Bridges Grade 4 Supplement Sets
Correlations to Common Core State Standards

BY SET

BY STANDARD

Bridges supplements not correlated to the Common Core State Standards are not listed here.
Some activities and worksheets not correlated to the Common Core State Standards are not shown.
CCSS standards not addressed by any supplements are not shown.

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Set A3 Number & Operations: Place Value to Millions

	Activities			Worksheets		
	1	2	3	1	2	3
4.NBT Number and Operations in Base Ten						
4.NBT.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. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.	•	•	•	•	•	•
4.NBT.2a Read and write Multi-Digit whole numbers using base-ten numerals, number names, and expanded form.	•	•	•	•	•	•
4.NBT.2b Compare two Multi-Digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.			•	•		

Set A4 Number & Operations: Estimating to Multiply & Divide

	Worksheets		
	1	2	3
4.OA Operations and Algebraic Thinking			
4.OA.3c Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	•	•	•
4.NBT Number and Operations in Base Ten			
4.NBT.3 Use place value understanding to round Multi-Digit whole numbers to any place.	•	•	•
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.	•	•	•
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.	•	•	•

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Set A5 Number & Operations: Multi-Digit Multiplication

Activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14
4.OA Operations and Algebraic Thinking														
4.OA.3a 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.		•		•		•		•	•				•	
4.OA.3c Assess the reasonableness of answers using mental computation and estimation strategies including rounding.		•		•		•		•	•				•	
4.NBT Number and Operations in Base Ten														
4.NBT.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. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.		•	•				•			•				
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.		•	•	•	•	•	•	•	•	•	•		•	
4.MD Measurement and Data														
4.MD.2 Use the four operations to solve word 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. c. liquid volumes													•	
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.				•				•						

Worksheets	1	2	3	4	5	6	7	8	9
4.OA Operations and Algebraic Thinking									
4.OA.3a 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.	•				•				•
4.NBT Number and Operations in Base Ten									
4.NBT.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. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.	•	•							
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.	•	•	•	•	•	•	•	•	•
4.MD Measurement and Data									
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.	•		•						

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Set A6 Number & Operations: Fractions, Mixed Numbers & Decimals

	Worksheets	
	1	2
4.OA Operations and Algebraic Thinking		
4.OA.4a 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.		•
4.NF Number and Operations—Fractions		
4.NF.1 Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × 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.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 1/2. 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.		•
4.NF.3a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	•	•
4.NF.3d 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.	•	

Set A9 Number & Operations: Adding & Subtracting Fractions

	Activity	Worksheets		
	1	1	2	3
4.NF Number and Operations—Fractions				
4.NF.3a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.		•	•	
4.NF.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, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$.	•			
4.NF.3c 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.NF.3d 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.	•	•	•	•

Set A10 Number & Operations: Multiplying Whole Numbers by Fractions

	Activities			Worksheets			
	1	2	3	1	2	3	4
4.NF Number and Operations—Fractions							
4.NF.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, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$.	•	•	•	•	•	•	•
4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. **4.NF.4a** Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times (\frac{1}{4})$, recording the conclusion by the equation $\frac{5}{4} = 5 \times (\frac{1}{4})$. **4.NF.4b** Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. For example, 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, $n \times (\frac{a}{b}) = (\frac{n \times a}{b})$.) **4.NF.4c** 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 will eat $\frac{3}{8}$ of a pound of roast beef, and there are 5 people, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?	•	•	•	•	•	•	•

Set B1 Algebra: Equations & Expressions

	Activities				Worksheets		
	1	2	3	4	1	2	3
4.OA Operations and Algebraic Thinking							
4.OA.3a 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.	•		•	•		•	
4.OA.3b Represent these multistep word problems posed with whole numbers using equations with a letter standing for the unknown quantity.	•		•	•		•	

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Set B2 Algebra: Comparisons & Equations

	Activity	Worksheets	
	1	1	2
4.OA Operations and Algebraic Thinking			
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.	•	•	•
4.OA.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.	•	•	•

Set C1 Geometry: Parallel, Perpendicular & Intersecting

	Activity	Worksheets	
	1	1	2
4.G Geometry			
4.G.1a Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.	•	•	•

Set C2 Geometry: 2- & 3-Dimensional Shapes

	Worksheet
	1
4.G Geometry	
4.G.1a Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.	•
4.G.1b Identify these in two-dimensional figures.	•
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.	•

