

Wyoming Department of Education Required Virtual Education Course Syllabus

Niobrara County School District # 1

Program Name	Wyoming Virtual Academy	Content Area	MA
Course ID	CALMS3612	Grade Level	4
Course Name	Math 4 Summit	# of Credits	
SCED Code		Curriculum Type	K12 Inc

COURSE DESCRIPTION

Math 4 Summit is designed to support true depth of knowledge required by today's standards. With rich content to form conceptual understanding and enough practice to support mastery, including time built-in for individualized independent practice, games, and offline practice, Summit Math 4 includes the tools and technology that students need to succeed in a blended learning environment. Summit Math 4 focuses on expanding understanding of operations with whole numbers, developing a greater understanding of fractions, discovering decimals and their relationship to fractions, and exploring geometric figures.

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK (Standard/Indicator) Use the Standards and Benchmarks as Spreadsheets
4.OA.A.2	Multiply or divide to solve word problems involving multiplicative comparison, by using strategies including, but not limited to, drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
4.OA.A.3	Solve multi-step word problems posed with whole numbers, including problems in which remainders must be interpreted.
4.OA.A.3a	Represent these problems using equations with a letter standing for the unknown quantity.
4.OA.A.3b	Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
4.OA.B.4	Demonstrate an understanding of factors and multiples.
4.OA.B.4a	Find all factor pairs for a whole number in the range 1-100.

4.OA.B.4b	Recognize that a whole number is a multiple of each of its factors.
4.OA.B.4c	Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number.
4.OA.B.4d	Determine whether a given whole number in the range 1-100 is prime or composite.
4.OA.C.5	Given a pattern, explain a rule that the pattern follows and extend the pattern. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.
4.NBT.D.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
4.NBT.D.2	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols.
4.NBT.D.3	Use place value understanding to round multi-digit whole numbers to any place.
4.NBT.E.4	Add and subtract multi-digit whole numbers using place value strategies including the standard algorithm.
4.NBT.E.5	Use strategies based on place value and the properties of multiplication to:
4.NBT.E.5a	Multiply a whole number of up to four digits by a one-digit whole number.
4.NBT.E.5b	Multiply a pair of two-digit numbers.
4.NBT.E.5c	Use appropriate models to explain the calculation, such as by using equations, rectangular arrays, and/or area models.
4.NBT.E.6	Use strategies based on place value, the properties of multiplication, and/or the relationship between multiplication and division to find quotients and remainders with up to four-digit dividends and one-digit divisors. Use appropriate models to explain the calculation, such as by using equations, rectangular arrays, and/or area models.
4.NF.F.1	Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
4.NF.F.2	Compare two fractions with different numerators and different denominators by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$.
4.NF.F.2a	Recognize that comparisons are valid only when the two fractions refer to the same whole.

4.NF.F.2b	Record the results of comparisons with symbols $>$, $=$, or $<$.
4.NF.F.2c	Justify the conclusions by using a visual fraction model.
4.NF.G.3	Understand a fraction a/b with $a > 1$ as a sum of unit fractions ($1/b$).
4.NF.G.3a	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
4.NF.G.3b	Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions by using a visual fraction model.
4.NF.G.3c	Add and subtract mixed numbers with like denominators by replacing each mixed number with an equivalent fraction, and/or by using properties of addition and the relationship between addition and subtraction.
4.NF.G.4	Apply and extend an understanding of multiplication by multiplying a whole number and a fraction.
4.NF.G.4a	Understand a fraction a/b as a multiple of $1/b$.
4.NF.G.4c	Solve real-world problems involving multiplication of a fraction by a whole number, using visual fraction models and equations to represent the problem.
4.NF.H.5	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.
4.NF.H.6	Use decimal notation for fractions with denominators 10 or 100.
4.NF.H.7	Compare and order decimal numbers to hundredths and justify by using concrete and visual models. Record the results of comparisons with the words "is greater than," "is equal to," "is less than," and with the symbols $>$, $=$, and $<$.
4.MD.I.1	Know relative sizes of measurement units within one system of units including, but not limited to, km, m, cm; kg, g; lb., oz.; l, ml; hr., min, sec; ft, in., gal., qt. pt., c., . Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
4.MD.I.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. Assessment Boundary: Use denominators of 2, 4, 8 and decimals up to hundredths.
4.MD.I.3	Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

4.MD.J.4	Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.
4.MD.K.5	Regarding angles:
4.MD.K.5a	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint.
4.MD.K.5b	Understand concepts of angle measurement. An angle is measured with reference to a circle with its center at the common endpoint of the rays.
4.MD.K.6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
4.MD.K.7	Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.
4.G.L.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
4.G.L.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.
4.G.L.3	Identify line-symmetric figures. Recognize and draw lines of symmetry for two-dimensional figures.

UNIT OUTLINE	STANDARD#	OUTCOMES OBJECTIVES/STUDENT CENTERED GOALS
Whole Number Sense: Comparing with Multiplication and Division (A)	4.OA.A.2	<p>Interpret a multiplication equation as a comparison.</p> <p>Represent an expression or equation using real-world situations, limited to multiplication comparison situations.</p> <p>Represent a verbal or a written statement of multiplicative comparison as a multiplication equation.</p> <p>Solve a word problem involving multiplicative comparisons and multiplication, using a drawing to represent the problem.</p> <p>Solve a word problem involving multiplicative comparisons and multiplication, using an equation with a symbol for the unknown number to represent the problem.</p>

		<p>Differentiate between a comparison problem that is solved using multiplication and a problem that is solved using addition.</p> <p>Solve a word problem involving multiplicative comparisons and multiplication.</p>
<p>Whole Number Sense: Comparing with Multiplication and Division (B)</p>	<p>4.OA.A.2</p>	<p>Represent an expression or equation using real-world situations, limited to multiplication comparison situations.</p> <p>Solve a word problem involving multiplicative comparisons and division, using a drawing to represent the problem.</p> <p>Solve a word problem involving multiplicative comparisons and division, using an equation with a symbol for the unknown number to represent the problem.</p> <p>Differentiate between a comparison problem that is solved using division and a problem that is solved using subtraction.</p> <p>Solve a word problem involving multiplicative comparisons and division.</p>
<p>Whole Number Sense: Comparing with Multiplication and Division (C)</p>	<p>4.OA.A.2</p>	<p>Interpret a multiplication equation as a comparison.</p> <p>Represent an expression or equation using real-world situations, limited to multiplication comparison situations.</p> <p>Represent a verbal or a written statement of multiplicative comparison as a multiplication equation.</p> <p>Solve a word problem involving multiplicative comparisons and multiplication, using a drawing to represent the problem.</p> <p>Solve a word problem involving multiplicative comparisons and multiplication, using an equation with a symbol for the unknown number to represent the problem.</p> <p>Differentiate between a comparison problem that is solved using multiplication and a problem that is solved using addition.</p> <p>Solve a word problem involving multiplicative comparisons and multiplication.</p> <p>Determine whether an equation is true or false by using comparative relational thinking.</p> <p>Solve a word problem involving multiplicative comparisons and division, using a drawing to represent the problem.</p>

		<p>Solve a word problem involving multiplicative comparisons and division, using an equation with a symbol for the unknown number to represent the problem.</p> <p>Differentiate between a comparison problem that is solved using division and a problem that is solved using subtraction.</p> <p>Solve a word problem involving multiplicative comparisons and division.</p>
Whole Number Sense: Multiples and Factors (A)	4.OA.C.5	<p>Generate a shape pattern that follows a given rule.</p> <p>Describe the rule for a given shape pattern.</p> <p>Identify an apparent feature of a number or shape pattern that was not explicit in the rule itself.</p> <p>Extend a shape pattern that follows a given rule.</p> <p>Complete a shape pattern that follows a given rule.</p> <p>Express a rule for a given pattern using words.</p>
Whole Number Sense: Multiples and Factors (B)	4.OA.C.5	<p>Generate a number pattern that follows a given rule.</p> <p>Describe the rule for a given number pattern.</p> <p>Identify an apparent feature of a number or shape pattern that was not explicit in the rule itself.</p> <p>Describe why a feature of a number or shape pattern follows from the rule used to generate the pattern.</p> <p>Extend a number pattern that follows a given rule.</p> <p>Complete a number pattern that follows a given rule.</p> <p>Express a rule for a given pattern using words.</p> <p>Determine whether an equation is true or false by using comparative relational thinking.</p> <p>Determine the unknown whole number in an equation relating four whole numbers.</p>
Whole Number Sense: Multiples and Factors (C)	<p>4.OA.B.4</p> <p>4.OA.B.4a</p> <p>4.OA.B.4b</p> <p>4.OA.B.4c</p>	<p>Determine the factor pairs of a whole number in the range 1 to 100 .</p> <p>Determine whether a given whole number in the range 1 to 100 is a multiple of a given one-digit number.</p>

