd Nine Weeks	3rd Nine Weeks	4th Nine Weeks
Number Operations in Base Ten	NC.5.NBT.5	NC.5.NBT.6	NC.5.NBT.1, NC.5.NBT.3, NC.5.NBT.7	5.NBT.3, 5.NBT.5 NBT.6, NBT.7
Measurement and Data	NC.5.MD.4, NC.5.MD.5	NC.5.MD.2	NC.5.MD.1	NC.5.MD.1, NC.MD.2
Operations and Algebraic Thinking	NC.5.OA.3, NC.5.OA.2			
Numbers and Operations Fractions		NC.5.NF.1, NC.5.NF.4 NC.5.NF.7	NC.5.NF.3	NC.5.NF.1, NC.5.NF.3, NC.5.NF.4, NC.5.NF.7
Geometry	NC.5.G.1, NC.5.G.3			NC.5.G.1
NC Check-In 2.0 Information	Test A NC.5.OA.2 NC.5.OA.3 NC.5.NBT.5 NC.5.MD.5 NC.5.G.1	Test B NC.5.NBT.6 NC.5.NF.1 NC.5.NF.4 NC.5.NF.7 NC.5.MD.2	Test C NC.5.NBT.3 NC.5.NBT.7 NC.5.NF.3 NC.5.NF.4 NC.5.MD.1	

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Unit/Module Pacing: 1st Quarter

Quarter 1 - 42 Days					
Number of Days	**Name of Unit/Module**	**Pre-Requisites**	**Standards**	**Academic Vocabulary**	**Instructional Resources**
15 Multiplication-Lesson Plan	Multiplying Whole Numbers	NC.4.MD.3 Determine the area of a square or rectangle by counting units of measure (unit squares). NC.4.NBT.5 Multiply a whole number of up to three digits by a one-digit whole number, and multiply up to two two-digit numbers with place value understanding using area models, partial products, and the properties of operations. Use models to make connections and develop the algorithm. NC.4.NBT.6 Find whole-number quotients and remainders with up to three-digit dividends and one-digit divisors with place value understanding using rectangular arrays, area models, repeated subtraction, partial quotients, properties of operations, and/or the relationship between multiplication and division.	5.NBT.5-Demonstrate fluency with the multiplication of two whole numbers up to a three-digit number by a two-digit number.	**algorithm** -a step by step process use to solve a problem. **factor** - a number multiplied. **product**-the answer you get when you multiply. **sum**- the answer you get when you add. estimate -to find a number that is close to an exact amount by rounding. **partial product-** a product of two numbers obtained when we break the numbers into parts, multiply the parts separately and then add them together. **multiplication** - repeated addition. **digit**-the symbols 0 to 9 are used to write numbers **Operation -** A math procedure involving addition, subtraction, multiplication, and/or division. **array –** a drawing in the shape of a rectangle use	Box Method Multiplication Connecting Arrays to the Multiplication Algorithm Field Trip Funds-5.NBT.5 Multiplying Multi-Digit Whole Numbers Using the Standard Algorithm #1 Two Different Solutions-5.NBT.5 Multiplication with Partial Products-5.NBT.5

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				to model multiplication	
5 Volume-Lesson Plan	Understand Volume Concepts	NC.4.MD.3 Determine the area of a square or rectangle by counting units of measure (unit squares).	5.MD.5-Relate volume to the operations of multiplication and Addition. 5.MD.4-Recognize volume as an attribute of solid figures and measure volume by counting unit cubes, using cubic centimeter, cubic inches, cubic feet, and improvised units.	**volume -** the amount of space a 3D object takes up(formula: l x w x h). **area -** the amount of space a flat object covers. **unit cube -** a 3D square used to find volume. Each side measures 1 unit. rectangular prism - a 3D object shaped like a rectangle. Every side has a straight line, and all angles are 90 degrees. length - how long an object is. **width** - how wide an object is. **height -** how tall an object is. **dimensions -** a measurement of one side of an object. **Length, width,** and **height** are all examples of this.	Volume with Unit Cubes Cubix Factory Storage-5.MD.5 Build a Box-5.MD.4 Boxes and More Boxes-5.MD.4 Carter's Candy Company-5.MD.4 Draw Your Own Figure-5.MD.5 Packing the Robot Toys-5.MD.4 Measure a Box-5.MD.4 Sears Tower-5.MD.5
7	Evaluating Numerical Expressions	NC.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.	5.OA.2-Write, explain, and evaluate numerical expressions involving the four operations to solve up to two step problems. Include expressions involving: ● Parentheses, using the order of operations.	**Properties of Operations** -strategies used to add, subtract, multiply and/or divide **Order of Operations -** procedure to solve a multi-operation problem Symbol - a pattern or image used instead of	Order of Operations Making Sense of the Order of Operations Tile and Parentheses Puzzles-5.0A.2 Comparing Products-5.0A.2

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		Distinguish multiplicative comparison from additive comparison.	● Commutative, associative and distributive properties.	words **Brace {} -** symbols used to identify a set **Bracket []** - symbols used to identify a set **Parentheses ()** - symbols used to group numbers	Expression Sets-5.0A.2 Leigh's Strategy
10	Numerical Patterns	NC.3.OA.3 Represent, interpret, and solve one-step problems involving multiplication and division. • Solve multiplication word problems with factors up to and including 10. Represent the problem using arrays, pictures, and/or equations with a symbol for the unknown number to represent the problem. • Solve division word problems with a divisor and quotient up to and including 10. Represent the problem using arrays, pictures, repeated subtraction and/or equations with a symbol for the unknown number to represent the problem.	5.OA.3-Generate two numerical patterns using two given rules. • Identify apparent relationships between corresponding terms. . • Form ordered pairs consisting of corresponding terms from the two patterns. • Graph the ordered pairs on a coordinate plane. 5.G.1-Graph points in the first quadrant of a coordinate plane, and identify and interpret the x and y coordinates to solve problems	**expression** - a group of mathematical symbols representing a number or quantity. **describe** - represent in words using relevant details. **relationship** - connection between two or more things **equation** - a mathematical statement that assigns equivalence	Analyze Patterns and Relationships (youtube video) Lesson-Building Mathematical Mindsets: Day 2 for Grades 5 (5.0A.3) Dan's Bicycle-5.0A.3 Devin's Exercise Goal-5.0A.3 Farmer Brown-5.0A.3 Samaria's Reading Plan-5.0A.3
5	Classifying Quadrilaterals	NC.4.G.1 Draw and identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.	NC.5.G.3 Classify quadrilaterals into categories based on their properties. • Explain that attributes belonging to a category of	**quadrilateral** – a four-sided polygon. **parallelogram** – a quadrilateral with two pairs of parallel and congruent sides. **rectangle** – a	Cluster 7: NC Tools for Teachers Shape Mix Up!-5.G.3

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			quadrilaterals also belong to all subcategories of that category. • Classify quadrilaterals in a hierarchy based on properties.	quadrilateral with two pairs of equal, parallel sides and four right angles. **rhombus** – a parallelogram with all four sides equal in length. **square** – a parallelogram with four equal sides and four right angles.	
Consider Administering NC Check-In A at the End of Quarter 1					

