

# Bridges Grade 5 Supplement Sets

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

### Set A4 Number & Operations: Long Division

Activities	
1	2

<b>5.NBT Number and Operations in Base Ten</b>		
<p><b>5.NBT.6</b> Find whole-number quotients of whole numbers with up to four-digit dividends and two-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.</p>	•	•

### Set A6 Number & Operations: Fraction Concepts

Activities		Worksheets		
1	2	1	2	3

<b>5.NF Number and Operations—Fractions</b>					
<p><b>5.NF.1</b> Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, <math>\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}</math>. (In general, <math>\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}</math>.)</p>	•	•	•	•	•

### Set A9 Number & Operations: Multiplying Fractions

Activities							Worksheets				
1	2	3	4	5	6	7	1	2	3	4	5

<b>5.NF Number and Operations—Fractions</b>											
<p><b>5.NF.2</b> Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result <math>\frac{2}{5} + \frac{1}{2} = \frac{3}{7}</math>, by observing that <math>\frac{3}{7} &lt; \frac{1}{2}</math>.</p>	•	•	•	•	•	•	•	•	•	•	•
<p><b>5.NF.3</b> Interpret a fraction as division of the numerator by the denominator (<math>\frac{a}{b} = a \div b</math>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret <math>\frac{3}{4}</math> as the result of dividing 3 by 4, noting that <math>\frac{3}{4}</math> multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size <math>\frac{3}{4}</math>. Between what two whole numbers does your answer lie?</p>	•	•	•	•	•	•	•	•	•	•	•
<p><b>5.NF.4a</b> Interpret the product <math>(\frac{a}{b}) \times q</math> as <math>a</math> parts of a partition of <math>q</math> into <math>b</math> equal parts; equivalently, as the result of a sequence of operations <math>a \times q \div b</math>. For example, use a visual fraction model to show <math>(\frac{2}{5}) \times 4 = \frac{8}{5}</math>, and create a story context for this equation. Do the same with <math>(\frac{2}{5}) \times (\frac{1}{5}) = \frac{2}{25}</math>. (In general, <math>(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}</math>.)</p>	•	•	•	•	•	•	•	•	•	•	•
<p><b>5.NF.4b</b> Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p>	•	•	•	•	•	•	•	•	•	•	•
<p><b>5.NF.5b</b> [Interpret multiplication as scaling (resizing) by] explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence <math>\frac{a}{b} = \frac{(n \times a)}{(n \times b)}</math> to the effect of multiplying <math>\frac{a}{b}</math> by 1.</p>	•	•	•								
<p><b>5.NF.6</b> Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>	•	•	•	•	•	•	•	•	•	•	•

### Set A10 Number and Operations: Integers

	Activities			Worksheets		
	1	2	3	1	2	3
<b>5.G Geometry</b>						
<b>5.G.1</b> Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).			•		•	•
<b>5.G.2</b> Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.			•		•	•

### Set A11 Number & Operations: Multiplying & Dividing Decimals

	Activities								Worksheets							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
<b>5.NBT Number and Operations in Base Ten</b>																
<b>5.NBT.1</b> Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.	•	•							•	•						
<b>5.NBT.2a</b> Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.	•	•		•												
<b>5.NBT.2b</b> Use whole-number exponents to denote powers of 10.		• <sup>1</sup>														
<b>5.NBT.4</b> Use place value understanding to round decimals to any place.									•							
<b>5.NBT.6</b> Find whole-number quotients of whole numbers with up to four-digit dividends and two-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.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>5.NBT.7a</b> Add and subtract decimals to hundredths, 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.				•												
<b>5.NBT.7b</b> Multiply and divide decimals to hundredths, 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.	•	•	•	•	•	•	•	•			•	•	•	•	•	
<b>5.NF Number and Operations—Fractions</b>																
<b>5.NF.4b</b> Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.				•												
<b>5.NF.5a</b> [Interpret multiplication as scaling (resizing) by] comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	•	•		•												