		<p>Determine the multiples of a given one-digit whole number, limited to multiples 1 to 100.</p> <p>Show that a whole number is a multiple of any of its whole number factors, limited to whole numbers up to and including 100.</p>
Whole Number Sense: Multiples and Factors (D)	4.OA.B.4d	<p>Classify a whole number from 1 to 100 as prime or composite.</p> <p>Display a data set in a bar graph.</p> <p>Interpret data represented in a bar graph, at a fourth grade level.</p> <p>Translate information from one type of data display to another.</p>
Whole Number Sense: Multiples and Factors (E)	<p>4.OA.B.4</p> <p>4.OA.B.4a</p> <p>4.OA.B.4b</p> <p>4.OA.B.4c</p> <p>4.OA.B.4d</p> <p>4.OA.C.5</p>	<p>Generate a shape pattern that follows a given rule.</p> <p>Describe the rule for a given shape pattern.</p> <p>Identify an apparent feature of a number or shape pattern that was not explicit in the rule itself.</p> <p>Extend a shape pattern that follows a given rule.</p> <p>Complete a shape pattern that follows a given rule.</p> <p>Generate a number pattern that follows a given rule.</p> <p>Describe the rule for a given number pattern.</p> <p>Describe why a feature of a number or shape pattern follows from the rule used to generate the pattern.</p> <p>Extend a number pattern that follows a given rule.</p> <p>Complete a number pattern that follows a given rule.</p> <p>Determine the factor pairs of a whole number in the range 1 to 100.</p> <p>Determine whether a given whole number in the range 1 to 100 is a multiple of a given one-digit number.</p> <p>Determine the multiples of a given one-digit whole number, limited to multiples 1 to 100.</p> <p>Show that a whole number is a multiple of any of its whole number factors, limited to whole numbers up to and including 100.</p> <p>Classify a whole number from 1 to 100 as prime or composite.</p>

Whole Number Sense: Comparing with Larger Numbers (A)	4.NBT.D.2	Convert a multidigit number given in standard form to expanded form or given in expanded form to standard form, limited to whole numbers less than or equal to 1,000,000.
Whole Number Sense: Comparing with Larger Numbers (B)	4.NBT.D.2	Compare two multidigit numbers using the symbols $>$, $=$, or $<$, limited to numbers less than 1,000,000. Justify the comparison of two multidigit numbers.
Whole Number Sense: Comparing with Larger Numbers (C)	4.NBT.D.2	Convert a multidigit whole number given in standard form to a number name, or given in a number name to standard form, limited to whole numbers less than or equal to 1,000,000. Compare two multidigit numbers using the symbols $>$, $=$, or $<$, limited to numbers less than ,.
Multiplication with Fractions: Multiplying a Fraction by a Whole Number (A)	4.NF.G.4a	Represent a fraction a/b as a multiple of $1/b$, using a visual fraction model, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100. Represent a fraction a/b as a multiple of $1/b$, using an equation, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Multiplication with Fractions: Multiplying a Fraction by a Whole Number (B)	4.NF.G.4	Multiply a fraction by a whole number, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Multiplication with Fractions: Multiplying a Fraction by a Whole Number (C)	4.NF.G.4 4.NF.G.4c	Multiply a fraction by a whole number, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100. Solve a word problem involving multiplication of a fraction by a whole number, using a visual fraction model or equation. Verify the reasonableness of a solution to a word problem involving multiplication of a fraction by a whole number, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Multiplication with Fractions: Multiplying a Fraction by a Whole Number (D)	4.NF.G.4a	Represent a fraction a/b as a multiple of $1/b$, using a visual fraction model, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

		<p>Represent a fraction a/b as a multiple of $1/b$, using an equation, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Multiply a fraction by a whole number, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>
Multiplication with Fractions: Fractions Greater Than One (A)	4.NF.G.4c	<p>Represent an improper fraction as a mixed number or a mixed number as an improper fraction, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Name or write a mixed number, using an object or picture.</p>
Multiplication with Fractions: Fractions Greater Than One (B)	4.NF.G.4c	Solve a word problem involving multiplication of a fraction by a whole number, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Multiplication with Fractions: Fractions Greater Than One (C)	4.NF.G.4c	<p>Represent an improper fraction as a mixed number or a mixed number as an improper fraction, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving multiplication of a fraction by a whole number, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>
Equivalent Fractions and Comparison : Equivalent Fractions Concepts (A)	4.NF.F.1	<p>Show how two fractions can be the same size even though the number and size of the parts differ, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent or determine equivalent fractions using a fraction model, including parts of a set, fraction circles, fraction strips, a number line, or other manipulatives.</p> <p>Represent equivalent fractions.</p>
Equivalent Fractions and Comparison : Equivalent Fractions Concepts (B)	4.NF.F.1	Describe why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ using a visual fraction model, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Equivalent Fractions and Comparison : Equivalent Fractions Concepts (C)	4.NF.H.5	<p>Identify equivalent fractions, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Determine if two given fractions are equivalent.</p>
Equivalent Fractions and Comparison :	4.NF.F.1 4.NF.H.5	Show how two fractions can be the same size even though the number and size of the parts differ, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.

Equivalent Fractions Concepts (D)		Describe why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ using a visual fraction model, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. Identify equivalent fractions, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Equivalent Fractions and Comparison : Creating Equivalent Fractions (A)	4.NF.H.5 4.NF.F.1	Generate equivalent fractions, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Equivalent Fractions and Comparison : Creating Equivalent Fractions (B)	4.NF.F.1	Generate equivalent fractions, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. Represent a fraction in simplest form.
Equivalent Fractions and Comparison : Creating Equivalent Fractions (C)	4.NF.F.1	Generate equivalent fractions, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. Represent a fraction in simplest form.
Equivalent Fractions and Comparison : Comparing Fractions (A)	4.NF.F.2	Compare two fractions with different numerators and/or denominators, using the symbols $>$, $<$, or $=$, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100. Describe why one fraction is greater than, equal to, or less than another fraction, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. Represent or compare fractions and/or decimals in a real-world or mathematical situation. Create an input-output rule in order to solve a real-world or mathematical problem.
Equivalent Fractions and Comparison : Comparing Fractions (B)	4.NF.F.2 4.NF.F.2c 4.NF.G.4c	Convert two fractions so they have a common denominator or common numerator, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100. Compare two fractions with different numerators and/or denominators, using the symbols $>$, $<$, or $=$, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100. Compare benchmark fractions ($1/4$, $1/3$, $1/2$, $2/3$, $3/4$) and/or benchmark decimals (0.25, 0.50, 0.75) in a mathematical or real-world situation.

		Order fractions and/or mixed numbers.
Equivalent Fractions and Comparison : Comparing Fractions (C)	4.NF.F.2	Convert two fractions so they have a common denominator or common numerator, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100. Compare two fractions with different numerators and/or denominators, using the symbols $>$, $<$, or $=$, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100.
Equivalent Fractions and Comparison : Comparing Fractions (D)	4.NF.F.2a	Describe why a comparison of two fractions is valid only when the two fractions refer to the same whole, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Equivalent Fractions and Comparison : Comparing Fractions (E)	4.NF.F.2 4.NF.F.2a 4.NF.F.2c	Compare two fractions with different numerators and/or denominators, using the symbols $>$, $<$, or $=$, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100. Describe why one fraction is greater than, equal to, or less than another fraction, limited to fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100. Convert two fractions so they have a common denominator or common numerator, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, or 100. Describe why a comparison of two fractions is valid only when the two fractions refer to the same whole, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.
Angles and Their Measurement: Concepts of Angle Size (A)	4.MD.K.5 4.MD.K.5a 4.G.L.1	Identify a point, line, line segment, ray, or angle. Draw a point, line, line segment, ray, or angle. Identify a right, acute, or obtuse angle. Draw a right, acute, or obtuse angle. Identify a point, line, line segment, ray, or angle in a two-dimensional figure. Identify a right, acute, or obtuse angle in a two-dimensional figure. Compare angles according to size. Describe a point, line, line segment, ray, or angle, including an endpoint or vertex.