Learning Targets: 1st Nine Weeks/Quarter 1

Multiplying Whole Numbers (5.NBT.5)		
Day #	**Daily Learning Target**	**How will the daily learning target be assessed?**
1	I can use rounding and compatible numbers to estimate products.	**Rounding Multiplication - Gimkit**
2	I can use place-value understandings and patterns to mentally multiply whole numbers and powers of 10.	Exit Ticket-Veronica's Statement
3	I can use place value and the standard algorithm to multiply multi-digit numbers by 1-digit numbers.	Multiply 2 digit x 1 digit - Kahoot
4	I can use the expanded and the standard algorithm to multiply 2-digit by 2-digit numbers.	**Exit Ticket**-Field Trip Fund- 5.NBT.5
5	I can multiply 3-digit by 2-digit numbers by adding partial products or by using the standard Algorithm.	**Exit Tickets** Two Different Solutions-5.NBT.5 Multiplication with Partial Products-5.NBT.5

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6	I can use knowledge about place value and multiplying with 2-digit and 3-digit numbers to multiply with zeros.	**Quick Check Assessment**
7	I can use properties and the standard algorithm for multiplication to find the product of multi-digit numbers.	**Exit Ticket:** Which expression cannot be used to find 237 x 12? A. (12 x 200) + (12 x 30) + (12 x 7) B. (12 x 100) + (12 x 100) + (12 x 37) C. (12 +200) x (12 + 37) D. (237 x 10) + (237 x2)
8	I can use properties and the standard algorithm for multiplication to find the product of multi-digit numbers.	List two different ways you could break up the factors in 239 x 64 to find the product. Explain why both ways would have the same product.
9	I can use models and the standard algorithm to solve problems with multi-digit multiplication.	**Quick Check Assessment** 1. Ella has 23 photo books. Each book has 115 photos in it. How many photos do the books contain altogether? A. 138 B. 575 C. 2,215 D. 2,645 2. A furniture store sold 22 sofas for $471 each. How much money did the store receive? A. $1,884 B. $1,984 C. $9,362 D. $10,362 3. A store has 32 cases of canned peaches. Each case contains 24 cans. How many cans of peaches does the store have? A. 120 B. 192 C. 728 D. 768 4. Ms. Seferyn has 67 rolls of stickers. There are 152 stickers in each roll. How many stickers does Ms. Seferyn have altogether? A. 10,184 B. 10,174 C. 10,074 D. 9,884 5. A school district bought 558 boxes of crayons. There are 20 crayons in each box. How many crayons did the school district buy altogether? A. 11,160 B. 5,780 C. 1,116 D. 578
10	I can solve problems using multi-digit multiplication.	**Exit Tickets-** A certain dishwasher uses 29 kilowatts of energy per hour. If the dishwasher was used 146 hours last year, how many kilowatts of energy did the dishwasher use last year? A factory has 586 boxes of popcorn. There are 24 bags in each box. How

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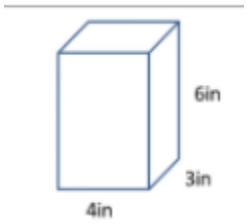
		many bags of popcorn does the factory have?
11	I can use different strategies to solve word problems multiplying 2 digit and 3 digit numbers.	**Exit Ticket**-Which expression shows the numbers multiplied for the partial product 11,886? A.) 4 x 810 C.) 40 x 810 B.) 4 x 849 D.) 40 x 849
12	I can use models to solve word problems multiplying 2 digit and 3 digit numbers.	Schoolnet Quizizz Teacher Made Assessments
13	I can use the standard algorithm to multiply 2 digit and 3 digit numbers.	Released EOG Test Item Exit Ticket: 1. A supermarket has 238 large boxes of cereal. Each large box holds 32 small bags of cereal. How many small bags of cereal are in the supermarket? a. 6,506 b. 6.616 c. 7,506 d. 7,616
14	I can use models and strategies to solve word Problems using multiplication.	Schoolnet / Quizizz / Teacher Made Assessment
15	I can solve word problems multiplying 2 digit and 3 digit numbers.	**Exit Ticket**-A drama club needed to purchase popcorn for the intermission of their play. The drama club purchased 24 cases of popcorn. If popcorn comes in cases of 42 bags, how many bags of popcorn did the club purchase?
Understand Volume Concepts (5.MD.5 and 5.MD.4)		
16	I can find the volume of solid figures.	**Exit Ticket:** Ann new toy box is shown below:  What is the volume of the toy box in cubic inches?

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17	I can find the volume of rectangular prisms using a formula.	Measure a Box - 5.MD.5 **Exit Ticket**-A construction company is digging a hole for a swimming pool. The hole will be 14 yards long, 8 yards wide, and 4 yards deep. How many cubic yards of dirt will the company need to remove?
18	I can find the volume of a solid figure that is the combination of two or more rectangular prisms.	Cabinet Space - 5.MD.5
19	I can use models, prior knowledge of volumes, and previously learned strategies to solve word problems involving volume.	Volume Argument - 5.MD.5
20	I can calculate the volume of a right rectangular prism in the context of a word problem.	Transferring Teachers - 5.MD.5
Evaluating Numerical Expressions (5.OA.2)		
21	I can use the order of operations to evaluate expressions. .	**Exit Ticket:** Which expression is equivalent to the statement “25 divided by the difference of 10 and 5”? A. 25 / 10 - 5 B. 25 / (10 - 5) C. 25 / 5 - 10 D. 25 / (5 - 10)
22	I can write simple expressions that show calculations with numbers.	Comparing Products - 5.OA.2
23	I can interpret numerical expressions without evaluating them.	Expression Sets - 5.OA.2
24	I can use reasoning to solve problems by making sense of quantities and relationships in the situation	Leigh’s Strategy - 5.OA.2
25	I can solve problems using the correct order of operations.	Seeing is Believing - 5.OA.2
26	I can use all the operations to solve problems.	Target Numbers - 5.OA.2
27	I can solve word problems using the order of operations.	Video Games Scores - 5.OA.2