<sup>1</sup> Extension 3

### Set A12 Number & Operations: Dividing Fractions & Whole Numbers

	Activities								Worksheets			
	1	2	3	4	5	6	7	8	1	2	3	
<b>5.NF Number and Operations—Fractions</b>												
<b>5.NF.3</b> Interpret a fraction as division of the numerator by the denominator ( $\frac{a}{b} = a \div b$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$ . Between what two whole numbers does your answer lie?		•	•	•	•	•	•			•	•	•
<b>5.NF.4a</b> Interpret the product $(\frac{a}{b}) \times q$ as $a$ parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$ . For example, use a visual fraction model to show $(\frac{2}{5}) \times 4 = \frac{8}{5}$ , and create a story context for this equation. Do the same with $(\frac{2}{5}) \times (\frac{1}{5}) = \frac{2}{25}$ . (In general, $(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}$ .)		•	•	•	•	•	•			•	•	•
<b>5.NF.4b</b> Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.		•	•	•	•	•	•			•	•	•
<b>5.NF.7a</b> Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(\frac{1}{5}) \div 4$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(\frac{1}{5}) \div 4 = \frac{1}{20}$ because $(\frac{1}{20}) \times 4 = \frac{1}{5}$ .		•	•	•	•	•	•			•	•	•
<b>5.NF.7b</b> Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (\frac{1}{5})$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$ .		•	•	•	•	•	•			•	•	•
<b>5.NF.7c</b> Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $\frac{1}{2}$ lb of chocolate equally? How many $\frac{1}{3}$ -cup servings are in 2 cups of raisins?		•	•	•	•	•	•			•	•	•

### Set B1 Algebra: Diagrams & Equations

	Activities		Worksheets		
	1	2	1	2	
<b>5.OA Operations and Algebraic Thinking</b>					
<b>5.OA.2</b> Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$ . Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$ , without having to calculate the indicated sum or product.		•		•	•

### Set C1 Geometry: Triangles & Quadrilaterals

	Activities				Worksheets					
	1	2	3	4	1	2	3	4	5	6
<b>5.G Geometry</b>										
<b>5.G.3</b> Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	•	•			•	•	•	•		
<b>5.G.4</b> Classify two-dimensional figures in a hierarchy based on properties.	•	•			•	•	•	•		

**Set D2 Measurement: Volume**

	Activities						Worksheets				
	1	2	3	4	5	6	1	2	3	4	5
<b>5.NF Number and Operations—Fractions</b>											
<b>5.NF.1</b> Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)				•	•					•	•
<b>5.NF.2</b> Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ , by observing that $\frac{3}{7} < \frac{1}{2}$ .				•	•					•	•
<b>5.NF.3</b> Interpret a fraction as division of the numerator by the denominator ( $\frac{a}{b} = a \div b$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$ . Between what two whole numbers does your answer lie?				•	•					•	•
<b>5.NF.4a</b> Interpret the product $(\frac{a}{b}) \times q$ as $a$ parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$ . For example, use a visual fraction model to show $(\frac{2}{5}) \times 4 = \frac{8}{5}$ , and create a story context for this equation. Do the same with $(\frac{2}{5}) \times (\frac{1}{5}) = \frac{2}{25}$ . (In general, $(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}$ .)				•	•					•	•
<b>5.NF.6</b> Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.				•	•					•	•
<b>5.MD Measurement and Data</b>											
<b>5.MD.1</b> Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.				•	•					•	•
<b>5.MD.2</b> Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.				•	•					•	•
<b>5.MD.3</b> Recognize volume as an attribute of solid figures and understand concepts of volume measurement. <b>5.MD.3a</b> A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. <b>5.MD.3b</b> A solid figure which can be packed without gaps or overlaps using $n$ unit cubes is said to have a volume of $n$ cubic units.	•	•	•					•	•	•	
<b>5.MD.4</b> Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	•	•	•					•	•	•	
<b>5.MD.5a</b> Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.	•	•	•					•	•	•	
<b>5.MD.5b</b> Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	•	•	•					•	•	•	
<b>5.MD.5c</b> Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.			•	•	•					•	•