		Explain or show that an angle is created when two rays share a common endpoint.
Angles and Their Measurement: Concepts of Angle Size (B)	<p>4.MD.K.5</p> <p>4.MD.K.5a</p> <p>4.MD.K.5b</p> <p>4.G.L.1</p>	<p>Explain that the measure of an angle whose common endpoint is the center of a circle is determined by looking at the fraction of the circle between the points where the two rays intersect the circle.</p> <p>Define a “one-degree angle” as an angle that turns through $\frac{1}{360}$ of a circle.</p> <p>Define an angle measure of n degrees as the size of an angle that turns through n one-degree turns.</p> <p>Draw a straight or reflex angle.</p> <p>Estimate the measure of an angle.</p> <p>Identify a right, acute, or obtuse angle.</p>
Angles and Their Measurement: Concepts of Angle Size (C)	<p>4.MD.K.5</p> <p>4.MD.K.5a</p> <p>4.MD.K.6</p>	<p>Measure an angle in whole-number degrees, using a protractor.</p> <p>Describe an angle, length, or area as a measurable attribute of a real-world or mathematical object.</p>
Angles and Their Measurement: Concepts of Angle Size (D)	<p>4.MD.K.5</p> <p>4.MD.K.5a</p>	<p>Sketch an angle of a specified whole-number measure.</p>
Angles and Their Measurement: Concepts of Angle Size (E)	<p>4.MD.K.5</p> <p>4.MD.K.5a</p> <p>4.MD.K.5b</p> <p>4.MD.K.6</p> <p>4.G.L.1</p>	<p>Identify a point, line, line segment, ray, or angle.</p> <p>Draw a point, line, line segment, ray, or angle.</p> <p>Identify a right, acute, or obtuse angle.</p> <p>Draw a right, acute, or obtuse angle.</p> <p>Explain that the measure of an angle whose common endpoint is the center of a circle is determined by looking at the fraction of the circle between the points where the two rays intersect the circle.</p> <p>Define a “one-degree angle” as an angle that turns through $\frac{1}{360}$ of a circle.</p> <p>Define an angle measure of n degrees as the size of an angle that turns through n one-degree turns.</p> <p>Measure an angle in whole-number degrees, using a protractor.</p>

		Sketch an angle of a specified whole-number measure.
Angles and Their Measurement: Calculating with Angles (A)	4.MD.K.5 4.MD.K.5b 4.MD.K.7	Describe that when an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve a problem to find an unknown angle on a diagram in a mathematical problem, using addition. Solve a problem to find an unknown angle on a diagram in a mathematical problem, using subtraction.
Angles and Their Measurement: Calculating with Angles (B)	4.MD.K.7	Solve a problem to find an unknown angle on a diagram in a real-world problem, using addition. Solve a problem to find an unknown angle on a diagram in a real-world problem, using subtraction.
Angles and Their Measurement: Calculating with Angles (C)	4.MD.K.5 4.MD.K.5b 4.MD.K.7	Describe that when an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve a problem to find an unknown angle on a diagram in a mathematical problem, using addition. Solve a problem to find an unknown angle on a diagram in a mathematical problem, using subtraction. Solve a problem to find an unknown angle on a diagram in a real-world problem, using addition. Solve a problem to find an unknown angle on a diagram in a real-world problem, using subtraction.
Adding and Subtracting Fractions and Mixed Numbers: Adding and Subtracting Fractions (A)	4.NF.G.3b	Represent multiple decompositions of a fraction as a sum of fractions and/or mixed numbers with the same denominator using an equation, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100. Represent multiple decompositions of a fraction as a sum of fractions and/or mixed numbers with the same denominator using a model, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100. Decompose a fraction more than one way.
Adding and Subtracting Fractions and Mixed Numbers: Adding and	4.NF.G.3a	Represent the addition of fractions and/or mixed numbers as the joining of parts of the same whole, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.

Subtracting Fractions (B)		Explain the meaning of addition or subtraction of fractions with like denominators, using a drawing, words, or symbols.
Adding and Subtracting Fractions and Mixed Numbers: Adding and Subtracting Fractions (C)	4.NF.G.3a	<p>Represent the subtraction of fractions and/or mixed numbers as the separating of parts of the same whole, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Explain the meaning of addition or subtraction of fractions with like denominators, using a drawing, words, or symbols.</p>
Adding and Subtracting Fractions and Mixed Numbers: Adding and Subtracting Fractions (D)	4.NF.G.3a	<p>Add fractions with like denominators, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Subtract fractions with like denominators, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Add or subtract fractions and/or mixed numbers with like denominators.</p> <p>Develop a rule for addition or subtraction of fractions with like denominators.</p> <p>Multiply a whole number by a fraction, using repeated addition.</p>
Adding and Subtracting Fractions and Mixed Numbers: Adding and Subtracting Fractions (E)	4.NF.G.3 4.NF.G.3a	<p>Represent multiple decompositions of a fraction as a sum of fractions and/or mixed numbers with the same denominator using an equation, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent multiple decompositions of a fraction as a sum of fractions and/or mixed numbers with the same denominator using a model, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent the addition of fractions and/or mixed numbers as the joining of parts of the same whole, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent the subtraction of fractions and/or mixed numbers as the separating of parts of the same whole, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Add fractions with like denominators, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Subtract fractions with like denominators, limited to denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>

Adding and Subtracting Fractions and Mixed Numbers: Adding Mixed Numbers (A)	4.NF.G.3c	<p>Add mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Add or subtract fractions and/or mixed numbers with like denominators.</p>
Adding and Subtracting Fractions and Mixed Numbers: Adding Mixed Numbers (B)	4.NF.G.3c	<p>Add mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent an improper fraction as a mixed number or a mixed number as an improper fraction, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Add or subtract fractions and/or mixed numbers with like denominators.</p>
Adding and Subtracting Fractions and Mixed Numbers: Adding Mixed Numbers (C)	4.NF.G.3c	<p>Add mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent an improper fraction as a mixed number or a mixed number as an improper fraction, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>
Adding and Subtracting Fractions and Mixed Numbers: Subtracting Mixed Numbers (A)	4.NF.G.3c	<p>Subtract mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Add or subtract fractions and/or mixed numbers with like denominators.</p>
Adding and Subtracting Fractions and Mixed Numbers: Subtracting Mixed Numbers (B)	4.NF.G.3c	<p>Subtract mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent an improper fraction as a mixed number or a mixed number as an improper fraction, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Add or subtract fractions and/or mixed numbers with like denominators.</p>
Adding and Subtracting Fractions and Mixed Numbers: Subtracting Mixed Numbers (C)	4.NF.G.3c	<p>Subtract mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent an improper fraction as a mixed number or a mixed number as an improper fraction, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>
Adding and Subtracting Fractions and Mixed Numbers:	4.NF.G.4c	Solve a word problem involving the addition of fractions and/or mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

<p>Problem Solving with Mixed Numbers (A)</p>		<p>Solve a real-world problem involving addition and/or subtraction of fractions and/or mixed numbers with like denominators</p> <p>Solve a single-step problem involving the addition or subtraction of fractions and/or mixed numbers</p> <p>Add or subtract fractions with like denominators in a real-world situation, using a fraction model.</p>
<p>Adding and Subtracting Fractions and Mixed Numbers: Problem Solving with Mixed Numbers (B)</p>	<p>4.NF.G.3a</p>	<p>Solve a world problem involving the subtraction of fractions and/or mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a real-world problem involving addition and/or subtraction of fractions and/or mixed numbers with like denominators.</p> <p>Solve a single-step problem involving the addition or subtraction of fractions and/or mixed numbers.</p> <p>Add or subtract fractions with like denominators in a real-world situation, using a fraction model.</p>
<p>Adding and Subtracting Fractions and Mixed Numbers: Problem Solving with Mixed Numbers (C)</p>	<p>4.NF.G.3a 4.NF.F.2 4.NF.F.2c</p>	<p>Solve a multistep word problem involving the addition and subtraction of fractions referring to the same whole and having like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, 100.</p> <p>Order fractions and/or mixed numbers.</p>
<p>Adding and Subtracting Fractions and Mixed Numbers: Problem Solving with Mixed Numbers (D)</p>	<p>4.NF.G.4c</p>	<p>Solve a word problem involving the addition of fractions and/or mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a world problem involving the subtraction of fractions and/or mixed numbers with like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a multistep word problem involving the addition and subtraction of fractions referring to the same whole and having like denominators, limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, 100.</p> <p>Solve a real-world problem involving addition and/or subtraction of fractions and/or mixed numbers with like denominators</p>

		<p>Solve a single-step problem involving the addition or subtraction of fractions and/or mixed numbers.</p> <p>Add or subtract fractions with like denominators in a real-world situation, using a fraction model.</p>
<p>Multiplication by a 1-digit Number: Multiplication with Arrays (A)</p>	<p>4.NBT.E.5 4.NBT.E.5a 4.NBT.E.5c</p>	<p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Multiply a whole number of up to four digits by a one-digit whole number, using an area model.</p>
<p>Multiplication by a 1-digit Number: Multiplication with Arrays (B)</p>	<p>4.NBT.E.5 4.NBT.E.5a 4.NBT.E.5c</p>	<p>Multiply a three-digit whole number by a one-digit whole number.</p> <p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Multiply a whole number of up to four digits by a one-digit whole number, using an area model.</p> <p>Explain how to multiply a number by 10 or 100, using place value.</p> <p>Multiply a number by 10 or 100.</p>
<p>Multiplication by a 1-digit Number: Multiplication with Arrays (C)</p>	<p>4.NBT.E.5 4.NBT.E.5a 4.NBT.E.5c</p>	<p>Multiply a three-digit whole number by a one-digit whole number.</p> <p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Multiply a whole number of up to four digits by a one-digit whole number, using an area model.</p> <p>Explain how to multiply a number by 10 or 100, using place value.</p> <p>Multiply a number by 10 or 100.</p>
<p>Multiplication by a 1-digit Number:</p>	<p>4.NBT.E.5</p>	<p>Describe multidigit multiplication using equations, limited to a two-digit, three-digit, or four-digit whole number multiplied by</p>

Multiplication with Equations (A)	4.NBT.E.5a	a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.
Multiplication by a 1-digit Number: Multiplication with Equations (B)	4.NBT.E.5 4.NBT.E.5a	Describe multidigit multiplication using equations, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.
Multiplication by a 1-digit Number: Multiplication with Equations (C)	4.NBT.E.5 4.NBT.E.5a	Describe multidigit multiplication using equations, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.
Multiplication by a 1-digit Number: Multiplication Using Algorithm (A)	4.NBT.E.5 4.NBT.E.5a	Multiply a two-digit whole number by a one-digit whole number. Estimate the product of whole numbers. Estimate the product of multidigit whole numbers, using a strategy such as rounding, benchmarks, or place value, to assess the reasonableness of a result. Justify the solution of the product of a whole number of up to four digits multiplied by a one-digit whole number.
Multiplication by a 1-digit Number: Multiplication Using Algorithm (B)	4.NBT.E.5 4.NBT.E.5a	Multiply a three-digit whole number by a one-digit whole number. Estimate the product of whole numbers. Estimate the product of multidigit whole numbers, using a strategy such as rounding, benchmarks, or place value, to assess the reasonableness of a result. Justify the solution of the product of a whole number of up to four digits multiplied by a one-digit whole number.
Multiplication by a 1-digit Number: Multiplication Using Algorithm (C)	4.NBT.E.5 4.NBT.E.5a	Multiply a two-digit whole number by a one-digit whole number. Multiply a three-digit whole number by a one-digit whole number. Estimate the product of whole numbers.

