

Kindergarten

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Counting and Cardinality				
Sub-category: Know number names and the count sequence.				
K-CC1	Count to 100 by ones and tens.	Possible Extension: from a given number Ex. By 10's beginning at 40. 		
K-CC2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Example: ...26, 27, 28... 		
K-CC3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).			
Sub-category: Count to tell the number of objects.				
K-CC4	Understand the relationship between numbers and quantities; connect counting to cardinality.	Example: Counting collections 		
K-CC4a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.			
K-CC4b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	Example/extension: Provide various counting examples with a variety of objects increasing the quantity over time. 		
K-CC4c	Understand that each successive number name refers to a quantity that is one larger.	Example: Play +1 continuation games. 		
K-CC5	Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.	Example: Sort and count activities with various objects and quantities. 		

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Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Counting and Cardinality				
Sub-category: Compare numbers.				
K-CC6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)			
K-CC7	Compare two numbers between 1 and 10 presented as written numerals.			
Domain: Operations and Algebraic Thinking				
Sub-category: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.				
K-OA1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (Drawings need not show details, but should show the mathematics in the problem. This applies wherever drawings are mentioned in the Standards.)			
K-OA2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.			
K-OA3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation.	$5 = 2 + 3$ and $5 = 4 + 1$		
K-OA4	For any number from 1 to 9, find the number that makes 10			
K-OA5	Fluently add and subtract within 6. 			

Kindergarten

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Number and Operations in Base Ten				
Sub-category: Work with numbers 11-19 to gain foundations for place value.				
K-NBT1	Compose and decompose numbers from 11 to 19 into ten	By using objects or drawings, and record each composition		
Domain: Measurement and Data				
K-MD1	Describe measurable attributes of objects such as length or weight. Describe several measurable attributes of a single object.			
K-MD2	Directly compare two objects, with a measurable attribute in common, to see which object has “more of” or “less of” the attribute, and describe the difference.	Directly compare the heights of two children, and describe one child as taller or shorter.		
Classify objects and count the number of objects in each category.				
K-MD3	Classify objects into given categories; count the number of			
Domain: Geometry				
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).				
K-G1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i> , <i>below</i> , <i>beside</i> , <i>in front of</i> , <i>behind</i> , and <i>next to</i> .			
K-G2	Correctly name shapes regardless of their orientations or overall size.			
K-G3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).			
Analyze, compare, create, and compose shapes.				
K-G4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes.	Number of sides and vertices or “corners” Having sides of equal length		
K-G5	Model shapes in the world by building shapes from components and drawing shapes.	Components = sticks and clay balls		
K-G6	Compose simple shapes to form larger shapes.	<i>Can you join these two triangles with full sides touching to make a rectangle?</i>		

First Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Operations and Algebraic Thinking				
Sub-Category: Represents and solve problems involving addition and subtraction.				
1-OA1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	See Appendix A, Table 1		
1-OA2	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	By using objects, drawings, and equations with a symbol for the unknown number to represent the problem.		
Sub-Category: Understand and apply properties of operations and the relationship between addition and subtraction.				
1-OA3	Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.)	If $8+3=11$ is known, then $3+8=11$ is also known as Commutative property of addition. To add $2+6+4$, the second two numbers can be added to make a ten, so $2+6+4=2+10=12$ (Associative property of addition).		
1-OA4	Understand subtraction as an unknown-addend problem.	Subtract $10-8$ by finding the number that makes 10 when added to 8.		
Sub-Category: Add and subtract within 20.				
1-OA5	Relate counting to addition and subtraction.	By counting on 2 to add 2.		

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Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Operations and Algebraic Thinking				
1-OA6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.	Examples: making tens $8+6 = 8+2 + 4 = 10 + 4 = 14$; decomposing a number leading to ten $13-4 = 13-3 -1 = 10-1 = 9$; using the relationship between addition and subtraction knowing that $8 + 4 = 12$, one know $12-8 = 4$; creating equivalent but easier or known sums adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$		
Sub-Category: Work with addition and subtraction equations.				
1-OA7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.	Which of the following equations are true and which are false: $6 = 6$, $7 = 8-1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$?		
1-OA8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	Determine the number that makes the equation true in each of the equations, $8 + ? = 11$, $5 = _ - 3$, and $6 + 6 = _$		
Domain: Number and Operation in Base Ten				
Sub-Category: Extend the counting sequence.				
1-NBT1	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.			
1-NBT2	Skip Count by 2's to 30 and 5's to 100. 			
1-NBT3	Count backwards from a given number to zero 			
1-NBT4	Identify position using ordinal number through 10th 	Possible Extension: Identify position using ordinal number through 20th 		
1-NBT5	Differentiate between odd and even numbers 			
1-NBT6	Represent numbers with multiple models. 			
1-NBT7	Estimate the number of objects in sets that contain up to 100 objects. 			
Sub-Category: Understand place value.				
1-NBT8	Understand that the two digits of a two-digit number represent amounts of tens and ones.	Possible Extension: Understand that three digit numbers represent hundreds, tens, and ones.		