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Coordinate Grids/Numerical Patterns (5.G.1 and 5.OA.3)		
28	I can identify and explain the coordinate plane.	Schoolnet / Quizizz / Teacher Made Assessment
29	I can identify and interpret relationships between the x and y terms.	Coordinate Planes - 5.G.1 GimKit
30	I can identify ordered pairs between patterns.	Farmer Brown - 5.OA.3
31	I can create a table and analyze relationships between the terms.	Devin's Exercise Goal - 5.OA.3
32	I can interpret a real-world context with two patterns.	Samaria's Reading Plan - 5.OA.3
33	I can identify and explain the key concepts of the first quadrant of the coordinate plane.	Coordinate Grids - 5.G.1 Kahoot
34	I can plot points in the first quadrant to solve real world problems.	Where do the Points Go - 5.G.1
35	I can plot points in the first quadrant to find distance between points.	Moving Around the Neighborhood - 5.G.1
36	I can plot points in the first quadrant to find missing points to geometric figures.	Quizizz Activity Quizlet Activity Schoolnet Assessment Teacher-Created assessments Exit Ticket
37	I can plot points in the first quadrant to solve mathematical problems.	Plotting the Course - 5.G.1
Classifying Quadrilaterals (5.G.3)		
38	I can identify and describe properties of quadrilaterals.	**Exit Ticket**-The patio at the front of the school is a quadrilateral with 4 right angles and 4 congruent sides. What type of quadrilateral is it? A. Trapezoid B. Square C. Rhombus D. Rectangle
39	I can identify and describe the different quadrilaterals.	**Exit Ticket**-Joy claims she can draw a trapezoid with three right triangles. Is it possible? Explain
40	I can classify quadrilaterals in a hierarchy based on properties	Classifying Shapes - 5.G.3

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41	I can classify quadrilaterals into a hierarchy based on the relationship between shapes based on attributes.	Squares, Rhombuses, and Rectangles - 5.G.3
42	I can solve word problems with classifying quadrilaterals into different categories.	Trapezoids and Parallelograms - 5.G.3

Unit/Module Pacing: 2nd Nine Weeks/Quarter 2

Quarter 2 - 45 Days					
Number of Days	**Name of Unit/Module**	**Pre-Requisites**	**Standards**	**Academic Vocabulary**	**Instructional Resources**
15	Dividing Whole Numbers	NC.4.NBT.6 Find whole-number quotients and remainders with up to three-digit dividends and one-digit divisors with place value understanding using rectangular arrays, area models, repeated subtraction, partial quotients, properties of operations, and/or the relationship between multiplication and division.	NC.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.	divide-sharing or grouping a number into equal parts. quotient-the result of a division problem. division-an operation used to find the number in each group or the number of groups in equal-sized groups. dividend- the number being divided in a division problem. divisor-the number that you are dividing by in a division problem.	Mr. J's Long Division Cluster 2: NC Tools for Teachers Cluster 6: NC Tools for Teachers
10	Adding and Subtracting Fractions with Unlike Denominators	NC.4.NF.1 Explain why a fraction is equivalent to another fraction by using area and length fraction models, with attention to how the number and size of the parts differ even though	NC. 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.	mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5	Cluster 5 : NC Tools for Teachers

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		the two fractions themselves are the same size	• 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.	sum-the result of adding two or more numbers. Ex. 2+2=4, the number 4 in this problem. difference-the result of subtracting one number from another. numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction. simplify-to express a fraction in simplest/lowest form. equivalent fractions -fractions that have the same value common denominator- a number that is a common multiple of the denominators of two or more.	
10	Multiplying Fractions	NC.4.NF.4 Apply and extend previous understandings of multiplication to: • Model and explain how fractions can be represented by multiplying a whole number by a unit fraction, using this understanding to multiply a whole number by any fraction less than one. • Solve word problems involving multiplication of a fraction by a whole number.	NC.5.NF.4-Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction, including mixed numbers.	mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5 sum-the result of adding two or more numbers. Ex. 2+2=4, the number 4 in this problem. difference-the result of subtracting one number from another. numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction.	Collecting More Recyclables-5.NF.4 Area with Fractions: Doubling a Garden-5.NF.4 More Servings at the Ice Cream Party-5.NF.4 Multiplying Fractions: Cassandra's Master Mix-5.NF.4 Tiling the Walls of the Art Room-5.NF.4 Who Won? The Lance School Relay-5.NF.4 Cluster 6: NC Tools for Teachers

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				simplify-to express a fraction in simplest/lowest form. equivalent fractions -fractions that have the same value common denominator- a number that is a common multiple of the denominators of two or more.	
5	Dividing Fractions	NC.4.NF.6 Use decimal notation to represent fractions. •Express, model and explain the equivalence between fractions with denominators of 10 and 100. • Use equivalent fractions to add two fractions with denominators of 10 or 100. •Represent tenths and hundredths with models, making connections between fractions and decimals.	NC.5.NF.7-Solve one-step word problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions using area and length models, and equations to represent the problem.	unit fraction-a fraction with a numerator of 1 mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5 sum-the result of adding two or more numbers. Ex. 2+2=4, the number 4 in this problem. difference-the result of subtracting one number from another. numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction. simplify-to express a fraction in simplest/lowest form. equivalent fractions -fractions that have the same value common denominator- a number that is a common multiple of the denominators	Cluster 3: NC Tools for Teachers Creating Stories-5.NF.7 Sharing Prizes at the Spring Carnival-5.NF.7 What's in the Punch?-5.NF.7 How many cookies? 5.NF.7

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				of two or more.	
5	Represent and Interpret Data	NC.4.MD.2 Use multiplicative reasoning to convert metric measurements from a larger unit to a smaller unit using place value understanding, two-column tables, and length models.	NF.5.MD.2-Represent and interpret data.Collect data by asking a question that yields data that changes over time. Make and interpret a representation of data using a line graph.	Line graph-used to show how something changes over time	Cluster 1: NC tools for Teachers Cluster 4: NC tools for Teachers
Consider Administering NC Check-In B at the End of Quarter 2					

Learning Targets: 2nd Nine Weeks/Quarter 2

Dividing Whole Numbers (5.NBT.6)		
Day #	**Daily Learning Target**	**How will the daily learning target be assessed? EXIT TICKET**
1	I can find quotients by dividing whole numbers using rectangular arrays.	Schoolnet / Quizizz / Teacher Made Assessment
2	I can find quotients by dividing whole numbers using area models.	Georges Division Strategy - 5.NBT.6
3	I can find quotients by dividing whole numbers using repeated subtraction.	**Exit Ticket:** Students are packing 150 pears in boxes. They put 25 pears in each box. How many boxes can they fill? You can use repeated subtraction to divide.
4	I can find quotients by dividing whole numbers using partial quotients.	**Exit Ticket:** Each package has 25 pieces of crayons. How many packages can be made with 1,804 pieces of crayons? You can use partial quotients to show your work.
5	I can find quotients by finding relationships between multiplication and division.	**Exit Ticket:** Which equation shows the result of 2,501/67?