		<p>Estimate the product of multidigit whole numbers, using a strategy such as rounding, benchmarks, or place value, to assess the reasonableness of a result.</p> <p>Justify the solution of the product of a whole number of up to four digits multiplied by a one-digit whole number.</p>
Multiplication by a 1-digit Number: Problem Solving with Multidigit Multiplication (A)	4.OA.A.2	<p>Solve a word problem involving multiplicative comparisons and multiplication.</p> <p>Evaluate a numerical expression with more than two operations, limited to whole numbers, with no grouping symbols.</p>
Multiplication by a 1-digit Number: Problem Solving with Multidigit Multiplication (B)	<p>4.OA.A.3</p> <p>4.OA.A.3a</p> <p>4.OA.A.3b</p>	<p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Determine the reasonableness of an answer to a multistep problem, using whole numbers and mental computation or estimation strategies including rounding.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p>
Multiplication by a 1-digit Number: Problem Solving with Multidigit Multiplication (C)	<p>4.OA.A.3</p> <p>4.OA.A.3a</p> <p>4.OA.A.3b</p>	<p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Determine the reasonableness of an answer to a multistep problem, using whole numbers and mental computation or estimation strategies including rounding.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p>
Multiplication by a 1-digit Number: Problem Solving with Multidigit Multiplication (D)	<p>4.OA.A.2</p> <p>4.OA.A.3</p> <p>4.OA.A.3a</p>	<p>Solve a word problem involving multiplicative comparisons and multiplication.</p>

	4.OA.A.3b	<p>Evaluate a numerical expression with more than two operations, limited to whole numbers, with no grouping symbols.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Determine the reasonableness of an answer to a multistep problem, using whole numbers and mental computation or estimation strategies including rounding.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p>
Multiplication of Two 2-digit Numbers: Multiples of Ten (A)	4.NBT.E.5 4.NBT.E.5a	Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.
Multiplication of Two 2-digit Numbers: Multiples of Ten (B)	4.NBT.E.5 4.NBT.E.5a	Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.
Multiplication of Two 2-digit Numbers: Multiples of Ten (C)	4.NBT.E.5 4.NBT.E.5b	Multiply two two-digit whole numbers.
Multiplication of Two 2-digit Numbers: Multiples of Ten (D)	4.NBT.E.5 4.NBT.E.5b	<p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Multiply two two-digit whole numbers.</p>
Multiplication of Two 2-digit Numbers:	4.NBT.E.5 4.NBT.E.5b	Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit

<p>Multiplying Two 2-digit Numbers (A)</p>		<p>whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Multiply 2 two-digit numbers, including perfect squares through 15 by 15.</p>
<p>Multiplication of Two 2-digit Numbers: Multiplying Two 2-digit Numbers (B)</p>	<p>4.NBT.E.5 4.NBT.E.5b</p>	<p>Estimate the product of whole numbers.</p> <p>Estimate the product of multidigit whole numbers, using a strategy such as rounding, benchmarks, or place value, to assess the reasonableness of a result.</p> <p>Estimate a solution involving whole numbers, using compatible numbers.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p>
<p>Multiplication of Two 2-digit Numbers: Multiplying Two 2-digit Numbers (C)</p>	<p>4.NBT.E.5 4.NBT.E.5b</p>	<p>Multiply two two-digit whole numbers.</p> <p>Justify the solution of the product of two two-digit numbers.</p>
<p>Multiplication of Two 2-digit Numbers: Multiplying Two 2-digit Numbers (D)</p>	<p>4.NBT.E.5 4.NBT.E.5b</p>	<p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Multiply 2 two-digit numbers, including perfect squares through 15 by 15.</p> <p>Estimate the product of whole numbers.</p> <p>Estimate the product of multidigit whole numbers, using a strategy such as rounding, benchmarks, or place value, to assess the reasonableness of a result.</p> <p>Multiply two two-digit whole numbers.</p> <p>Estimate a solution involving whole numbers, using compatible numbers.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p> <p>Justify the solution of the product of two two-digit numbers.</p>

<p>Multiplication of Two 2-digit Numbers: Problem Solving with 2-digit Multiplication (A)</p>	<p>4.OA.A.3 4.OA.A.3a</p>	<p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p> <p>Determine the reasonableness of an answer to a multistep problem, using whole numbers and mental computation or estimation strategies including rounding.</p>
<p>Multiplication of Two 2-digit Numbers: Problem Solving with 2-digit Multiplication (B)</p>	<p>4.OA.A.3 4.OA.A.3a</p>	<p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p>
<p>Multiplication of Two 2-digit Numbers: Problem Solving with 2-digit Multiplication (C)</p>	<p>4.OA.A.3 4.OA.A.3a</p>	<p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p> <p>Determine the reasonableness of an answer to a multistep problem, using whole numbers and mental computation or estimation strategies including rounding.</p>
<p>Division by a 1-digit Divisor Without Remainders: Division with Models (A)</p>	<p>4.NBT.E.6</p>	<p>Describe a division calculation using an equation, limited to a four-digit dividend and one-digit divisor, no remainder.</p> <p>Describe a division calculation using an equation, rectangular array and/or area model, limited to a four-digit dividend and one-digit divisor, with no remainder.</p>

<p>Division by a 1-digit Divisor Without Remainders: Division with Models (B)</p>	<p>4.NBT.E.6</p>	<p>Describe a division calculation using an equation, limited to a four-digit dividend and one-digit divisor, no remainder.</p> <p>Describe a division calculation using an equation, rectangular array and/or area model, limited to a four-digit dividend and one-digit divisor, with no remainder.</p>
<p>Division by a 1-digit Divisor Without Remainders: Division with Models (C)</p>	<p>4.NBT.E.6</p>	<p>Describe a division calculation using an equation, limited to a four-digit dividend and one-digit divisor, no remainder.</p> <p>Describe a division calculation using an equation, rectangular array and/or area model, limited to a four-digit dividend and one-digit divisor, with no remainder.</p>
<p>Division by a 1-digit Divisor Without Remainders: Division Algorithm Without Remainders (A)</p>	<p>4.NBT.E.6</p>	<p>Divide a two-digit number by a one-digit number, limited to whole number quotients, and no remainder.</p> <p>Divide a three-digit number by a one-digit number, limited to whole number quotients, and no remainder.</p> <p>Divide a multidigit whole number by a one-digit number.</p>
<p>Division by a 1-digit Divisor Without Remainders: Division Algorithm Without Remainders (B)</p>	<p>4.NBT.E.6</p>	<p>Solve a word problem involving multiplicative comparisons and division.</p> <p>Solve a word problem involving multiplicative comparisons and division, using an equation with a symbol for the unknown number to represent the problem.</p> <p>Estimate the quotient of multidigit whole numbers, using strategies such as rounding, benchmarks, or place value, to assess the reasonableness of a result.</p> <p>Justify the solution for a whole number quotient and remainder with up to a four-digit dividend and one-digit divisor.</p> <p>Estimate a solution involving whole numbers, using compatible numbers.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p>

<p>Division by a 1-digit Divisor Without Remainders: Division Algorithm Without Remainders (C)</p>	<p>4.OA.A.3</p>	<p>Evaluate a numerical expression with more than two operations, limited to whole numbers, with no grouping symbols.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p>
<p>Division by a 1-digit Divisor Without Remainders: Division Algorithm Without Remainders (D)</p>	<p>4.OA.A.2 4.OA.A.3 4.OA.A.3a</p>	<p>Divide a two-digit number by a one-digit number, limited to whole number quotients, and no remainder.</p> <p>Divide a three-digit number by a one-digit number, limited to whole number quotients, and no remainder.</p> <p>Solve a word problem involving multiplicative comparisons and division.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Divide a multidigit whole number by a one-digit number.</p>
<p>Division by a 1-Digit Divisor with Remainders: 2-digit by 1-Digit Division with Remainders (A)</p>	<p>4.NBT.E.6</p>	<p>Describe a division calculation using an equation, rectangular array, and/or area model, limited to a two, three, or four-digit dividend and one-digit divisor, with a remainder.</p>
<p>Division by a 1-Digit Divisor with Remainders: 2-digit by 1-Digit Division with Remainders (B)</p>	<p>4.NBT.E.6</p>	<p>Divide a two-digit number by a one-digit number, limited to whole number quotients, with a remainder.</p> <p>Divide a multidigit whole number by a one-digit number.</p>
<p>Division by a 1-Digit Divisor with Remainders: 2-digit by 1-Digit Division with Remainders (C)</p>	<p>4.NBT.E.6</p>	<p>Describe a division calculation using an equation, rectangular array, and/or area model, limited to a two, three, or four-digit dividend and one-digit divisor, with a remainder.</p> <p>Divide a two-digit number by a one-digit number, limited to whole number quotients, with a remainder.</p>

