

Bridges & Number Corner Third Edition >>

CORRELATIONS

>> California Common Core State Standards Mathematics



4 Mathematics Process Standards

Standard	Descriptor	Citations				
PS Mathema	Mathematics Process Standards					
PS.1	Make sense of problems and persevere in solving them.	Bridges in Mathematics Unit 2: M3 S5 Unit 3: M1 S2 Unit 4: M1 S5; M1 S6; M4 S1 Unit 5: M4 S2 Unit 6: M3 S2 Unit 7: M1 S1 Unit 8: M1 S1	Number Corner September: Solving Problems October: Calendar Grid, Solving Problems November: Solving Problems December: Solving Problems January: Solving Problems February: Computational Fluency, Number Strings, Solving Problems April: Calendar Grid			
PS.2	Reason abstractly and quantitatively.	Bridges in Mathematics Unit 1: M2 S1; M2 S2; M3 S3; M4 S3 Unit 2: M2 S4 Unit 4: M3 S1; M3 S2; M4 S1 Unit 5: M1 S4; M4 S2; M4 S3 Unit 6: M3 S3 Unit 8: M1 S3	Number Corner October: Calendar Grid November: Calendar Collector, Number Strings January: Calendar Grid February: Calendar Grid April: Calendar Collector			
PS.3	Construct viable arguments and critique the reasoning of others.	Bridges in Mathematics Unit 4: M2 S5 Unit 5: M2 S3 Unit 6: M3 S4 Unit 7: M1 S2; M1 S3; M1 S4; M1 S5; M1 S6 Unit 8: M2 S2; M3 S6	Number Corner September: Number, Strings, Solving Problems October: Computational Fluency, Solving Problems November: Number Strings December: Calendar Collector January: Number Strings, Solving Problems February: Solving Problems May: Calendar Grid			
PS.4	Model with mathematics.	Bridges in Mathematics Unit 2: M1 S3 Unit 5: M3 S1; M3 S2; M3 S3; M3 S4 Unit 6: M2 S1; M2 S2; M2 S3 Unit 8: M2 S5	Number Corner October: Solving Problems November: Solving Problems January: Calendar Collector February: Solving Problems April: Solving Problems May: Calendar Collector			

Standard	Descriptor	Citations			
PS Mathemat	PS Mathematics Process Standards				
PS.5	Use appropriate tools strategically.	Bridges in Mathematics Unit 3: M1 S4; M2 S3 Unit 4: M1 S5; M1 S6; M2 S4; M4 S2 Unit 5: M1 S5; M2 S3; M2 S5; M4 S1 Unit 6: M4 S1; M4 S2 Unit 8: M1 S2; M1 S5; M1 S6; M2 S1; M2 S3; M2 S4; M3 S1; M3 S3; M4 S2; M4 S3	Number Corner October: Number Strings November: Calendar Grid December: Calendar Collector, Number Strings February: Calendar Collector, Number Strings April: Solving Problems May: Calendar Collector, Solving Problems		
PS.6	Attend to precision.	Bridges in Mathematics Unit 4: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5 Unit 5: M1 S6 Unit 7: M1 S1; M1 S6; M1 S7	Number Corner October: Calendar Collector November: Number Strings December: Number Strings January: Calendar Collector, Computational Fluency February: Calendar Collector, Solving Problems May: Computational Fluency		
PS.7	Look for and make use of structure.	Bridges in Mathematics Unit 1: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5 Unit 3: M1 S5 Unit 5: M2 S2; M2 S3; M2 S5 Unit 6: M4 S3 Unit 7: M1 S5; M1 S6; M1 S7	Number Corner September: Computational Fluency October: Calendar Grid November: Computational Fluency December: Calendar Collector, Number Strings, Solving Problems January: Calendar Collector February: Calendar Grid, Number Strings May: Number Strings		
PS.8	Look for and express regularity in repeated reasoning	Bridges in Mathematics Unit 1: M2 S1; M2 S2; M2 S5 Unit 4: M1 S5	Number Corner September: Computational Fluency October: Computational Fluency November: Computational Fluency December: Calendar Collector, Calendar Grid January: Calendar Grid February: Computational Fluency, Solving Problems March: Calendar Grid April: Computational Fluency May: Calendar Grid, Number Strings		