Set C3 Geometry: Circles & Angles

	Activities		Worksheets	
	1	2	1	2
4.MD Measurement and Data				
4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: **4.MD.5a** 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.MD.5b** An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.	•	•		
4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	•	•		
4.G Geometry				
4.G.1a Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.	•	•		•
4.G.1b Identify these in two-dimensional figures.	•	•	•	•
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.	•		•	•

Set D1 Measurement: Weight & Mass

	Activities		
	1	4	5
4.MD Measurement and Data			
4.MD.1a 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. iv. standard weight (lb, oz)		•	•
4.MD.2 Use the four operations to solve word 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. d. masses of objects	•	•	•

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Set D3 Measurement: Capacity in Metric Units

	Activities		Worksheet
	1	2	1
4.MD Measurement and Data			
4.MD.1a 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. v. metric capacity (l, ml)	•	•	•
4.MD.2 Use the four operations to solve word 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. c. liquid volumes	•	•	•

Set D6 Measurement: Area & Perimeter

	Activities				Worksheets	
	1	2	3	4	1	2
4.MD Measurement and Data						
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.	•	•	•	•	•	•

Set D9 Measurement: Area of Polygons

	Activities	Worksheets	
	1	1	2
4.MD Measurement and Data			
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.	•	•	•
4.G Geometry			
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.	•	•	•

Set D10 Measurement: Conversion

	Activity	Worksheets	
	1	1	2
4.G Geometry			
4.MD.1a 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. iii. metric mass (kg, g)	•	•	•
4.MD.1b 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), … iii. metric mass (kg, g); iv. standard weight (lb, oz); v. metric capacity (l, ml); vii. time (hr, min, sec)	•	•	•

Set E2 Data Analysis: Line Plots

	Activities			Worksheets	
	1	2	3	1	2
4.MD Measurement and Data					
4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). 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.	•	•	•	•	•

4.OA Operations and Algebraic Thinking

Standard	Supplements & Practice Book Pages
Use the four operations with whole numbers 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.	Set B2 Algebra: Comparisons & Equations, Activity 1 and Indpependent Worksheets 1 & 2
4.OA.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.	Set B2 Algebra: Comparisons & Equations, Activity 1 and Indpependent Worksheets 1 & 2
4.OA.3a 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.	Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2, 4, 6, 8, 9, 13 & Ind. Worksheets 1, 5, 9 Set B1 Algebra: Equations & Expressions, Activities 1, 3 ,4 & Ind. Worksheet 2 Bridges Practice Book, pp 2, 4, 8, 12, 14, 16, 18, 24, 36, 40, 54, 56, 58, 60, 62, 69, 70, 72, 74, 76, 80, 94, 96, 98, 99, 100, 124, 128
4.OA.3b Represent these multistep word problems posed with whole numbers using equations with a letter standing for the unknown quantity.	Set B1 Algebra: Equations & Expressions, Activities 1, 3 ,4 & Ind. Worksheet 2 Bridges Practice Book, pp 124, 128
4.OA.3c Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Set A4 Number & Operations: Estimating to Mutiply & Divide, Independent. Worksheets 1–3 Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2, 4, 9, 13 Bridges Practice Book, pp 73, 75, 94, 96, 98, 100
Gain familiarity with factors and multiples.	
4.OA.4a 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.	Set A6 Number & Operations: Fractions, Mixed Numbers & Decimals, Activity 2 Bridges Practice Book, pp 17, 42, 105, 107, 109, 126, 129
4.OA.4b Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number.	Bridges Practice Book, pp 15, 126, 129
4.OA.4c Determine whether a given whole number in the range 1–100 is prime or composite.	Bridges Practice Book, pp 17, 42, 105, 107, 109, 126, 129
Generate and analyze patterns.	
4.OA.5a Generate a number or shape pattern that follows a given rule.	Bridges Practice Book, pp 122, 125, 126, 129, 138
4.OA.5b 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 Practice Book, pp 122, 126, 129, 138

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4.NBT Number and Operations in Base Ten