		Divide a multidigit whole number by a one-digit number.
Division by a 1-Digit Divisor with Remainders: 3-digit by 1-Digit Division with Remainders (A)	4.NBT.E.6	Describe a division calculation using an equation, rectangular array, and/or area model, limited to a two, three, or four-digit dividend and one-digit divisor, with a remainder.
Division by a 1-Digit Divisor with Remainders: 3-digit by 1-Digit Division with Remainders (B)	4.NBT.E.6	Divide a three-digit number by a one-digit number, limited to whole number quotients, with a remainder. Divide a multidigit whole number by a one-digit number.
Division by a 1-Digit Divisor with Remainders: 3-digit by 1-Digit Division with Remainders (C)	4.NBT.E.6	Describe a division calculation using an equation, rectangular array, and/or area model, limited to a two, three, or four-digit dividend and one-digit divisor, with a remainder. Divide a three-digit number by a one-digit number, limited to whole number quotients, with a remainder. Divide a multidigit whole number by a one-digit number.
Division by a 1-Digit Divisor with Remainders: Problem Solving Using Division with Remainders (A)	4.NBT.E.6	Solve a word problem using division, limited to a quotient from a division problem with up to a four-digit dividend and a one-digit divisor, including answers that have a remainder. Interpret the remainder in the solution to a division word problem, limited to a quotient from a division problem with up to a four-digit dividend and a one-digit divisor.
Division by a 1-Digit Divisor with Remainders: Problem Solving Using Division with Remainders (B)	4.OA.A.2	Solve a word problem involving multiplicative comparisons and division.
Division by a 1-Digit Divisor with Remainders: Problem Solving Using Division with Remainders (C)	4.OA.A.3	Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, when the answer has a remainder. Interpret the remainder in the solution to a multistep word problem that uses whole numbers.

<p>Division by a 1-Digit Divisor with Remainders: Problem Solving Using Division with Remainders (D)</p>	<p>4.OA.A.2 4.OA.A.3</p>	<p>Solve a word problem using division, limited to a quotient from a division problem with up to a four-digit dividend and a one-digit divisor, including answers that have a remainder.</p> <p>Interpret the remainder in the solution to a division word problem, limited to a quotient from a division problem with up to a four-digit dividend and a one-digit divisor.</p> <p>Solve a word problem involving multiplicative comparisons and division.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, when the answer has a remainder.</p> <p>Interpret the remainder in the solution to a multistep word problem that uses whole numbers.</p>
<p>Decimal Notation: Denominators of 10 and 100 (A)</p>	<p>4.NF.H.6</p>	<p>Represent a fraction with denominator 10 as an equivalent fraction with denominator 100.</p> <p>Add two fractions with denominators 10 and 100 by using 100 as a common denominator.</p>
<p>Decimal Notation: Denominators of 10 and 100 (B)</p>	<p>4.NF.H.6</p>	<p>Represent a fraction with a denominator of 10 as a decimal.</p> <p>Represent a fraction with a denominator of 100 as a decimal.</p> <p>Represent tenths or hundredths with a concrete model, making connections between fractions and decimals.</p> <p>Explain that a fraction and a decimal are equivalent representations of the same quantity.</p> <p>Read a decimal.</p> <p>Write a decimal using words and/or symbols.</p> <p>Read or write a decimal or fraction using words, limited to tenths and hundredths.</p>
<p>Decimal Notation: Denominators of 10 and 100 (C)</p>	<p>4.NF.H.6</p>	<p>Represent a decimal as a fraction with a denominator of 10.</p> <p>Represent a decimal as a fraction with a denominator of 100.</p>

<p>Decimal Notation: Denominators of 10 and 100 (D)</p>	<p>4.NF.H.6</p>	<p>Represent a fraction with denominator 10 as an equivalent fraction with denominator 100.</p> <p>Add two fractions with denominators 10 and 100 by using 100 as a common denominator.</p> <p>Represent a fraction with a denominator of 10 as a decimal.</p> <p>Represent a fraction with a denominator of 100 as a decimal.</p> <p>Represent a decimal as a fraction with a denominator of 10.</p> <p>Represent a decimal as a fraction with a denominator of 100.</p> <p>Represent tenths or hundredths with a concrete model, making connections between fractions and decimals.</p> <p>Explain that a fraction and a decimal are equivalent representations of the same quantity.</p> <p>Read a decimal.</p> <p>Write a decimal using words and/or symbols.</p> <p>Read or write a decimal or fraction using words, limited to tenths and hundredths.</p>
<p>Decimal Notation: Comparing Decimals (A)</p>	<p>4.NF.F.2a 4.NF.F.2b 4.NF.H.7</p>	<p>Describe why one decimal is less than, greater than, or equal to another decimal using a visual model, limited to decimals with 1 or 2 decimal places.</p> <p>Describe why the comparison of two decimals is valid only when the decimals refer to the same whole.</p> <p>Compare two decimals to the hundredths place, using a visual model.</p> <p>Compare two decimals to the hundredths place, using the symbols $>$, $=$, or $<$.</p> <p>Order decimals and/or whole numbers, using a model such as a grid or base 10 blocks.</p> <p>Order decimals and/or whole numbers, using place value.</p> <p>Order decimals.</p> <p>Order decimals, using a concrete or visual model.</p> <p>Order decimals up to hundredths, using a concrete or visual model.</p>

<p>Decimal Notation: Comparing Decimals (B)</p>	<p>4.NF.F.2b 4.NF.H.7</p>	<p>Represent a decimal on a number line, limited to decimals with 1 or 2 decimal places.</p> <p>Compare two decimals to the hundredths place, using the symbols $>$, $=$, or $<$.</p> <p>Represent a fraction or decimal to the tenths or hundredths place as a distance from zero on a number line.</p> <p>Locate a decimal involving tenths or hundredths on a number line.</p> <p>Determine the decimal to the tenths or hundredths place for a point on a number line.</p> <p>Order decimals and/or whole numbers, using a number line.</p> <p>Order decimals.</p> <p>Order decimals, using a concrete or visual model.</p> <p>Order decimals up to hundredths, using a concrete or visual model.</p>
<p>Decimal Notation: Comparing Decimals (C)</p>	<p>4.NF.F.2a 4.NF.F.2b 4.NF.H.7</p>	<p>Describe why one decimal is less than, greater than, or equal to another decimal using a visual model, limited to decimals with 1 or 2 decimal places.</p> <p>Describe why the comparison of two decimals is valid only when the decimals refer to the same whole.</p> <p>Compare two decimals to the hundredths place, using a visual model.</p> <p>Compare two decimals to the hundredths place, using the symbols $>$, $=$, or $<$.</p> <p>Represent a decimal on a number line, limited to decimals with 1 or 2 decimal places.</p> <p>Order decimals and/or whole numbers, using a model such as a grid or base 10 blocks.</p> <p>Order decimals and/or whole numbers, using place value.</p> <p>Order decimals.</p> <p>Order decimals, using a concrete or visual model.</p> <p>Order decimals up to hundredths, using a concrete or visual model.</p>

		<p>Represent a fraction or decimal to the tenths or hundredths place as a distance from zero on a number line.</p> <p>Locate a decimal involving tenths or hundredths on a number line.</p> <p>Determine the decimal to the tenths or hundredths place for a point on a number line.</p> <p>Order decimals and/or whole numbers, using a number line.</p>
Measurement Units: Units of Length (A)	4.MD.I.1	<p>Recall a measurement fact related to metric units of distance or length, limited to whole numbers using centimeters, meters, and/or kilometers.</p> <p>Recall the relative size of a measurement unit within the metric system, limited to kilometer, meter, centimeter, kilogram, gram, liter, and milliliter.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the metric system of measures, limited to kilometers, meters, and centimeters.</p> <p>Record metric measurement equivalents in a two-column table or as number pairs.</p>
Measurement Units: Units of Length (B)	4.MD.I.1	<p>Recall a measurement fact related to U.S. customary units of distance or length, limited to whole numbers using inches, feet, and/or yards.</p> <p>Recall the relative size of a measurement unit within the U.S. customary system, limited to pounds, ounces, gallons, quarts, pints, cups, yards, feet, and inches.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the U.S. customary system of measures, limited to yards, feet, and inches.</p> <p>Record U.S. customary measurement equivalents in a two-column table or as number pairs.</p> <p>Convert a measurement unit, limited to the U.S. customary system of measures.</p>
Measurement Units: Units of Length (C)	4.MD.I.1	<p>Recall a measurement fact related to metric units of distance or length, limited to whole numbers using centimeters, meters, and/or kilometers.</p>