✓ OA — Operations and Algebraic Thinking

Standard	Descriptor	Citations	
Use the four op	perations with whole n	umbers to solve problems.	
4.OA.1	Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 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.	Bridges in Mathematics Unit 1: M1 S1; M1 S4; M3 S3; M3 S4	Number Corner November: Calendar Collector January: Calendar Grid April: Calendar Collector
4.0A.2	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.	Bridges in Mathematics Unit 1: M1 S1; M1 S2; M1 S3; M1 S4; M3 S3; M3 S4 Unit 4: M4 S1 Unit 7: M3 S1	Number Corner September: Solving Problems

Standard	Descriptor	Citations	
Use the four o	perations with whole n	umbers to solve problems.	
4.0A.3	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.	Bridges in Mathematics Unit 1: M3 S4 Unit 2: M2 S5 Unit 4: M1 S5; M1 S6 Unit 6: M1 S2; M2 S2; M3 S2; M3 S3; M3 S4 Unit 7: M3 S4; M4 S1	Number Corner October: Computational Fluency, Solving Problems November: Solving Problems January: Solving Problems February: Solving Problems May: Solving Problems

Gain familiarity	Gain familiarity with factors and multiples.			
4.0A.4	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.	Bridges in Mathematics Unit 1: M2 S1; M2 S2; M2 S5; M3 S1; M3 S2 Unit 2: M1 S3; M1 S4; M2 S4; M2 S5; M4 S4 Unit 8: M1 S1	Number Corner September: Computational Fluency, Solving Problems October: Computational Fluency November: Computational Fluency December: Computational Fluency	

Standard	Descriptor	Citations	
Generate and a	analyze patterns.		
4.OA.5	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. For 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.	Bridges in Mathematics Unit 1: M2 S1; M2 S2 Unit 2: M2 S5	Number Corner September: Calendar Grid November: Calendar Grid December: Calendar Grid January: Calendar Grid May: Calendar Grid

4 NBT — Number and Operations in Base Ten

Standard	Descriptor	Citations			
Generalize pla	Generalize place value understanding for multidigit whole numbers.				
4.NBT.1	Recognize that in a multidigit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.	Bridges in Mathematics Unit 2: M1 S1; M1 S2; M2 S3; M2 S5 Unit 4: M1 S2; M1 S3; M1 S4; M1 S5; M2 S3; M2 S4; M2 S5 Unit 7: M3 S3	Number Corner September: Calendar Grid, Computational Fluency October: Calendar Collector		
4.NBT.2	Read and write multidigit whole numbers using baseten numerals, number names, and expanded form. Compare two multidigit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Bridges in Mathematics Unit 4: M1 S1; M1 S2; M1 S3; M1 S4; M2 S5; M3 S2; M4 S1; M4 S2	Number Corner September: Calendar Grid October: Calendar Collector November: Computational Fluency December: Calendar Collector		
4.NBT.3	Use place value understanding to round multidigit whole numbers to any place.	Bridges in Mathematics Unit 4: M1 S1; M1 S3; M1 S4; M1 S6; M3 S1; M4 S1; M4 S2	Number Corner November: Solving Problems		

Standard	Descriptor	Citations			
Use place valu	Use place value understanding and properties of operations to perform multidigit arithmetic.				
4.NBT.4	Fluently add and subtract multidigit whole numbers using the standard algorithm.	Bridges in Mathematics Unit 2: M2 S4 Unit 4: M1 S1; M1 S4; M1 S5; M1 S6; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M3 S2; M4 S1; M4 S2 Unit 5: M3 S2; M3 S3; M4 S2; M4 S3 Unit 6: M2 S3; M2 S4 Unit 8: M1 S3; M2 S4; M2 S5; M3 S5; M3 S6	Number Corner November: Number Strings December: Calendar Collector, Number Strings		
4.NBT.5	Multiply a whole number of up to four digits by a one-digit 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.	Bridges in Mathematics Unit 1: M1 S3; M3 S4 Unit 2: M1 S4; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 5: M3 S1; M3 S4 Unit 6: M1 S1; M1 S2; M1 S3; M1 S6; M1 S7; M2 S2; M2 S3; M3 S1 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M4 S1; M4 S2; M4 S3 Unit 8: M1 S2; M1 S5; M3 S2; M3 S5; M3 S6	Number Corner September: Computational Fluency, Number Strings, Solving Problems October: Computational Fluency, Number Strings, Solving Problems January: Number Strings		
4.NBT.6	Find whole-number quotients and remainders with up to four-digit dividends and one-digit 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.	Bridges in Mathematics Unit 1: M1 S5; M1 S6 Unit 2: M4 S1; M4 S2; M4 S3; M4 S4 Unit 6: M1 S4; M1 S5; M1 S6; M1 S7; M2 S1; M2 S2; M2 S3; M3 S1; M3 S2; M3 S3; M3 S4 Unit 8: M1 S5; M2 S4; M3 S3; M3 S5	Number Corner January: Computational Fluency, Number Strings, Solving Problems April: Number Strings		