<b>5.OA Operations and Algebraic Thinking</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Write and interpret numerical expressions.</b>	
<b>5.OA.1</b> Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Bridges Practice Book, pp 11, 12, 121, 122, 124
<b>5.OA.2</b> Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$ . Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$ , without having to calculate the indicated sum or product.	Set B1 Algebra: Diagrams & Equations, Activity 1 & Ind. Worksheets 1, 2 Bridges Practice Book, pp 1, 31, 125, 126, 128
<b>Analyze patterns and relationships.</b>	
<b>5.OA.3</b> Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	Bridges Practice Book, pp 6, 7, 8, 33

<b>5.NBT Number and Operations in Base Ten</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Understand the place value system.</b>	
<b>5.NBT.1</b> Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.	Set A11 Number & Operations: Multiplying & Dividing Decimals, Activities 1, 2 & Ind. Worksheets 1, 2 Bridges Practice Book, pp 111, 112, 113, 130
<b>5.NBT.2a</b> Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.	Set A11 Number & Operations: Multiplying & Dividing Decimals, Activities 1, 2, 4 Bridges Practice Book, pp 22, 23
<b>5.NBT.2b</b> Use whole-number exponents to denote powers of 10.	Set A11 Number & Operations: Multiplying & Dividing Decimals, Activity 2 (Extension 3)
<b>5.NBT.3a.</b> Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (\frac{1}{10}) + 9 \times (\frac{1}{100}) + 2 \times (\frac{1}{1000})$ .	Bridges Practice Book, pp 111, 112, 113, 130
<b>Understand the place value system.</b>	
<b>5.NBT.4</b> Use place value understanding to round decimals to any place.	Set A11 Number & Operations: Multiplying & Dividing Decimals, Ind. Worksheet 1 Bridges Practice Book, p 14
<b>Perform operations with multi-digit whole numbers and with decimals to hundredths.</b>	
<b>5.NBT.5</b> Fluently multiply multi-digit whole numbers using the standard algorithm.	Bridges Practice Book, pp 25, 26, 28, 29, 30, 81
<b>5.NBT.6</b> Find whole-number quotients of whole numbers with up to four-digit dividends and two-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: Long Division, Activities 1 & 2 Set A11 Number & Operations: Multiplying & Dividing Decimals, Activities 1–8 & Ind. Worksheets 1–7 Bridges Practice Book, pp 1, 5, 9, 21, 22, 30, 32, 35–39, 61, 63, 64, 66–68, 70, 79, 81–83, 85, 90, 92, 99, 100, 131
<b>Perform operations with multi-digit whole numbers and with decimals to hundredths.</b>	
<b>5.NBT.7a</b> Add and subtract decimals to hundredths, 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.	Set A11 Number & Operations: Multiplying & Dividing Decimals, Activity 4 Bridges Practice Book, pp 112, 113, 114, 115, 116, 120, 130, 137, 138

5.NBT Number and Operations in Base Ten	
Standard	Supplements & Practice Book Pages
<p><b>5.NBT.7b</b> Multiply and divide decimals to hundredths, 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.</p>	<p>Set A11 Number &amp; Operations: Multiplying &amp; Dividing Decimals, Activities 1–8 &amp; Ind. Worksheets 3–7 Bridges Practice Book, pp 28, 34, 38</p>