First Grade

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1-NBT8a	10 can be thought of as a bundle of ten ones, called a “ten.” 			
1-NBT8b	The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.			
1-NBT8c	The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).			
1-NBT9	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.			
Use place value understanding and properties to add and subtract.				
1-NBT10	Add within 100, including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations.			
1-NBT11	Understand the relationship between addition and subtraction; relate the strategy to a written method, and explain the reasoning used; create fact families using related facts. 			
1-NBT12	Understand that in adding two-digit numbers, add tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 			
1-NBT13	Given a two-digit number, mentally find 10 more or 10 less than the number without having to count; explain the reasoning used.	Possible Extension: Identify a number before, after, and between a given number. 		

First Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
1-NBT14	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method, and explain the reasoning used.			
Measurement and Data				
1-MD1	Order three objects by length; compare the lengths of two objects indirectly by using a third object using both standard and non-standard units of measurement. 			
1-MD2	Express the length of an object as a whole number of length units by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	<i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i>		
1-MD3	Tell and write time in hours and half-hours using analog and digital clocks.			
Geometry				
Reason with shapes and their attributes.				
1-MD4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.			

First Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
1-MD5	Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non- defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	Possible Extension: Identify two dimensional shapes as faces of three dimensional figures.		
1-MD6	Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)			
1-MD7	Identify real-life examples of line of symmetry. 			
1-MD8	Partition circles and rectangles into two and four equal shares; describe the shares using the words <i>halves</i> , <i>fourths</i> , and <i>quarters</i> ; and use the phrases <i>half of</i> , <i>fourth of</i> , and <i>quarter of</i> . Describe the whole as two of, or four of the shares. Understand that decomposing into more equal shares creates smaller shares.			

Second Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Operations and Algebraic Thinking				
Sub-category: Represent and solve problems involving addition and subtraction				
2-OA1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	(See Appendix A, Table 1.)		
Sub-category: Add and subtract within 20.				
2-OA2	Fluently add and subtract within 20 using mental strategies.			
2-OA3	Determine whether a group of objects (up to 20) has an odd or even number of members; write an equation to express an even number as a sum of two equal addends.	Possible Extension: with larger groups 		
2-OA4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.			
Number and Operation in Base Ten				
Sub-category: Understand place value.				
2-NBT1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: see a & b			
2-NBT1a	100 can be thought of as a bundle of ten tens, called a “hundred.”			
2-NBT1b	The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).			
2-NBT2	Count within 1000; skip-count by 2s, 5s, 10s, and 100s.			
2-NBT3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.			

Second Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
2-NBT4	Compare two 4-digit numbers based on meanings of the hundreds, tens, and ones digits using $>$, $=$, and $<$ symbols to record the results of comparisons and order from least to greatest, greatest to least. 			
Sub-category: Use place value understanding and properties of operations to add and subtract.				
2-NBT5	Fluently add and subtract within 1,000 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.			
2-NBT6	Add up to four two-digit numbers using strategies based on place value and properties of operations.			
2-NBT7	Add and subtract within 1000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.			
2-NBT8	Mentally add 10 or 100 to a given number 100 – 900, and mentally subtract 10 or 100 from a given number 100 – 900.			
2-NBT9	Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)			
Domain: Measurement and Data				
Sub-category: Measure and estimate lengths in standard units.				
2-MD1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.			

Second Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
2-MD2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.			
2-MD3	Estimate lengths using units of inches, feet, centimeters, and meters.			
2-MD4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.			
Sub-Category: Relate addition and subtraction to length.				
2-MD5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.			
2-MD6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2..., and represent whole-number sums and differences within 100 on a number line diagram.			
Sub-Category: Word with time and money.				
2-MD7	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	Possible extensions: Know half past / quarter past / quarter till 		
2-MD8	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.	Example: If you have 2 dimes and 3 pennies, how many cents do you have? Possible extensions: dollar coins and half dollars. 		
Sub-category: Represent and interpret data.				
2-MD9	Generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object. Show the measurements by making a line plot where the horizontal scale is marked off in whole-number units.			