		<p>Recall the relative size of a measurement unit within the metric system, limited to kilometer, meter, centimeter, kilogram, gram, liter, and milliliter.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the metric system of measures, limited to kilometers, meters, and centimeters.</p> <p>Record metric measurement equivalents in a two-column table or as number pairs.</p> <p>Recall a measurement fact related to U.S. customary units of distance or length, limited to whole numbers using inches, feet, and/or yards.</p> <p>Recall the relative size of a measurement unit within the U.S. customary system, limited to pounds, ounces, gallons, quarts, pints, cups, yards, feet, and inches.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the U.S. customary system of measures, limited to yards, feet, and inches.</p> <p>Record U.S. customary measurement equivalents in a two-column table or as number pairs.</p> <p>Convert a measurement unit, limited to the U.S. customary system of measures.</p>
<p>Measurement Units: Units of Mass and Weight (A)</p>	<p>4.MD.I.1</p>	<p>Recall a measurement fact related to metric units of mass, limited to whole numbers using grams and kilograms.</p> <p>Recall the relative size of a measurement unit within the metric system, limited to kilometer, meter, centimeter, kilogram, gram, liter, and milliliter.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the metric system of measures, limited to kilograms and grams.</p> <p>Record metric measurement equivalents in a two-column table or as number pairs.</p>
<p>Measurement Units: Units of Mass and Weight (B)</p>	<p>4.MD.I.1</p>	<p>Recall a measurement fact related to U.S. customary units of weight, limited to whole numbers using ounces, pounds, and/or tons.</p>

		<p>Recall the relative size of a measurement unit within the U.S. customary system, limited to pounds, ounces, gallons, quarts, pints, cups, yards, feet, and inches.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the U.S. customary system of measures, limited to pounds, ounces, gallons, quarts, pints, and cups.</p> <p>Record U.S. customary measurement equivalents in a two-column table or as number pairs.</p> <p>Convert a measurement unit, limited to the U.S. customary system of measures.</p>
<p>Measurement Units: Units of Mass and Weight (C)</p>	<p>4.MD.I.1</p>	<p>Recall a measurement fact related to metric units of mass, limited to whole numbers using grams and kilograms.</p> <p>Recall the relative size of a measurement unit within the metric system, limited to kilometer, meter, centimeter, kilogram, gram, liter, and milliliter.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the metric system of measures, limited to kilograms and grams.</p> <p>Record metric measurement equivalents in a two-column table or as number pairs.</p> <p>Recall a measurement fact related to U.S. customary units of weight, limited to whole numbers using ounces, pounds, and/or tons.</p> <p>Recall the relative size of a measurement unit within the U.S. customary system, limited to pounds, ounces, gallons, quarts, pints, cups, yards, feet, and inches.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the U.S. customary system of measures, limited to pounds, ounces, gallons, quarts, pints, and cups.</p> <p>Record U.S. customary measurement equivalents in a two-column table or as number pairs.</p> <p>Convert a measurement unit, limited to the U.S. customary system of measures.</p>

<p>Measurement Units: Units of Volume (A)</p>	<p>4.MD.I.1</p>	<p>Recall a measurement fact related to metric units of liquid volume, limited to whole numbers using milliliters and liters.</p> <p>Recall the relative size of a measurement unit within the metric system, limited to kilometer, meter, centimeter, kilogram, gram, liter, and milliliter.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the metric system of measures, limited to liters and milliliters.</p> <p>Record metric measurement equivalents in a two-column table or as number pairs.</p>
<p>Measurement Units: Units of Volume (B)</p>	<p>4.MD.I.1</p>	<p>Recall a measurement fact related to U.S. customary units of liquid volume, limited to whole numbers using cups, ounces, pints, and/or gallons.</p> <p>Recall the relative size of a measurement unit within the U.S. customary system, limited to pounds, ounces, gallons, quarts, pints, cups, yards, feet, and inches.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the U.S. customary system of measures, limited to pounds, ounces, gallons, quarts, pints, and cups.</p> <p>Record U.S. customary measurement equivalents in a two-column table or as number pairs.</p> <p>Convert a measurement unit, limited to the U.S. customary system of measures.</p>
<p>Measurement Units: Units of Volume (C)</p>	<p>4.MD.I.1</p>	<p>Recall a measurement fact related to metric units of liquid volume, limited to whole numbers using milliliters and liters.</p> <p>Recall the relative size of a measurement unit within the metric system, limited to kilometer, meter, centimeter, kilogram, gram, liter, and milliliter.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the metric system of measures, limited to liters and milliliters.</p> <p>Record metric measurement equivalents in a two-column table or as number pairs.</p>

		<p>Recall a measurement fact related to U.S. customary units of liquid volume, limited to whole numbers using cups, ounces, pints, and/or gallons.</p> <p>Recall the relative size of a measurement unit within the U.S. customary system, limited to pounds, ounces, gallons, quarts, pints, cups, yards, feet, and inches.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units within the U.S. customary system of measures, limited to pounds, ounces, gallons, quarts, pints, and cups.</p> <p>Record U.S. customary measurement equivalents in a two-column table or as number pairs.</p> <p>Convert a measurement unit, limited to the U.S. customary system of measures.</p>
Measurement Units: Using Units of Time (A)	4.MD.I.2	<p>Recall a measurement fact related to time, limited to whole numbers.</p> <p>Recall the relative size of a unit measuring time, limited to hour, minute, and second.</p>
Measurement Units: Using Units of Time (B)	4.MD.I.1	<p>Determine the number of smaller units that are equivalent to a specified number of larger units for time measurement, limited to hour, minute, and second.</p> <p>Record time measurement equivalents in a two-column table or as number pairs.</p> <p>Convert between units of time.</p>
Measurement Units: Using Units of Time (C)	4.MD.I.1	<p>Recall a measurement fact related to time, limited to whole numbers.</p> <p>Recall the relative size of a unit measuring time, limited to hour, minute, and second.</p> <p>Determine the number of smaller units that are equivalent to a specified number of larger units for time measurement, limited to hour, minute, and second.</p> <p>Record time measurement equivalents in a two-column table or as number pairs.</p>

		Convert between units of time.
Problem Solving Involving Measurements: Word Problems with Measurements (A)	4.OA.A.3a	<p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Demonstrate the meaning of equality in an equation.</p> <p>Represent an unknown quantity with a symbol.</p> <p>Represent a real-world problem with a number sentence and unknowns.</p>
Problem Solving Involving Measurements: Word Problems with Measurements (B)	4.MD.I.2	<p>Solve a word problem involving metric distance, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving U.S. customary distance, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent a metric measurement quantity using a diagram such as a number line diagram that features a measurement scale.</p> <p>Solve a word problem that requires expressing a metric measurement given in a larger unit in terms of a smaller unit.</p> <p>Solve a word problem that requires expressing a U.S. customary measurement given in a larger unit in terms of a smaller unit.</p> <p>Determine the value of an unknown quantity represented by a symbol in a problem situation.</p>
Problem Solving Involving Measurements: Word Problems with Measurements (C)	4.MD.I.2	<p>Solve a word problem involving mass, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving weight, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem that requires expressing a metric measurement given in a larger unit in terms of a smaller unit.</p> <p>Solve a word problem that requires expressing a U.S. customary measurement given in a larger unit in terms of a smaller unit.</p>
Problem Solving Involving Measurements: Word	4.MD.I.2	Solve a word problem involving U.S. customary liquid volume, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.

<p>Problems with Measurements (D)</p>		<p>Solve a word problem involving metric liquid volume, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem that requires expressing a metric measurement given in a larger unit in terms of a smaller unit.</p> <p>Solve a word problem that requires expressing a U.S. customary measurement given in a larger unit in terms of a smaller unit.</p> <p>Represent a U.S. customary measurement quantity using a diagram such as a number line diagram that features a measurement scale.</p> <p>Represent a multistep word problem using whole numbers, with a diagram.</p>
<p>Problem Solving Involving Measurements: Word Problems with Measurements (E)</p>	<p>4.OA.A.3a</p>	<p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Demonstrate the meaning of equality in an equation.</p> <p>Represent an unknown quantity with a symbol.</p> <p>Represent a real-world problem with a number sentence and unknowns.</p> <p>Solve a word problem involving metric distance, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving U.S. customary distance, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent a metric measurement quantity using a diagram such as a number line diagram that features a measurement scale.</p> <p>Solve a word problem that requires expressing a metric measurement given in a larger unit in terms of a smaller unit.</p> <p>Solve a word problem that requires expressing a U.S. customary measurement given in a larger unit in terms of a smaller unit.</p> <p>Determine the value of an unknown quantity represented by a symbol in a problem situation.</p>