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		A. 2,501 = 47 x 53 + 10 B. 2,501 = 100 x 25 +1 C. 2,501 = 50 x 50 + 1 D. 2,501 = 37 x 67 +22
6	I can use models to make connections and develop the algorithm for long division of whole numbers.	Lion Hunt - 5.NBT.6
7	I can find quotients of whole numbers by using multiple strategies.	Dividing Whole Numbers - 5.NBT.6 - Quizizz
8	I can find quotients of word problems by dividing whole numbers using rectangular arrays.	Dividing Whole Numbers - 5.NBT.6 - Kahoot
9	I can find quotients of word problems by dividing whole numbers using area models.	Exit Ticket-5.NBT.6
10	I can find quotients of word problems by dividing whole numbers using repeated subtraction.	Dividing Whole Numbers - 5.NBT.6 - Gimkit
11	I can find quotients of word problems by dividing whole numbers using partial quotients.	**Exit Ticket:** Using partial quotients solve the following problem. There are 962 students going on a field trip. Each bus holds 32 students. How many buses are needed? A. 32 buses B. 31 buses C. 30 buses D. 29 buses
12	I can find quotients of word problems by finding relationships between multiplication and division.	Exit Ticket: Which equation shows te result of 302 ÷ 21? A. 50 x 6 + 2 =302 B. 42 x 7 + 8 = 302 C. 14 x 21 + 8 = 302 D. 4 x 75 + 2 =302
13	I can find quotients of word problems by using the algorithm of long division.	**Exit Ticket:** A high school has 5,460 seeds. The seeds will be planted in 84 rows. Each row will have the same number of seeds. How many seeds will be planted in each row?

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14	I can find quotients of word problems by using multiple strategies.	Use the strategy of your choice solve the following: The art club members want to buy 954 bags of chips to solve at a afterschool event. If the chips come in boxes of 24 bags, what is the minimum number of boxes that they would need?
15	I can find quotients of multidigit numbers and word problems using different strategies.	**Exit Ticket:** Mary has 526 marbles. She divides them equally among 15 friends. How many marbles will each friend get? Choose the strategy of your choice to solve.
Adding and Subtracting with Fractions (5.NF.1)		
16	I can find equivalent fractions to add fractions with unlike denominators	**Exit Ticket:** Which number sentence is not true? A. 15/20 = ¾ B. 4/20 = ⅓ C. ⅖ = 6/10 D. 10/15 = ⅔
17	I can add fractions by using different strategies.	Is Tim Correct? 5.NF.1
18	I can add mixed numbers with unlike denominators using different strategies.	**Exit Ticket:** Sarah has 5 ⅛ yards of yellow yarn and 2 ⅝ yards of pink yarn. How many yards of yarn does she have in all?
19	I can solve word problems by adding fractions with unlike denominators.	To Add or Not to Add? 5.NF.1
20	I can solve word problems by adding fractions and mixed numbers using different strategies.	Baking Cookies - 5.NF.1
21	I can find equivalent fractions to subtract fractions with unlike denominators.	**Exit Ticket:** Write equivalent fractions using common denominators, then subtract. Find the difference. 5/9 - 1/6
22	I can subtract fractions using different strategies.	What Makes One-Fifth - 5.NF.1
23	I can subtract mixed numbers with unlike denominators using different strategies.	How Much String? 5.NF.1

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24	I can solve word problems by subtracting fractions with unlike denominators.	**Exit Ticket**-Landon made 22 ¼ ounces of punch. He sampled 1 ¼ ounces to make sure it is not too sweet. How much punch is left?
25	I can solve word problems by subtracting fractions and mixed numbers using different strategies.	How Much Wood? 5.NF.1
Multiplying with Fractions (5.NF.4)		
26	I can find strategies to multiply whole numbers and fractions.	Instructional and Assessment Task (NC Tools for Teachers) Exit Tickets (written response, Padlet entry, Google form) Quizizz Activity Quizlet Activity Schoolnet Assessment Teacher-Created assessments Gimkit
27	I can use strategies to multiply whole numbers and fractions.	Fundraiser Brownies - 5.NF.4 **Exit Ticket**-Kenza needs 1 ¼ yard of material to make a placement. How much material does she need for 8 placements?
28	I can use different strategies to multiply a fraction by a fraction.	Multiply Fraction by Fraction - 5.NF.4
29	I can use different strategies to multiply a fraction by a mixed number.	Bird Feeder Fractions - 5.NF.4
30	I can use different strategies to multiply a mixed number by a mixed number.	Who Has More Box Tops? - 5.NF.4
31	I can solve word problems by multiplying whole numbers and fractions.	Comparing Times in the Mile Run - 5.NF.4
32	I can solve word problems by multiplying a fraction by a fraction.	Basketball or Football? - 5.NF.4
33	I can solve word problems by multiplying a fraction by a mixed number.	Birthday Cake - 5.NF.4
34	I can solve word problems by multiplying a mixed number by a mixed number.	Multiplying Fractions with Color Tiles - 5.NF.4

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35	I can multiply fractions problems using several different strategies.	Which Room is Larger? - 5.NF.4
Dividing with Fractions (5.NF.7)		
36	I can find and use strategies to divide a whole number by a unit fraction.	How Many Cookies - 5.NF.7
37	I can find and use strategies to divide a unit fraction by a whole number.	How Many Clear Beads - 5.NF.7 **Exit Ticket**-Karen bought ¼ of a turkey at the deli. She wants to use the turkey to make 4 sandwiches. If she splits the turkey equally, how much turkey will be on each sandwich?
38	I can find and use strategies to solve word problems involving unit fractions.	Creating Stories - 5.NF.7
39	I can model and solve word problems involving unit fractions.	Writing a Division Story - 5.NF.7
40	I can solve division of unit fractions and word problems using a variety of strategies.	Sloan's Coins - 5.NF.7
Represent and Collect Data (5.MD.2)		
41	I can collect data by asking a question that changes over time.	Room Temperature 5.MD.2
42	I can make and interpret a representation of data using a line graph.	Representing Data - 5.MD.2
43	I can graph points on my line graph to represent my data.	Wasted Water-5.MD.2
44	I can identify and describe the different types of data.	Weather Around the World-5.MD.2
45	I can solve one-step and two-step questions regarding data and graphs.	Henry's Musical Task - 5.MD.2

Unit/Module Pacing: 3rd Nine Weeks/Quarter 3

Quarter 3 - 50 days					
Number of Days	**Name of Unit/Module**	**Pre-Requisites**	**Standards**	**Academic Vocabulary**	**Instructional Resources**
5	Numbers and	NC.4 NBT.1 Explain	NC.5.NBT.1-Explain the	Expanded form-writing	Cluster 4: NC Tools for Teachers

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	Operations Based Ten	that in a multi-digit whole number, a digit in one place represents 10 times as much as it represents in the place to its right, up to 100,000. NC.4.NBT.2 Read and write multi-digit whole numbers up to and including 100,000 using numerals, number names, and expanded form.	patterns in the place value system from one million to the thousandths place. NC.5.NBT.3-Read, write, and compare decimals to thousandths. Write decimals using base-ten numerals, number names, and expanded form. Compare two decimals to thousandths based on the value of the digits in each place, using >, =, and < symbols to record the results of comparisons.	each number according to its place value. Standard form–the usual way to write the name of a number. Word form–a number written in words Tenths Hundredths Thousandths	
10 Add 10 Subtract 5 Multiply 5 Divide	Perform Operations with Decimals	NC.4.NF.6 Use decimal notation to represent fractions. • Express, model and explain the equivalence between fractions with denominators of 10 and 100. • Use equivalent fractions to add two fractions with denominators of 10 or 100. • Represent tenths and hundredths with models, making connections between fractions and decimals.	NC.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	decimal-the expression of a fraction in the base of ten, using a decimal point to separate whole numbers from the fractional value. decimal point-a printed or written dot in a decimal number that divides the whole numbers from the tenths, hundredths, and smaller divisions of ten dividend-the number that is divided by another number in a division operation. divisor-the quantity by which another quantity is to be divided. tenth-One out of one ten equal parts; the position of the first digit to the right of the decimal point. hundredth- One out of one hundred equal parts; the	Cluster 6: NC Tools for Teachers Subtracting Decimals Serving Lemonade-5.NBT.7 Miguel's String-5.NBT.7 Using Estimation to Multiply Whole Numbers by Decimals-5.NBT.7 Adding decimals using Models Cluster 6 Assessment