Second Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
2-MD10	Draw a picture graph, a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	(See Appendix A, Table 1)		
Geometry				
Sub-category: Reason with shapes and their attributes.				
2-G1	Recognize and draw shapes having specified attributes such as a given number of angles or a given number of equal faces. (Sizes are compared directly or visually, not compared by measuring.) Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Solid figures.			
2-G2	Partition a rectangle into rows and columns of same-size squares, and count to find the total number of them.			
2-G3	Partition circles and rectangles into two, three, or four equal shares; describe the shares using the words <i>halves</i> , <i>thirds</i> , <i>half of</i> , <i>a third of</i> , etc.; and describe the whole as two halves, three thirds, or four fourths. Recognize that equal shares of identical wholes need not have the same shape.			

Third Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Operations and Algebraic Thinking				
Sub-category: Represent and solve problems involving multiplication and division.				
3-OA1	Interpret products of whole numbers 	Example: a) interpret 5×7 as the total number of objects in 5 groups of 7 objects each b) Describe a context in which a total number of objects can be expressed as 5×7		
3-OA2	Interpret whole-number quotients of whole numbers interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.	Example: Describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$		
3-OA3	Use multiplication and division within 144 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 	See Appendix A, Table 2		
3-OA4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	Determine the unknown number that makes the equation true in each of the equations, $8 \times ? = 48$, $5 = \square \div 3$, and $6 \times 6 = ?$.		
Sub-category: Understand properties of multiplication and the relationship between multiplication and division.				
3-OA5	Apply properties of operations as strategies to multiply and divide.	Example: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known (commutative property of multiplication). $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$ (Associative property of multiplication). Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8(5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ (Distributive property).		
3-OA6	Understand division as an unknown-factor problem.	Find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.		

Third Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Sub-category: Multiply and divide within 100.				
3-OA7	Fluently multiply and divide within 144, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.			
Sub-category: Solve problems involving the four operations, and identify and explain patterns in arithmetic.				
3-OA8	Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. Note: Only problems with whole-numbers and whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).			
3-OA9	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	Example: Observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.		
Domain: Number and Operations in Base Ten				
Sub-category: Use place value understanding and properties of operations to perform multi-digit arithmetic (A range of algorithms may be used).				
3-NBT1	Use place value understanding to round whole numbers to the nearest 10 and 100.	Possible Extension: whole numbers to nearest 1,000 		
3-NBT2	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.			
3-NBT3	Multiply one-digit whole numbers by multiples of 10 in the range 10 - 90 using strategies based on place value and properties of operations.	Example: 9×80 , 5×60 , 4×40		

Third Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Number and Operations-Fractions (limited to fractions with denominators 2,3,4, 6, and 8)				
Sub-category: Develop understanding of fractions as numbers.				
3-NF1	Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts and size $\frac{1}{b}$.			
3-NF2	Understand a fraction as a number on the number line; represent fractions on a number line diagram.			
3-NF2a	Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.			
3-NF2b	Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.			
3-NF3	Explain equivalence of fractions in special cases/using pictorial representation , and compare fractions by reasoning about their size. 			
3-NF3a	Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.			
3-NF3b	Recognize and generate simple equivalent fractions. Explain why the fractions are equivalent, e.g., by using a visual fraction model.			
3-NF3c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	Example: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{1}{4}$ and 1 at the same point of a number line diagram.		

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Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
3-NF3d	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.			
Domain: Measurement and Data				
Sub-category: Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.				
3-MD1	Tell and write time to the nearest minute, and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.			
3-MD2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (Excludes compound units such as cm^3 and finding the geometric volume of a container. Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units to represent the problem. (Excludes multiplicative comparison problems (problems involving notions of “times as much”).	See Appendix A, Table 2		
Sub-category: Represent and interpret data.				
3-MD3	Draw and compare a scaled picture graph, scaled bar graph, and Venn (s) to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	Example: Draw a bar graph in which each square in the bar graph might represent 5 pets.		

Third Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
3-MD4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.			
Sub-category: Geometric measurement: understand concepts of area and relate area to multiplication and to addition.				
3-MD5	Recognize area as an attribute of plane figures, and understand concepts of area measurement.			
3-MD5a	A square with side length 1 unit called “a unit square,” is said to have “one square unit” of area and can be used to measure area.			
3-MD5b	A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.			
3-MD6	Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).			
3-MD6	Relate area to the operations of multiplication and addition.			
3-MD6a	Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.			
3-MD6b	Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.			
3-MD6c	Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.			

Third Grade

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3-MD6d	Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.			
Sub-category: Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.				
3-MD8	Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.			
Domain: Geometry				
Sub-category: Reason with shapes and their attributes.				
3-G1	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.			
3-G2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	Example: Partition a shape into 4 parts With equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.		