Standard	Supplements & Practice Book Pages
Generalize place value understanding for Multi-Digit whole numbers.	
4.NBT.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. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.	Set A3 Number & Operations: Place Value to Millions, Activities 1–3 & Ind. Worksheets 1–3 Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2, 3, 7, 10 & Ind. Worksheets 1 & 2 Bridges Practice Book, pp 25, 37, 61, 75
4.NBT.2a Read and write Multi-Digit whole numbers using base-ten numerals, number names, and expanded form.	Set A3 Number & Operations: Place Value to Millions, Activities 1–3 & Ind. Worksheets 1–3 Bridges Practice Book, pp 21, 25, 29, 111
4.NBT.2b Compare two Multi-Digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Set A3 Number & Operations: Place Value to Millions, Activity 3 & Ind. Worksheet 1 Bridges Practice Book, pp 132, 134
4.NBT.3 Use place value understanding to round Multi-Digit whole numbers to any place.	Set A4 Number & Operations: Estimating to Mutiply & Divide, Ind. Worksheets 1–3 Bridges Practice Book, p 9
Use place value understanding and properties of operations to perform Multi-Digit arithmetic.	
4.NBT.4 Fluently add and subtract Multi-Digit whole numbers using the standard algorithm.	Bridges Practice Book, pp 1–5, 7, 8, 9, 12, 17, 37
Use place value understanding and properties of operations to perform Multi-Digit arithmetic.	
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.	Set A4 Number & Operations: Estimating to Multiply & Divide, Ind. Worksheets 1–3 Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2–11, 13 & Ind. Worksheets 1–9 Bridges Practice Book, pp 23, 33, 34, 35, 39, 53, 61, 66, 68, 69, 71, 73, 75, 77, 78, 79, 87, 95, 136, 139
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.	Set A4 Number & Operations: Estimating to Multiply & Divide, Ind. Worksheets 1–3 Bridges Practice Book, pp 81, 82, 85, 87, 93, 136

4.NF Number and Operations—Fractions

Standard	Supplements & Practice Book Pages
Extend understanding of fraction equivalence and ordering. **Note: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12 & 100.**	
4.NF.1 Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × 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.	Set A6 Number & Operations: Fractions & Mixed Numbers, Activities 1 & 2 Bridges Practice Book, pp 41, 42, 45, 47, 59, 101, 105, 107, 109, 111, 113, 115, 117, 119, 137
Extend understanding of fraction equivalence and ordering. **Note: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12 & 100.**	
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 1/2. 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.	Set A6 Number & Operations: Fractions & Mixed Numbers, Activity 2 Bridges Practice Book, pp 42–44, 46, 47, 57, 67, 102, 103, 109, 117
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	
4.NF.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.	
4.NF.3a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	Set A6 Number & Operations: Fractions & Mixed Numbers, Activities 1 & 2 Set A9 Number & Operations: Adding & Subtracting Fractions, Ind. Worksheets 1 & 2
4.NF.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, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$.	Set A9 Number & Operations: Adding & Subtracting Fractions, Activity 1 Set A10 Number & Operations: Multiplying Whole Numbers by Fractions, Activities 1–3 & Ind. Worksheets 1–4
4.NF.3c 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.	Set A9 Number & Operations: Adding & Subtracting Fractions, Ind. Worksheets 1–3
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	
4.NF.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.	
4.NF.3d 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.	Set A6 Number & Operations: Fractions & Mixed Numbers, Activity 1 Set A9 Number & Operations: Adding & Subtracting Fractions, Activity 1 & Ind. Worksheets 1–3
4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	
4.NF.4a Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times (\frac{1}{4})$, recording the conclusion by the equation $\frac{5}{4} = 5 \times (\frac{1}{4})$.	Set A10 Number & Operations: Multiplying Whole Numbers by Fractions, Activities 1–3 & Ind. Worksheets 1–4
4.NF.4b Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. For example, 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, $n \times (\frac{a}{b}) = (\frac{n \times a}{b})$.)	Set A10 Number & Operations: Multiplying Whole Numbers by Fractions, Activities 1–3 & Ind. Worksheets 1–4
4.NF.4c 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 will eat $\frac{3}{8}$ of a pound of roast beef, and there are 5 people, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?	Set A10 Number & Operations: Multiplying Whole Numbers by Fractions, Activities 1–3 & Ind. Worksheets 1–4

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4.NF Number and Operations—Fractions

Standard	Supplements & Practice Book Pages
Understand decimal notation for fractions, and compare decimal fractions.	
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 Practice Book, pp 111, 115, 119, 137
4.NF.7a 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.	Bridges Practice Book, pp 111, 115, 117, 119, 137
4.NF.7b Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	Bridges Practice Book, pp 111, 113, 119, 137