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			should be limited to hundredths. • Use estimation strategies to assess reasonableness of answers.	position of the second digit to the right of the decimal point. thousandth- One out of one thousand equal parts; the position of the third digit to the right of the decimal point. sum-the answer to an addition problem	
5	Division as Fractions	NC.4.NF.3 Understand and justify decompositions of fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. • Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. • Decompose a fraction into a sum of unit fractions and a sum of fractions with the same denominator in more than one way using area models, length models, and equations. • Add and subtract fractions, including mixed numbers with like denominators, by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. • Solve word problems	NC.5.NF.3-Use fractions to model and solve division problems. Interpret a fraction as an equal sharing context, where a quantity is divided into equal parts. Model and interpret a fraction as the division of the numerator by the denominator. Solve one-step word problems involving division of whole numbers leading to answers in the form of fractions and mixed numbers, with denominators of 2, 3, 4, 5, 6, 8, 10, and 12, using area, length, and set models or equations.	dividend-the number that is divided by another number in a division operation. divisor-the quantity by which another quantity is to be divided.	Cluster 3: NC Tools for Teachers

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		involving addition and subtraction of fractions, including mixed numbers by writing equations from a visual representation of the problem.			
5	Dividing Fractions	NC.4.NF.6 Use decimal notation to represent fractions. •Express, model and explain the equivalence between fractions with denominators of 10 and 100. • Use equivalent fractions to add two fractions with denominators of 10 or 100. •Represent tenths and hundredths with models, making connections between fractions and decimals.	NC.5.NF.7-Solve one-step word problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions using area and length models, and equations to represent the problem.	unit fraction-a fraction with a numerator of 1 numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction. mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5	Cluster 3: NC Tools for Teachers Cluster 6:NC Tools for Teachers
5	Convert Measurements	NC.4.MD.2 Use multiplicative reasoning to convert metric measurements from a larger unit to a smaller unit using place value understanding, two-column tables, and length models.	5.MD.1-Given a conversion chart, use multiplicative reasoning to solve one-step conversion problems within a given measurement system.	Metric - the decimal measuring system based on the meter, liter, and gram as units of length, capacity, and weight or mass. Customary-the customary system of measurement, also called the U.S. Customary System, is based on the English system of measurement. In math, the	Cluster 6: NC Tools for Teachers

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				customary system can be defined as a set of weights and measures used for measuring length, weight, capacity and temperature. Meters- standard unit of length. centimeter-one hundredth of a meter. decimeter-one tenth of a meter Kilometer-1000 meters inches-the basic measure of length; 12 inches equal 1 foot. foot-A unit of length in the customary system. Yards - A unit of linear measurement in the customary system equal to three feet (36 inches). miles-A unit of length equal to 5,280 feet.	
Consider Administering NC Check-In C at the End of Quarter 3					

Learning Targets for Course: 3rd Nine Weeks/Quarter 3

Read, Write and Compare Decimals (5.NBT.1 and 5.NBT.3)		
Day #	**Daily Learning Target**	**How will the daily learning target be assessed?**
Days 1-2	I can explain patterns in the place value system from the one million to the thousandths place.	Comparing Digits-5.NBT.1 5.NBT.1 Quick Assessment
Days 3-4	I can write decimals using base-ten numerals, number names, and expanded form.	Is it closer - 5.NBT.3 **Exit Ticket**-The diameter of a half dollar is 1.205. What is the value of the 5 in the diameter of a half dollar?

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Days 5-6	I can compare decimals to the thousandths.	Comparing Distance - 5.NBT.3
Days 7-8	I can solve word problems involving comparing decimals.	London Olympics - 5.NBT.3
Days 9-10	I can solve problems comparing and ordering decimals to the thousandths.	Runner's Time - 5.NBT.3
Adding Decimals (5.NBT.7)		
11	I can identify and describe how to add decimals to the thousandths by using models.	Exit Ticket-5.NBT.7 Cluster 6 Assessment
12	I can identify and describe how to solve and add decimals to the thousandths by using drawings.	Exit Ticket-5.NBT.7
13	I can identify and describe the process needed to solve adding decimals.	**Exit Ticket:** Mary drove 129.7 miles to visit her cousin and then drove 113.6 miles to visit her sister. How many miles did Mary drive in all? Expain how you solve this problem.
14	I can solve adding decimals to the thousandths using different strategies.	**Exit Ticket:** Find the Sum. 15.987 + 97.945=
15	I can identify and describe how to solve adding decimal word problems to the thousandths by using models.	Exit Ticket-5.NBT.7
16	I can identify and describe how to solve adding decimal word problems to the thousandths by using drawings.	**Exit Ticket**-It took Melaine 1.55 hours to mow the lawn and it took her 0.45 hour to rake the leaves. How long did it take Melaine to mow the lawn and rake the leaves?
17	I can identify and describe the process needed to solve adding	**Exit Ticket:**

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	decimal word problems.	Melaine bought a skirt for $45.92 and a matching shirt for $23.45. How much money did Melaine spend in all?
18	I can solve adding decimal word problems to the thousandths using different strategies.	**Exit Ticket:** Read the problem below. Then explore different ways to understand how to add decimals to solve the problem. From Kim's home, she rides the bus 4.984 miles. Then she walks 0.03 miles from the bus stop to school. How many miles does she walk from home to school?
19	I can solve word problems involving adding decimals.	**Exit Ticket:** Angel bought a movie ticket for $8.50, popcorn for $4.95, and a drink for $3.25. How much money did Angel spend in all?
20	I can solve real world problems involving adding decimals.	**Exit Ticket:** Craig mailed four packages. Their weights were 3.5 pounds, 2.50 pounds, 4.68 pounds, and 6.5 pounds. What was the total weight of all four packages? Explain how you found your answer.
Subtract Decimals (5.NBT.7)		
21	I can identify and describe how to subtract decimals to the thousandths by using models.	Exit Ticket-5.NBT.7
22	I can identify and describe how to solve subtracting decimals to the thousandths by using drawings.	Exit Ticket-5.NBT.7
223	I can identify and describe the process needed to solve subtracting decimals.	**Exit Ticket-5 NBT.7** Tammy walked dogs for two weeks. The first week, she earned $5.75. The second week, she earned $12.50. How much more money did Tammy earn the second week than the first week?
24	I can solve subtracting decimals to the thousandths using different strategies.	**Exit Ticket-1.)**Josh lives 14.25 miles from the school and 3.84 miles from the gym. How much farther does Josh live from the school than from the gym? **2.) Find the difference:** 13.879-0.786
25	I can identify and describe how to solve subtracting decimal word problems to the thousandths by using models.	**Exit Ticket:**