Fourth Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Domain: Operations and Algebraic Thinking				
Sub-category: Use the four operations with whole numbers to solve problems.				
4-OA1	Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.			
4-OA2	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	Appendix A, Table 2		
4-OA3	Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.			
Sub-category: Gain familiarity with factors and multiples.				
4-OA4	Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.			

Fourth Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Sub-category: Generate and analyze patterns.				
4-OA5	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.	Example: Given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence, and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.		
Domain: Number and Operations in Base Ten (limited to whole numbers less than or equal to 1,000,000)				
Sub-category: Generalize place value understanding for multi-digit whole numbers.				
4-NBT1	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.	Example: Recognize that $700 \div 70 = 10$ by applying concepts of place value and division.		
4-NBT2	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 to record the results of comparisons.			
4-NBT3	Use place value understanding to round multi-digit whole numbers to any place.			
Sub-category: Use place value understanding and properties of operations to perform multi-digit arithmetic.				
4-NBT4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.			
4-NBT5	Multiply a whole number of up to four digits by a one-digit and whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.			

Fourth Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
4-NBT6	Find whole-number quotients and remainders with up to four-digit dividends and one-digit and divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.			
Domain: Number and Operations-Fractions (limited to fractions with denominators 2,3,4,5,6,8,10,12, and 100)				
Sub-category: Extend understanding of fractions equivalence and ordering.				
4-NF1	Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{(n \times a)}{(n \times b)}$ 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-NF2	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators or by comparing to a benchmark fraction such as $\frac{1}{2}$. 			
4-NF2a	Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. 			
Sub-category: Build fractions from unit fractions by applying and extending previous understandings of operations on the whole number.				
4-NF3	Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.			
4-NF3a	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.			

Fourth Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
4-NF3b	Decompose a fraction into a sum of fractions with the same denominators in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.	Example: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{3}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$		
4-NF3c	Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.			
4-NF3d	Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.			
4-NF4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.			
4-NF4a	Understand a fraction a/b as a multiple of $1/b$.	Example: Use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times (\frac{1}{4})$, recording the conclusion by equation $\frac{5}{4} = 5 \times (\frac{1}{4})$.		
4-NF4b	Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.	Use a visual fraction model to express $3 \times (\frac{2}{5})$ as $6 \times (\frac{1}{5})$, recognizing this product as $\frac{6}{5}$. (In general, $n \times (a/b) = (n \times a)/b$.)		
4-NF4c	Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.	Example: If each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between which two whole numbers does your answer lie?		

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Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
Sub-category: Understand decimal notation for fractions, and compare decimal fractions.				
4-NF5	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. (Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.)	$\frac{3}{10} = \frac{30}{100}$ $\frac{4}{10} = \frac{40}{100}$ $\frac{3}{10} + \frac{4}{10} = \frac{30}{100} + \frac{40}{100} = \frac{70}{100} = \frac{7}{10}$ Example: Express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{10} = \frac{70}{100} = \frac{7}{10}$.		
4-NF6	Use decimal notation for fractions with denominators 10 or 100.	Example: Rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.		
4-NF7	Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.			
Domain: Measurement and Data				
Sub-category: Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.				
4-MD1	Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb, oz; l, ml; and hr, min, sec. 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.	Example: Know that 1 ft is 12 times as long as 1 in. Express then length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36),...		

Fourth Grade

Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
4-MD2	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.			
4-MD3	Apply the area, perimeter, and volume formulas for rectangles in real-world and mathematical problems.	Example: Find the width of a rectangular room given the area of the flooring and the length by viewing the area formula as a multiplication equation with an unknown factor.		
Sub-category: Represent and interpret data.				
4-MD4	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.	Example: From a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.		
Sub-category: Geometric measurement: understand concepts of angle and measure angles.				
4-MD5	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.			
4-MD5a	An angle is measured with reference to a circle with its center at the common endpoint of the rays by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a one-degree angle” and can be used to measure angles.			
4-MD5b	An angle that turns through n one-degree angles is said to have an angle measure of n degrees			

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Area-Grade	Content Standards In Action (I can.../Students will...)	Example(s)/Possible Extensions	Suggested Time of Focus	Date Taught
4-MD6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.			
4-MD7	Recognize angle measure as additive. 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 addition and subtraction problems to find unknown angles on a diagram in real-world or mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.			
Geometry				
Sub-category: Draw and identify lines and angles, and classify shapes by properties of their lines and angles.				
4-G1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.			
4-G2	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-G3	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.			