✓ NF — Number and Operations: Fractions

Standard	Descriptor	Citations					
Extend under	ixtend understanding of fraction equivalence and ordering.						
4.NF.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.	Bridges in Mathematics Unit 3: M1 S3; M1 S4; M1 S5; M1 S6; M2 S1; M2 S3; M2 S4 Unit 6: M4 S3 Unit 7: M1 S1; M1 S2; M1 S4; M1 S5; M1 S6; M1 S7	Number Corner September: Calendar Collector October: Calendar Grid November: Calendar Collector January: Computational Fluency February: Computational Fluency, Number Strings March: Calendar Collector, Computational Fluency, Number Strings April: Computational Fluency May: Number Strings				
4.NF.2	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 ½. 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.	Bridges in Mathematics Unit 3: M1 S1; M1 S3; M1 S4; M2 S3; M4 S3 Unit 7: M1 S2; M1 S3; M1 S4; M1 S5; M1 S6; M1 S7; M2 S2	Number Corner October: Calendar Grid January: Computational Fluency February: Computational Fluency				

Standard	Descriptor	Citations			
Build fraction	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.				
	4.NF.3 Understand a fr	IF.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.			
4.NF.3.a	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	Bridges in Mathematics Unit 3: M1 S3; M1 S5; M1 S6; M2 S1; M2 S4; M2 S5; M2 S6; M3 S3	Number Corner September: Calendar Collector January: Calendar Collector February: Computational Fluency March: Calendar Collector		
4.NF.3.b	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, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8; 2 ½ = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.	Bridges in Mathematics Unit 3: M1 S5; M2 S1; M2 S2; M2 S3; M2 S4 Unit 7: M1 S1	Number Corner November: Calendar Collector January: Calendar Collector February: Number Strings		
4.NF.3.c	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.	Bridges in Mathematics Unit 3: M1 S5; M1 S6; M2 S3; M2 S4; M2 S5; M2 S6 Unit 6: M4 S3 Unit 7: M2 S4	Number Corner March: Calendar Collector April: Computational Fluency		
4.NF.3.d	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.	Bridges in Mathematics Unit 3: M1 S3; M1 S5; M1 S6; M2 S1; M2 S4; M2 S5; M2 S6; M3 S3	Number Corner September: Calendar Collector January: Calendar Collector February: Computational Fluency March: Calendar Collector		

Standard	Descriptor	Citations	
Build fraction	ns from unit fractions by	applying and extending previous understandings of	of operations on whole numbers.
	4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.		a fraction by a whole number.
4.NF.4.a	Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4).	Bridges in Mathematics Unit 3: M2 S1; M2 S2; M2 S6	Number Corner December: Solving Problems January: Calendar Collector May: Number Strings
4.NF.4.b	Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)	Bridges in Mathematics Unit 3: M1 S6; M2 S6	Number Corner September: Calendar Collector December: Solving Problems January: Calendar Collector February: Number Strings April: Computational Fluency
4.NF.4.c	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. For example, if each person at a party will eat 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 what two whole numbers does your answer lie?	Bridges in Mathematics Unit 3: M2 S6 Unit 8: M1 S2	Number Corner December: Solving Problems May: Number Strings

Standard	Descriptor	Citations			
Understand d	Understand decimal notation for fractions, and compare decimal fractions.				
4.NF.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. For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.	Bridges in Mathematics Unit 3: M3 S1; M3 S2; M3 S3; M4 S1; M4 S2; M4 S3 Unit 6: M4 S3 Unit 7: M2 S1; M2 S2; M2 S3; M4 S1	Number Corner October: Calendar Grid February: Computational Fluency, Number Strings March: Computational Fluency, Number Strings May: Computational Fluency		
4.NF.6	Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	Bridges in Mathematics Unit 3: M3 S1; M3 S2; M3 S3; M4 S1; M4 S2; M4 S3 Unit 7: M2 S1; M2 S2; M2 S3	Number Corner October: Calendar Grid February: Computational Fluency March: Computational Fluency May: Computational Fluency		
4.NF.7	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 the number line or another visual model.	Bridges in Mathematics Unit 3: M3 S2; M3 S3; M3 S4; M4 S2; M4 S3 Unit 7: M2 S3	Number Corner February: Computational Fluency March: Computational Fluency May: Computational Fluency		