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		What is the difference between 520.16 and 392.79? A.127.37 B.128.63 C.238.47 D. 272.63
26	I can identify and describe how to solve subtracting decimal word problems to the thousandths by using drawings.	**Exit Ticket:** Students are riding a bus to summer camp. The distance to the camp is 65.148 kilometers. They rode 41.34 kilometers so far. How much farther must they ride to reach their destination?
27	I can identify and describe the process needed to solve subtracting decimal word problems.	**Exit Ticket:** Mark swam 3 lengths of swimming pool in a total of 25.43 seconds. The third length 7.89 seconds. How long did it take Mark to swim the first 2 lengths of the pool?
28	I can solve subtracting decimal word problems to the thousandths using different strategies.	**Exit Ticket:** A necklace that costs $23.56 was marked down to the $13.46. How much was the necklace marked down? A. $2.88 B. $5.79 C. $10.10 D. $37.02 Exit Ticket:
29	I can solve word problems involving subtracting decimals.	**Exit Ticket:** Nick walked 12.4 kilometers and ran 5.6 kilometers yesterday. How much farther did he walk thn run? Ann is sending a box to a friend. The box weighs 25.89 pounds. Ann removes a 4.568-pound book to decrease the shipping cost. What is the new weight of the box?
30	I can solve real world problems involving subtracting decimals.	**Exit Ticket:** Mary and John are looking for cell phone plans. A group plan will cost $145.65 per month. An individual plan will cost $65.76 per month. Should Mary and John purchases a group plan or two individual plans? How much money could they save? Justify your answer.
Multiply Decimals (5.NBT.7)		
31	I can identify and describe how to multiply decimals to the	Clay Boxes-5.NBT.7

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	thousandths by using models.	
32	I can identify and describe how to solve multiply decimals to the thousandths by using drawings.	**Exit Ticket:** Angel wants to buy 2 books at the bookstore. Each book costs $13.29. How much money does she need to buy both books?
33	I can identify and describe the process needed to solve multiplying decimals based on place value.	**Exit Ticket:** Gaby bought 0.85 pounds of American cheese at the grocery store. The cheese was on sale for $3.50 per pound. How much did Gaby pay?
34	I can solve multiplying decimals to the thousandths using different strategies.	**Exit Ticket:** Jake bought 5 bottles of orange juice at a market. Each bottle cost $2.43. How much did the orange juice cost all together? A. $7.43 B. $10.05 C. $12.15 D. $20.05
35	I can use different strategies to solve word problems multiplying decimals.	Is Sam Correct?-5.NBT.7 **Exit Ticket**: A scientist at a giant panda preserve in China measured the length of a baby cub as 18.5 centimeters. The cub's mother was 10.5 times as tall as the length of the cub. How tall is the mother ?
Divide Decimals (5.NBT.7)		
36	I can divide a whole number by a decimal using repeated subtraction.	Are they Equivalent Problems? 5.NBT.7
37	I can divide a whole number by a decimal using an area model.	Window Time-5.NBT.7
38	I can divide a decimal by a whole number using repeated subtraction.	**Exit Ticket**-Mya has a piece of ribbon that is 30.5 yards long. The length is just enough ribbon to make 5 bows that are the same size. How long is the ribbon that she uses for each bow?
39	I can divide a decimal by a whole number using an area model.	**Exit Ticket:** Using an area model solve the following: Leah cut a rope that was 7.2 inches long into 4 equal pieces. How long was each piece of rope? A. 1.8 inches B. 2.0 inches C. 14.8 inches D. 28.8 inches

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40	I can divide decimals to the hundredths using estimation strategies.	**Exit Ticket:** Four friends attend a movie and spend $21.41 on snacks. About how much will each person pay if they split the cost equally? A. $5.35 B. $6.35 C. $7.20 D. $8.20
Division as Fraction (5.NF.3)		
41	I can interpret a fraction as equal sharing.	**Exit Ticket**-Ann and her three friends decide to pick 19 pints of grapes. They gave away 4 pints to family and friends. The friends divide the rest evenly among them. How many pints of grapes does each person get?
42	I can model and interpret a fraction as the division of the numerator by the denominator.	**Exit Ticket:** Jason has 10 bags of sand. He wants to put an equal amount of sand into 4 burrows. How much sand will Jason put in each burrow?
43	I can make connections between a fraction and an equal sharing.	**Exit Ticket:** Mary bought 9 huge bags of soil. She wants to put an equal amount of soil into 7 planters boxes. How much soil will Mary put in each planter box? Justify your answer.
44	I can solve one-step word problems involving division of whole numbers giving the answers in the form of fractions and mixed numbers.	Candy Conundrum - 5.NF.3
45	I can use different strategies to solve one step word problems involving division of whole numbers.	Tying Knot Project - 5.NF.3
Converting Measurements (5.MD.1)		
46	I can solve problems within the customary units of measurement.	**Exit Ticket**-Long Jump - 5.MD.1
47	I can solve conversions within the customary units of measurement.	**Exit Ticket**-Aneka bought 46 yards of fabric to make dresses for the school talent show. What is 46 yards in inches?
48	I can solve problems with the metric units of measurement.	A pile of rocks has a mass of 1,300 grams. What is the mass of the rocks in kilograms?

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		A. 0.013 kg B. 0.13 kg C. 1.3 kg D. 13 kg
49	I can solve problems with the metric units of measurement.	**Exit Ticket**-Drew bought 3.25 meters of fabric to make a costume. How many centimeters of fabric did she buy?
50	I can solve word problems that involve converting metric and customary units of measurement.	Assessment Task-5.MD.1

Unit/Module Pacing: 4th Nine Weeks/Quarter 4

Quarter 4 - 32 days					
Number of Days	**Name of Unit/Module**	**Pre-Requisites**	**Standards**	**Academic Vocabulary**	**Instructional Resources**
3	Number and Operation in Base Ten	NC.4 NBT.1 Explain that in a multi-digit whole number, a digit in one place represents 10 times as much as it represents in the place to its right, up to 100,000 NC.4.NBT.2 Read and write multi-digit whole numbers up to and including 100,000 using numerals, number names, and expanded form.	5.NBT.3-Read, write, and compare decimals to thousandths. -Write decimals using base-ten numerals, number names, and expanded form. -Compare two decimals to thousandths based on the value of the digits in each place, using >, =, and < symbols to record the results of comparisons	Standard form – the usual way to write the name of a number. tenths – one of 10 equal parts of a whole or group. (written as 1/10 or 0.1) hundredths – one of 100 equal parts of a whole or group. (written as 1/100 or 0.01) thousandths – one of 1000 equal parts of a whole or group. (written as 1/1000 or 0.001) value – numerical worth or amount	Cluster 3: NC Tools for Teachers Decimal Clue Conundrum-5.NBT.3 London Olympics-5.NBT.3 Comparing Distances-5.NBT.3