		<p>Solve a word problem involving mass, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving weight, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving U.S. customary liquid volume, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem involving metric liquid volume, limited to whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Represent a U.S. customary measurement quantity using a diagram such as a number line diagram that features a measurement scale.</p> <p>Represent a multistep word problem using whole numbers, with a diagram.</p>
<p>Problem Solving Involving Measurements: Word Problems with Time and Money (A)</p>	<p>4.MD.I.2</p>	<p>Solve a word problem involving money, limited to whole numbers.</p> <p>Solve a word problem that requires expressing money given in a larger unit in terms of a smaller unit, limited to whole numbers.</p> <p>Represent money as a decimal.</p> <p>Add or subtract money, using a model, and/or express the answer in decimal notation.</p> <p>Calculate the change required given a total cost (whole dollars up to \$20 or coins) and amount paid (whole dollars up to \$20 or coins), limited to whole dollars up to \$20 or sets of coins.</p> <p>Determine the value of a collection of coins greater than \$1.00.</p> <p>Determine the value of a collection of coins and bills greater than \$1.00.</p> <p>Represent a multistep word problem using whole numbers, with a diagram.</p>
<p>Problem Solving Involving Measurements: Word</p>	<p>4.MD.I.2</p>	<p>Solve a word problem involving an intervals of time, using whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p>

<p>Problems with Time and Money (B)</p>		<p>Solve a word problem that requires expressing a measurement of time given in a larger unit in terms of a smaller unit.</p> <p>Add or subtract intervals of time in hours and minutes, using a model.</p> <p>Determine elapsed time.</p>
<p>Problem Solving Involving Measurements: Word Problems with Time and Money (C)</p>	<p>4.MD.I.2</p>	<p>Solve a word problem involving money, limited to whole numbers.</p> <p>Solve a word problem that requires expressing money given in a larger unit in terms of a smaller unit, limited to whole numbers.</p> <p>Determine the value of a collection of coins greater than \$1.00.</p> <p>Determine the value of a collection of coins and bills greater than \$1.00.</p> <p>Represent money as a decimal.</p> <p>Add or subtract money, using a model, and/or express the answer in decimal notation.</p> <p>Calculate the change required given a total cost (whole dollars up to \$20 or coins) and amount paid (whole dollars up to \$20 or coins), limited to whole dollars up to \$20 or sets of coins.</p> <p>Solve a word problem involving an intervals of time, using whole numbers and/or simple fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, and 100.</p> <p>Solve a word problem that requires expressing a measurement of time given in a larger unit in terms of a smaller unit.</p> <p>Add or subtract intervals of time in hours and minutes, using a model.</p> <p>Determine elapsed time.</p>
<p>Problem Solving Involving Measurements: Measurements and Line Plots (A)</p>	<p>4.MD.J.4</p>	<p>Represent numerical data on a line plot, limited to halves, quarters, and eighths.</p> <p>Interpret data represented on a line plot where the horizontal scale is marked off in whole-number units.</p> <p>Represent data using a frequency table.</p> <p>Translate information from one type of data display to another.</p>

<p>Problem Solving Involving Measurements: Measurements and Line Plots (B)</p>	<p>4.MD.J.4</p>	<p>Solve a problem involving addition of fractions using information recorded in a line plot, limited to halves, quarters, and eighths.</p> <p>Solve a problem using data from a table or chart, including a frequency table.</p> <p>Analyze data in a frequency table.</p>
<p>Problem Solving Involving Measurements: Measurements and Line Plots (C)</p>	<p>4.MD.J.4</p>	<p>Solve a problem involving subtraction of fractions using information recorded in a line plot, limited to halves, quarters, and eighths.</p> <p>Solve a problem using data from a table or chart, including a frequency table.</p> <p>Analyze data in a frequency table.</p>
<p>Problem Solving Involving Measurements: Measurements and Line Plots (D)</p>	<p>4.MD.J.4</p>	<p>Represent numerical data on a line plot, limited to halves, quarters, and eighths.</p> <p>Interpret data represented on a line plot where the horizontal scale is marked off in whole-number units.</p> <p>Represent data using a frequency table.</p> <p>Translate information from one type of data display to another.</p> <p>Solve a problem involving addition of fractions using information recorded in a line plot, limited to halves, quarters, and eighths.</p> <p>Solve a problem involving subtraction of fractions using information recorded in a line plot, limited to halves, quarters, and eighths.</p> <p>Solve a problem using data from a table or chart, including a frequency table.</p> <p>Analyze data in a frequency table.</p>
<p>Problem Solving Involving Measurements: Area and Perimeter Problems (A)</p>	<p>4.MD.I.3</p>	<p>Determine the perimeter of a rectangle, limited to whole number side lengths.</p> <p>Solve a real-world problem related to the perimeter of a rectangle, limited to whole number side lengths.</p> <p>Determine the formula for the perimeter or area of a rectangle, using a model.</p>

		Solve a real-world problem related to perimeter or area in U.S Customary or metric units.
Problem Solving Involving Measurements: Area and Perimeter Problems (B)	4.MD.I.3	<p>Determine the area of a rectangle, limited to whole number side lengths.</p> <p>Solve a real-world problem related to the area of a rectangle, limited to whole number side lengths.</p> <p>Determine the formula for the perimeter or area of a rectangle, using a model.</p> <p>Solve a real-world problem related to perimeter or area in U.S Customary or metric units.</p> <p>Label an area measurement using square units.</p> <p>Determine the area of a real-world or mathematical object.</p> <p>Relate area to the operations of multiplication and/or addition.</p> <p>Describe an angle, length, or area as a measurable attribute of a real-world or mathematical object.</p>
Problem Solving Involving Measurements: Area and Perimeter Problems (C)	4.MD.I.3	<p>Determine the width or length of a rectangle when the area and length of one side is given, limited to whole number side lengths.</p> <p>Determine the width or length of a rectangle when the perimeter and length of one side is given, limited to whole number side lengths.</p> <p>Solve a real-world problem related to the perimeter of a rectangle, limited to whole number side lengths.</p> <p>Solve a real-world problem related to the area of a rectangle, limited to whole number side lengths.</p> <p>Solve a real-world problem related to perimeter or area in U.S Customary or metric units.</p>
Problem Solving Involving Measurements: Area and Perimeter Problems (D)	4.MD.I.3	<p>Determine the perimeter of a rectangle, limited to whole number side lengths.</p> <p>Solve a real-world problem related to the perimeter of a rectangle, limited to whole number side lengths.</p> <p>Determine the area of a rectangle, limited to whole number side lengths.</p>

		<p>Solve a real-world problem related to the area of a rectangle, limited to whole number side lengths.</p> <p>Determine the width or length of a rectangle when the area and length of one side is given, limited to whole number side lengths.</p> <p>Determine the width or length of a rectangle when the perimeter and length of one side is given, limited to whole number side lengths.</p> <p>Determine the formula for the perimeter or area of a rectangle, using a model.</p> <p>Solve a real-world problem related to perimeter or area in U.S Customary or metric units.</p> <p>Label an area measurement using square units.</p> <p>Determine the area of a real-world or mathematical object.</p> <p>Relate area to the operations of multiplication and/or addition.</p>
Operations with Larger Numbers: Exploring Larger Numbers (A)	4.NBT.D.1	Show the concept that in a multidigit whole number, a digit in one place represents ten times what it represents in the place to its right, limited to whole numbers less than or equal to 1,000,000.
Operations with Larger Numbers: Exploring Larger Numbers (B)	4.NBT.D.3	<p>Round a multidigit whole number to any place, limited to whole numbers less than or equal to 1,000,000.</p> <p>Round a multidigit whole number to any place using a variety of estimation methods, and describe, compare, or contrast the solution.</p>
Operations with Larger Numbers: Exploring Larger Numbers (C)	<p>4.NBT.D.1</p> <p>4.NBT.D.3</p>	<p>Show the concept that in a multidigit whole number, a digit in one place represents ten times what it represents in the place to its right, limited to whole numbers less than or equal to 1,000,000.</p> <p>Round a multidigit whole number to any place, limited to whole numbers less than or equal to 1,000,000.</p>
Operations with Larger Numbers: Addition and	4.NBT.E.4	Add multidigit whole numbers using the standard algorithm, limited to numbers less than or equal to 1,000,000.