4 MD — Measurement and Data

Standard	Descriptor	Citations		
Solve problems	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.			
4.MD.1	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; L, mL; 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. For example, know that 1 ft is 12 times as long as 1 in. Express the 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),	Bridges in Mathematics Unit 1: M4 S1; M4 S2; M4 S3 Unit 2: M1 S3; M1 S4; M1 S5; M3 S4 Unit 4: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M1 S2; M1 S3; M1 S5; M2 S1; M3 S2; M3 S3; M3 S5; M4 S1; M4 S2	Number Corner September: Calendar Collector November: Calendar Grid, Calendar Collector April: Calendar Collector May: Calendar Collector, Solving Problems	

Standard	Descriptor	Citations	
Solve problen	ns involving measureme	ent and conversion of measurements from a larger	unit to a smaller unit.
4.MD.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.	Bridges in Mathematics Unit 1: M1 S6; M4 S1; M4 S3 Unit 2: M1 S4; M1 S5; M3 S5 Unit 4: M3 S1; M3 S3; M3 S4; M3 S5 Unit 6: M4 S1; M4 S2 Unit 7: M4 S3 Unit 8: M1 S2; M1 S3; M1 S5; M2 S1; M2 S4; M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M3 S6; M4 S1; M4 S2; M4 S3	Number Corner September: Calendar Collector November: Calendar Grid December: Number Strings April: Solving Problems May: Calendar Collector, Solving Problems
4.MD.3	Apply the area and perimeter formulas for rectangles in real-world and mathematical problems. For 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.	Bridges in Mathematics Unit 2: M1 S1; M1 S3; M1 S4; M1 S5 Unit 5: M3 S1; M3 S2; M3 S3; M3 S4 Unit 6: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5 Unit 7: M3 S1; M3 S4 Unit 8: M1 S2; M2 S1; M3 S1; M3 S2; M3 S5	Number Corner December: Computational Fluency January: Calendar Grid April: Calendar Grid

Standard	Descriptor	Citations		
Represent and	Represent and interpret data.			
4.MD.4	Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.		Number Corner April: Solving Problems	

Geometric measurement: understand concepts of angle and measure angles.			
	4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concep of angle measurement:		
4.MD.5.a	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 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.	Bridges in Mathematics Unit 3: M3–S2, p. 91	Number Corner September: Calendar Collector

Standard	Descriptor	Citations			
Geometric m	eometric measurement: understand concepts of angle and measure angles.				
	4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand cond of angle measurement:				
4.MD.5.b	An angle that turns through <i>n</i> one-degree angles is said to have an angle measure of <i>n</i> degrees.	Bridges in Mathematics Unit 5: M1 S3; M4 S2	Number Corner February: Calendar Collector		
4.MD.6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Bridges in Mathematics Unit 5: M1 S4; M1 S5; M1 S6; M4 S1 Unit 8: M1 S4; M1 S5; M1 S6; M4 S1	Number Corner February: Calendar Collector		
4.MD.7	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 and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	Bridges in Mathematics Unit 5: M1 S3; M1 S4; M4 S2; M4 S3 Unit 8: M1 S6	Number Corner February: Calendar Grid		



Standard	Descriptor	Citations			
Draw and ide	raw and identify lines and angles, and classify shapes by properties of their lines and angles.				
4.G.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Bridges in Mathematics Unit 5: M1 S2; M1 S3; M1 S4; M1 S5; M2 S1; M2 S2; M2 S4; M2 S5; M2 S6; M3 S4 Unit 8: M2 S1; M3 S1; M3 S2; M3 S3; M4 S1; M4 S2; M4 S3	Number Corner February: Calendar Grid March: Calendar Grid, Solving Problems May: Calendar Grid		
4.G.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. (Two-dimensional shapes should include special triangles, e.g., equilateral, isosceles, scalene, and special quadrilaterals, e.g., rhombus, square, rectangle, parallelogram, trapezoid.)	Bridges in Mathematics Unit 5: M1 S1; M2 S4; M2 S5; M2 S6	Number Corner February: Calendar Grid March: Solving Problems		
4.G.3	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 linesymmetric figures and draw lines of symmetry.	Bridges in Mathematics Unit 5: M2 S2; M2 S3; M2 S5; M2 S6	Number Corner March: Calendar Grid, Solving Problems April: Calendar Grid May: Calendar Grid		