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3	Multiplying Whole Numbers	NC.4.MD.3 Determine the area of a square or rectangle by counting units of measure (unit squares). NC.4.NBT.5 Multiply a whole number of up to three digits by a one-digit whole number, and multiply up to two two-digit numbers with place value understanding using area models, partial products, and the properties of operations. Use models to make connections and develop the algorithm. NC.4.NBT.6 Find whole-number quotients and remainders with up to three-digit dividends and one-digit divisors with place value understanding using rectangular arrays, area models,repeated subtraction, partial quotients, properties of operations, and/or the relationship between multiplication and division.	5.NBT.5-Demonstrate fluency with the multiplication of two whole numbers up to a three-digit number by a two-digit number.	algorithm -a step by step process used to solve a problem. factor - a number multiplied. product-the answer you get when you multiply. sum- the answer you get when you add. estimate -to find a number that is close to an exact amount by rounding. multiplication -repeated addition.	Cluster 2: NC Tools for Teachers
3	Dividing Whole Numbers	NC.4.NBT.6 Find whole-number quotients and remainders with up to three-digit dividends and one-digit divisors with place value understanding using	NC.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	Dividend-Dividends are the numbers that are being divided Divisor -Divisors are the numbers we are dividing by Quotient -Quotients are answers to division problems. So quotients are the numbers	Cluster 2: NC Tools for Teachers

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		rectangular arrays, area models,repeated subtraction, partial quotients, properties of operations, and/or the relationship between multiplication and division.	subtraction, partial quotients, and/or the relationship between multiplication and division. Use models to make connections and develop the algorithm.	we obtain by division Remainder -Remainders are the numbers that are left over after we have found quotients. Fraction -Fractions are quotients of two (2) rational numbers. Fractions are division problems	
5	Perform Operations with decimals	NC.4.NF.6 Use decimal notation to represent fractions. •Express, model and explain the equivalence between fractions with denominators of 10 and 100. • Use equivalent fractions to add two fractions with denominators of 10 or 100. • Represent tenths and hundredths with models, making connections between fractions and decimals. NC.4.NF.7-Compare two decimals to hundredths by reasoning about their size using area and length models, and recording the results of comparisons with the symbols >, =, or <. Recognize that comparisons are valid only when the two decimals refer to the	NC.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.	decimal-the expression of a fraction in the base of ten, using a decimal point to separate whole numbers from the fractional value. decimal point- a printed or written dot in a decimal number that divides the whole numbers from the tenths, hundredths, and smaller divisions of ten dividend -the number that is divided by another number in a division operation. divisor -The quantity by which another quantity is to be divided. tenth -One out of one ten equal parts; the position of the first digit to the right of the decimal point. hundredth- One out of one hundred equal parts; the position of the second digit to the right of the decimal point thousandth- One out of one thousand equal parts; the position of the third digit to the right of the decimal point sum -The answer to an	Cluster 6 :NC Tools for Teachers Multiplying Decimals Dividing by Decimal

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		same whole.		addition problem	
5	Adding and Subtracting Fractions with unlike denominators	NC.4.NF.1 -Explain why a fraction is equivalent to another fraction by using area and length fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size.	NC. 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.	mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5 sum-the result of adding two or more numbers. Ex. 2+2=4, the number 4 in this problem. difference-the result of subtracting one number from another. numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction. simplify-to express a fraction in simplest/lowest form. equivalent fractions -fractions that have the same value common denominator- a number that is a common multiple of the denominators of two or more.	Cluster 5: NC Tools for Teachers
3	Fraction as Division	NC.4.NF.3- Understand and justify decompositions of fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. • Understand addition	NC.5.NF.3-Use fractions to model and solve division problems. Interpret a fraction as an equal sharing context, where a quantity is divided into equal parts.	dividend-the number that is divided by another number in a division operation. divisor-the quantity by which another quantity is to be divided. numerator-what is being divided; the top of the fraction	Cluster 3: NC Tools for Teachers

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		and subtraction of fractions as joining and separating parts referring to the same whole. • Decompose a fraction into a sum of unit fractions and a sum of fractions with the same denominator in more than one way using area models, length models, and equations. • Add and subtract fractions, including mixed numbers with like denominators, by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. • Solve word problems involving addition and subtraction of fractions, including mixed numbers by writing equations from a visual representation of the problem.	Model and interpret a fraction as the division of the numerator by the denominator. Solve one-step word problems involving division of whole numbers leading to answers in the form of fractions and mixed numbers, with denominators of 2, 3, 4, 5, 6, 8, 10, and 12, using area, length, and set models or equations.	denominator-how many parts there are; the bottom part of the fraction. mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5	
3	Multiplying Fractions	NC.4.NF.4 Apply and extend previous understandings of multiplication to: • Model and explain how fractions can be represented by multiplying a whole	NC.5.NF.4-Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction, including mixed numbers.	mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is	5th Grade Cluster 3: Models to Multiply and Divide Fractions

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		number by a unit fraction, using this understanding to multiply a whole number by any fraction less than one. • Solve word problems involving multiplication of a fraction by a whole number.		top-heavy. Ex. 9/5 sum-the result of adding two or more numbers. Ex. 2+2=4, the number 4 in this problem. difference-the result of subtracting one number from another. numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction. simplify-to express a fraction in simplest/lowest form. equivalent fractions -fractions that have the same value common denominator- a number that is a common multiple of the denominators of two or more.	
3	Dividing with Fractions	NC.4.NF.6 Use decimal notation to represent fractions. •Express, model and explain the equivalence between fractions with denominators of 10 and 100. • Use equivalent fractions to add two fractions with denominators of 10 or 100. • Represent tenths and hundredths with models, making connections between fractions and decimals.	NC.5.NF.7-Solve one-step word problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions using area and length models, and equations to represent the problem.	dividend-the number that is divided by another number in a division operation. divisor -the quantity by which another quantity mixed number-a whole number and a fraction combined into one number. Ex. 2 1/2 improper fraction-is greater than or equal to the denominator (the bottom number). In other words, it is top-heavy. Ex. 9/5 numerator-what is being divided; the top of the fraction denominator-how many parts there are; the bottom part of the fraction.	Cluster 3: NC Tools for Teachers Task Cards-5.NF.7

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2	Convert Measurements	NC.4.MD.2 Use multiplicative reasoning to convert metric measurements from a larger unit to a smaller unit using place value understanding, two-column tables, and length models.	5.MD.1-Given a conversion chart, use multiplicative reasoning to solve one-step conversion problems within a given measurement system.	Metric - the decimal measuring system based on the meter, liter, and gram as units of length, capacity, and weight or mass. Customary-the customary system of measurement, also called the U.S. Customary System, is based on the English system of measurement. In math, the customary system can be defined as a set of weights and measures used for measuring length, weight, capacity and temperature. Meters- standard unit of length. centimeter-one hundredth of a meter. decimeter-one tenth of a meter Kilometer-1000 meters inches-the basic measure of length; 12 inches equal 1 foot. foot-A unit of length in the customary system. Yards - A unit of linear measurement in the customary system equal to three feet (36 inches). miles-A unit of length equal to 5,280 feet.	Cluster 6: NC Tools for Teachers
2	Represent and Interpret Data	NC.4.MD.2 Use multiplicative reasoning to convert metric measurements from a larger unit to a smaller unit using place value understanding,	5.MD.2-Represent and interpret data. -Collect data by asking a question that yields data that changes over time. -Make and interpret a representation of data	Line graph-used to show how something changes over time	Cluster 4: NC Tools for Teachers

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		two-column tables, and length models.	using a line graph.		