4.MD Measurement and Data

Standard	Supplements & Practice Book Pages
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	
4.MD.1a 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.	
i. metric length (km, m, cm)	Bridges Practice Book, pp 10, 28, 48,
ii. standard length (yd, ft, in)	Bridges Practice Book, p 110
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	
4.MD.1a 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.	
iii. metric mass (kg, g)	Set D10 Measurement: Conversion, Activity 1 & Ind. Worksheets 1 & 2
iv. standard weight (lb, oz)	Set D1 Measurement: Weight & Mass, Activities 4, 5 Bridges Practice Book, p 106
v. metric capacity (l, ml)	Set D3 Measurement: Capacity in Metric Units, Activities 1 & 2 & Ind. Worksheet 1
vi. standard capacity (gal, qt, pt, c)	Bridges Practice Book, p 127
vii. time (hr, min, sec)	Bridges Practice Book, pp 28, 49, 55, 56, 62, 78, 104
4.MD.1b 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), …	
iii. metric mass (kg, g)	Set D10 Measurement: Conversion, Activity 1 & Ind. Worksheets 1 & 2
iv. standard weight (lb, oz)	Set D10 Measurement: Conversion, Activity 1 & Ind. Worksheets 1 & 2
v. metric capacity (l, ml)	Set D10 Measurement: Conversion, Activity 1 & Ind. Worksheets 1 & 2
vii. time (hr, min, sec)	Set D10 Measurement: Conversion, Activity 1 & Ind. Worksheets 1 & 2
Solve problems involving measurement 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.	
a. distances	Bridges Practice Book, pp 10, 18, 24, 28, 34, 48, 56, 58, 103, 109, 110, 114, 120
b. intervals of time	Bridges Practice Book, pp 7, 18, 24, 27, 28, 50, 56, 62, 78, 88, 91, 93, 96, 100, 104
c. liquid volumes	Set A5 Number & Operations: Multi-Digit Multiplication, Activity 13 Set D3 Measurement: Capacity in Metric Units, Activities 1 & 2 & Ind. Worksheet 1 Bridges Practice Book, pp 108, 127
d. masses of objects	Set D1 Measurement: Weight & Mass, Activities 1, 4, 5 Bridges Practice Book, pp 16, 36, 106, 120
e. money	Bridges Practice Book, pp 6, 12, 26, 30, 31, 32, 34, 36, 38, 40, 62, 70, 72, 88, 96, 99, 114, 116, 140

4.MD Measurement and Data

Standard	Supplements & Practice Book Pages
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	
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.	Set A5 Number & Operations: Multi-Digit Multiplication, Activities 4, 8 & Ind. Worksheets 1, 3 Set D6 Measurement: Area & Perimeter, Activities 1–4 & Ind. Worksheets 1 & 2 Set D9 Measurement: Area of Polygons, Activity 1 & Ind. Worksheets 1 & 2 Bridges Practice Book, pp 19, 20, 21, 22, 64, 80, 88, 98, 99, 116, 121, 122, 130, 138, 139, 140
Represent and interpret data.	
4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). 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.	Set E2 Data Analysis: Line Plots, Activities 1–3 & Ind. Worksheets 1 & 2
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 concepts of angle measurement:	
4.MD.5a 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.	Set C3 Geometry: Circles & Angles, Activities 1 & 2
4.MD.5b An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.	Set C3 Geometry: Circles & Angles, Activities 1 & 2
Geometric measurement: understand concepts of angle and measure angles.	
4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Set C3 Geometry: Circles & Angles, Activities 1 & 2

4.G Geometry

Standard	Supplements & Practice Book Pages
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	
4.G.1a Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.	Set C1 Geometry: Parallel, Perpendicular & Intersecting, Activity 1 & Ind. Worksheets 1 & 2 Set C2 Geometry: 2- & 3-Dimensional Shapes, Ind. Worksheet 1 Set C3 Geometry: Circles & Angles, Activities 1 & 2 & Ind. Worksheet 2
4.G.1b Identify these in two-dimensional figures.	Set C2 Geometry: 2- & 3-D Shapes, Ind. Worksheet 1 Set C3 Geometry: Circles & Angles, Activities 1, 2 & Ind. Worksheets 1, 2
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.	Set C2 Geometry: 2- & 3-D Shapes, Ind. Worksheet 1 Set C3 Geometry: Circles & Angles, Activity 1 & Ind. Worksheets 1 & 2 Set D9 Measurement: Area of Polygons, Activity 1 & Ind. Worksheets 1 & 2

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