Subtraction with Larger Numbers (A)		<p>Verify the reasonableness of the results when adding or subtracting multidigit whole numbers</p> <p>Estimate the sum or difference of whole numbers.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 100.</p>
Operations with Larger Numbers: Addition and Subtraction with Larger Numbers (B)	4.NBT.E.4	<p>Subtract multidigit whole numbers using the standard algorithm, limited to numbers less than or equal to 1,000,000.</p> <p>Verify the reasonableness of the results when adding or subtracting multidigit whole numbers</p> <p>Estimate the sum or difference of whole numbers.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p>
Operations with Larger Numbers: Addition and Subtraction with Larger Numbers (C)	4.OA.A.3 4.OA.A.3a	<p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Solve or represent a problem using the four operations.</p> <p>Create an algebraic expression or equation using a variable for an unknown number to represent a math process.</p>
Operations with Larger Numbers: Addition and Subtraction with Larger Numbers (D)	4.OA.A.3 4.OA.A.3a 4.OA.A.3b 4.NBT.E.4	<p>Add multidigit whole numbers using the standard algorithm, limited to numbers less than or equal to 1,000,000.</p> <p>Subtract multidigit whole numbers using the standard algorithm, limited to numbers less than or equal to 1,000,000.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Represent a multistep word problem involving whole numbers, and having a whole-number answer, using an equation with a letter standing for the unknown quantity.</p> <p>Determine the reasonableness of an answer to a multistep problem, using whole numbers and mental computation or estimation strategies including rounding.</p>

		<p>Verify the reasonableness of the results when adding or subtracting multidigit whole numbers</p> <p>Estimate the sum or difference of whole numbers.</p>
<p>Operations with Larger Numbers: Multiplying and Dividing with 4-digit Numbers (A)</p>	<p>4.NBT.E.5</p> <p>4.NBT.E.5a</p>	<p>Multiply a four-digit whole number by a one-digit whole number.</p> <p>Describe multidigit multiplication using equations, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Explain how to multiply a number by 1000, using place value.</p> <p>Multiply a number by 1000.</p> <p>Justify the solution of the product of a whole number of up to four digits multiplied by a one-digit whole number.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p>
<p>Operations with Larger Numbers: Multiplying and Dividing with 4-digit Numbers (B)</p>	<p>4.NBT.E.6</p>	<p>Divide a four-digit number by a one-digit number, limited to whole number quotients, and no remainder.</p> <p>Describe a division calculation using an equation, rectangular array and/or area model, limited to a four-digit dividend and one-digit divisor, with no remainder.</p> <p>Divide a multidigit whole number by a one-digit number.</p> <p>Justify the solution for a whole number quotient and remainder with up to a four-digit dividend and one-digit divisor.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p>
<p>Operations with Larger Numbers: Multiplying and Dividing with 4-digit Numbers (C)</p>	<p>4.NBT.E.6</p>	<p>Divide a four-digit number by a one-digit number, limited to whole number quotients, with a remainder.</p> <p>Describe a division calculation using an equation, limited to a four-digit dividend and one-digit divisor, no remainder.</p>

		<p>Describe a division calculation using an equation, rectangular array, and/or area model, limited to a two, three, or four-digit dividend and one-digit divisor, with a remainder.</p> <p>Divide a multidigit whole number by a one-digit number.</p> <p>Justify the solution for a whole number quotient and remainder with up to a four-digit dividend and one-digit divisor.</p> <p>Estimate a solution involving whole numbers, using rounding to the nearest 10, 100, or 1000.</p>
<p>Operations with Larger Numbers: Multiplying and Dividing with 4-digit Numbers (D)</p>	<p>4.OA.A.3</p>	<p>Solve a word problem using division, limited to a quotient from a division problem with up to a four-digit dividend and a one-digit divisor, including answers that have a remainder.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p> <p>Solve a multistep word problem using whole numbers and multiplication and/or division, and having whole-number answers.</p> <p>Solve a multistep word problem, using whole numbers and addition and/or subtraction.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, and/or multiplication.</p>
<p>Operations with Larger Numbers: Multiplying and Dividing with 4-digit Numbers (E)</p>	<p>4.OA.A.3 4.NBT.E.6</p>	<p>Multiply a four-digit whole number by a one-digit whole number.</p> <p>Describe multidigit multiplication using equations, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Describe multidigit multiplication using a rectangular array or an area model, limited to a two-digit, three-digit, or four-digit whole number multiplied by a one-digit whole number or a two-digit whole number multiplied by a two-digit whole number.</p> <p>Divide a four-digit number by a one-digit number, limited to whole number quotients, and no remainder.</p> <p>Describe a division calculation using an equation, limited to a four-digit dividend and one-digit divisor, no remainder.</p>

		<p>Describe a division calculation using an equation, rectangular array and/or area model, limited to a four-digit dividend and one-digit divisor, with no remainder.</p> <p>Divide a four-digit number by a one-digit number, limited to whole number quotients, with a remainder.</p> <p>Describe a division calculation using an equation, rectangular array, and/or area model, limited to a two, three, or four-digit dividend and one-digit divisor, with a remainder.</p> <p>Solve a word problem using division, limited to a quotient from a division problem with up to a four-digit dividend and a one-digit divisor, including answers that have a remainder.</p> <p>Solve a multistep word problem, using whole numbers and addition, subtraction, multiplication, and/or division, and having whole-number answers.</p>
<p>Geometric Relationships : Parallel and Perpendicular Lines (A)</p>	<p>4.G.L.1</p>	<p>Draw a pair of parallel or perpendicular lines.</p> <p>Draw a pair of intersecting lines or line segments.</p> <p>Describe a pair of intersecting, parallel, or perpendicular lines.</p>
<p>Geometric Relationships : Parallel and Perpendicular Lines (B)</p>	<p>4.G.L.2</p>	<p>Identify a point, line, line segment, ray, or angle in a two-dimensional figure.</p> <p>Identify a pair of parallel lines or line segments in a two-dimensional figure.</p> <p>Identify a pair of perpendicular lines or line segments in a two-dimensional figure.</p> <p>Label a point, line, perpendicular lines, parallel lines, line segment, or angle (right, acute, obtuse).</p>
<p>Geometric Relationships : Parallel and Perpendicular Lines (C)</p>	<p>4.G.L.1 4.G.L.2</p>	<p>Classify a two-dimensional figure based on the presence or absence of parallel and perpendicular lines.</p> <p>Draw or describe a parallelogram, rhombus, or trapezoid.</p> <p>Draw or describe a square or rectangle.</p> <p>Identify quadrilaterals in various contexts.</p> <p>Classify a quadrilateral based on the presence or absence of parallel and perpendicular lines.</p>

		Classify a quadrilateral, using the terms rhombus, square, rectangle, parallelogram, or trapezoid.
Geometric Relationships : Parallel and Perpendicular Lines (D)	<p>4.G.L.1</p> <p>4.G.L.2</p>	<p>Draw a pair of parallel or perpendicular lines.</p> <p>Draw a pair of intersecting lines or line segments.</p> <p>Describe a pair of intersecting, parallel, or perpendicular lines.</p> <p>Identify a pair of parallel lines or line segments in a two-dimensional figure.</p> <p>Identify a pair of perpendicular lines or line segments in a two-dimensional figure.</p> <p>Label a point, line, perpendicular lines, parallel lines, line segment, or angle (right, acute, obtuse).</p> <p>Classify a two-dimensional figure based on the presence or absence of parallel and perpendicular lines.</p> <p>Draw or describe a parallelogram, rhombus, or trapezoid.</p> <p>Draw or describe a square or rectangle.</p> <p>Identify quadrilaterals in various contexts.</p> <p>Classify a quadrilateral based on the presence or absence of parallel and perpendicular lines.</p> <p>Classify a quadrilateral, using the terms rhombus, square, rectangle, parallelogram, or trapezoid.</p>
Geometric Relationships : Classifying Shapes (A)	4.G.L.2	<p>Identify a right, acute, or obtuse angle.</p> <p>Identify a right, acute, or obtuse angle in a two-dimensional figure.</p>
Geometric Relationships : Classifying Shapes (B)	4.G.L.2	<p>Classify a two-dimensional figure based on the presence or absence of an angle of a specified size.</p> <p>Identify or name a right triangle.</p> <p>Identify triangles in various contexts.</p> <p>Classify a triangle based on the presence or absence of right, acute, and obtuse angles.</p> <p>Classify a triangle, using the terms equilateral, isosceles, or scalene.</p>

<p>Geometric Relationships : Classifying Shapes (C)</p>	<p>4.G.L.2</p>	<p>Identify a right, acute, or obtuse angle.</p> <p>Classify a two-dimensional figure based on the presence or absence of an angle of a specified size.</p> <p>Identify or name a right triangle.</p> <p>Identify triangles in various contexts.</p> <p>Classify a triangle based on the presence or absence of right, acute, and obtuse angles.</p> <p>Classify a triangle, using the terms equilateral, isosceles, or scalene.</p>
<p>Geometric Relationships : Symmetry (A)</p>	<p>4.G.L.3</p>	<p>Determine whether a given line across a two-dimensional figure is a line of symmetry.</p>
<p>Geometric Relationships : Symmetry (B)</p>	<p>4.G.L.1 4.G.L.3</p>	<p>Identify a figure that has at least one line of symmetry.</p> <p>Draw lines of symmetry on a line-symmetric figure.</p>
<p>Geometric Relationships : Symmetry (C)</p>	<p>4.G.L.1 4.G.L.3</p>	<p>Determine whether a given line across a two-dimensional figure is a line of symmetry.</p> <p>Identify a figure that has at least one line of symmetry.</p> <p>Draw lines of symmetry on a line-symmetric figure.</p>
<p>Geometric Relationships : Big Ideas: Extended Problems</p>	<p>4.G.L.1</p>	<p>Draw a pair of parallel or perpendicular lines.</p> <p><i>Big Ideas lessons require students to synthesize across key objectives within the unit, provide cumulative, spiraling review throughout the year, and offer opportunities to preview upcoming content as a challenge opportunity</i></p>