Learning Targets for Course: 4th Nine Weeks

Review: Read, Write and Compare Decimals (5.NBT.1 and 5.NBT.3)		
Day #	**Daily Learning Target**	**How will the daily learning target be assessed?**
1	I can solve problems with reading decimals to the thousandths.	**Exit Ticket-5.NBT.1** Which shows two and twelve thousandths written using base-ten numerals? A. 2.012 B. 2.102 C. 2.12 D. 2.201
2	I can solve problems with writing decimals to the thousandths.	Exit Ticket: Mercury has a mass of 0.055. Which is the number name for Mercury? A. Fifty -five B. Fifty-five tenths C. Fifty-five hundredths D. Fifty -five thousandths
3	I can solve problems with comparing decimals to the thousandths.	**Exit Ticket**-A rock collector finds the masses of three rock samples to be 5.552, 5.523, and 5.525. Which shows these masses in order from greatest to least? A. 5.552, 5.525, 5.523 B. 5.525, 5.523. 5.552 C. 5.523, 5.525, 5.552 D. 5.523, 5.552,5.525
Review: Multiplying Whole Numbers (5.NBT.5)		
6	I can solve multiplying whole numbers using different strategies.	**Exit Ticket:** Field Trip Funds
7	I can solve multi digit multiplication using different strategies.	Two Different Solutions
8	I can solve word problems with multiplying whole numbers.	**Exit Ticket:** A restaurant has a seating for 145 people. The restaurant offers $15 buffets. If the restaurant is full and everyone orders the buffet, how

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		much money will the restaurant earn?
Review: Dividing Whole Numbers (5.NBT.6)		
9	I can solve division of whole numbers using different strategies.	George's Division Strategy NC.5.NBT.6
10	I can solve division of whole numbers using different strategies.	**Exit Ticket:** Greg saved $180 to spend on CDs. How many CDs can he buy if each one costs $12? Choose any strategy to solve.
11	I can solve division of whole numbers using different strategies.	**Exit Ticket:** An arena has 5,933 seats. The seats are divided into 16 sections with the same number of seats in each section. How many seats are in each section?
Review: Operations with Decimals (5.NBT.7)		
12	I can solve problems with adding decimals.	Who Am I? NC.5.NBT.7 Cluster 6 Assessment-5.NBT.7
13	I can solve problems by subtracting decimals.	Batting Averages 5.NBT.7
14	I can solve problems with multiplying decimals.	**Exit Ticket**-Tim worked 6.5 hours on Saturday. He earns $6.20 per hour. How much did he earn on Saturday?
15	I can solve problems with dividing decimals.	**Exit Ticket**-Last year Mary took 4 trips to visit her mom. She traveled a total of 306.7 miles for all trips. How far did she travel on each trip?
16	I can solve problems with all operations with decimals.	**Exit Ticket**-Arnold bought 0.65 pounds of American cheese at the grocery store. The cheese was on sale for $3.60 per pound. How much did Arnold pay?
Review: Adding and Subtracting Fractions (5.NF.1)		
17	I can solve problems with adding fractions with unlike denominators.	How Much String? 5.NF.1
18	I can solve problems with adding fractions with unlike denominators.	How Much Wood? 5.NF.1
19	I can solve problems with subtracting fractions with unlike denominators.	**Exit Ticket:** Stan has completed 13/16 of a project. She had completed ½ of the project before starting today. What fraction of the project did Stan complete today?

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		A. 3/16 B. ¼ C. 5/16 D. 3/8
20	I can solve problems with subtracting fractions with unlike denominators.	Exit Ticket-5NF.1:
21	I can solve problems with adding and subtracting fractions with unlike denominators.	Cluster 5 Assessment **Exit Ticket:** Mary spent ¾ hour on a science project and ½ hour on a math project. What fraction of an hour longer did she spend on the science project?
Review: Division as Fraction (5.NF.3)		
22	I can solve problems with whole number division as fractions.	**Exit Ticket:** Joe printed 33 photos that he will put in an album. Each page holds 4 photos. How many pages can Joe fill?
23	I can solve problems with equal sharing as fractions.	Knot-Tying Project-5.NF.3 **Exit Ticket:** Mary has 2 pies. She cuts the pies into 3 equal pieces. How much pie is in each amount? A. ⅔ pie B. ⅓ pie C. ½ pie D. 1 pie
24	I can solve word problems with fractions as division.	**Exit Ticket:** Which division problem is the same as the fraction ¼ ? A. 1 ÷ 4 B. 1 ÷ 2 C. 2 ÷ 4 D. 4 ÷ 1
Multiplying Fractions (5.NF.4)		
25	I can solve multiplying fractions using different strategies.	Multiplying Fractions Task Cards - 5.NF.4

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26	I can solve multiplying mixed numbers using different strategies.	Multiplying Mixed Numbers
27	I can solve word problems with multiplying fractions	**Exit Ticket:** Sue loves to walk her dog each day for 2/4 of an hour. What will be the total number of hours she will walk her dog for 3 days? A. 2/4 x 3 = 6/4 B. 2/4 x 3 = 2/12 C. 2/4 x 4 = 8/4 D. 2/4 x 4 = 2/16
28	I can solve problems with dividing a whole number by a unit fraction.	**Exit Ticket:** The length of a trail is 15 miles long. There are park benches every ⅕ mile. How many park benches are along the trail?
29	I can solve problems with dividing a unit fraction by a whole number.	**Exit Ticket:** Joey divided ½ pound of cheese into 4 equal parts. How much cheese was in each part? A. 8 pound B. 2 pounds C. ⅛ pounds D. ½ pounds
30	I can solve word problems with dividing unit fractions.	**Exit Ticket:** How much juice will each friend get if 4 friends share ⅕ gallon equally?
Converting Measurements		
31	I can solve problems with converting with customary units.	CFA - Measurement
32	I can solve problems with converting with metric units.	Task - Measurement
Represent and Interpret Data		
33	I can solve problems with representing data.	Henrys Music Dilemma-5.MD.2
34	I can solve problems with interpreting data.	Cluster 1 Assessment
35-45	**Review for End of Grade Assessments** Learning targets for review days may vary depending upon student needs. It is best practice to personalize learning targets for student groups based on data.	

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	EOG Testing Window (typically reserved for the last 10 days of the school year)