5.NF Number and Operations—Fractions	
Standard	Supplements & Practice Book Pages
Use equivalent fractions as a strategy to add and subtract fractions.	
<p><b>5.NF.1</b> Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, <math>\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}</math>. (In general, <math>\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}</math>.)</p>	<p>Set A6 Number &amp; Operations: Fraction Concepts, Activities 1, 2 &amp; Ind. Worksheets 1–3 Set D2 Measurement: Volume, Activities 4, 5 &amp; Ind. Worksheets 4, 5 Bridges Practice Book, pp 76–79, 80, 84, 107–110, 114, 115, 117–119, 127, 129, 133–135, 137</p>
Use equivalent fractions as a strategy to add and subtract fractions.	
<p><b>5.NF.2</b> Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result <math>\frac{2}{5} + \frac{1}{2} = \frac{3}{7}</math>, by observing that <math>\frac{3}{7} &lt; \frac{1}{2}</math>.</p>	<p>Set A9 Number &amp; Operations: Multiplying Fractions, Activities 1–7 &amp; Ind. Worksheets 1–5 Set D2 Measurement: Volume, Activities 4, 5 &amp; Ind. Worksheets 4, 5 Bridges Practice Book, pp 78, 80, 93, 94, 119, 133, 134, 135, 136</p>
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
<p><b>5.NF.3</b> Interpret a fraction as division of the numerator by the denominator (<math>\frac{a}{b} = a \div b</math>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret <math>\frac{3}{4}</math> as the result of dividing 3 by 4, noting that <math>\frac{3}{4}</math> multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size <math>\frac{3}{4}</math>. Between what two whole numbers does your answer lie?</p>	<p>Set A9 Number &amp; Operations: Multiplying Fractions, Activities 1–7 &amp; Ind. Worksheets 1–5. Set A12 Number &amp; Operations: Dividing Fractions &amp; Whole Numbers Activities 2–7 &amp; Ind. Worksheets 1–3 Set D2 Measurement: Volume, Activities 4, 5 &amp; Ind. Worksheets 4, 5</p>
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
<b>5.NF.4</b> Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	
<p><b>5.NF.4a</b> Interpret the product <math>(\frac{a}{b}) \times q</math> as <math>a</math> parts of a partition of <math>q</math> into <math>b</math> equal parts; equivalently, as the result of a sequence of operations <math>a \times q \div b</math>. For example, use a visual fraction model to show <math>(\frac{2}{3}) \times 4 = \frac{8}{3}</math>, and create a story context for this equation. Do the same with <math>(\frac{2}{3}) \times (\frac{4}{5}) = \frac{8}{15}</math>. (In general, <math>(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}</math>.)</p>	<p>Set A9 Number &amp; Operations: Multiplying Fractions, Activities 1–7 &amp; Ind. Worksheets 1–5. Set A12 Number &amp; Operations: Dividing Fractions &amp; Whole Numbers Activities 2–7 &amp; Ind. Worksheets 1–3 Set D2 Measurement: Volume, Activities 4, 5 &amp; Ind. Worksheets 4, 5</p>
<p><b>5.NF.4b</b> Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p>	<p>Set A9 Number &amp; Operations: Multiplying Fractions, Activities 2–7 &amp; Ind. Worksheets 1–5 Set A11 Number &amp; Operations: Multiplying &amp; Dividing Decimals, Activity 4 Set A12 Number &amp; Operations: Dividing Fractions &amp; Whole Numbers Activities 2–7 &amp; Ind. Worksheets 1–3</p>

## Bridges Grade 5 Supplement Sets—CCSS Correlations by Standard

<b>5.NF Number and Operations—Fractions</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>5.NF.5</b> Interpret multiplication as scaling (resizing) by:	
<b>5.NF.5a</b> Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	Set A11 Number & Operations: Multiplying & Dividing Decimals, Activities 1, 2, 4
<b>5.NF.5b</b> Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ to the effect of multiplying $\frac{a}{b}$ by 1.	Set A9 Number & Operations: Multiplying Fractions, Activities 2, 3, 4 Practice Book, pp 103, 104, 106, 127, 129
<b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b>	
<b>5.NF.6</b> Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	Set A9 Number & Operations: Multiplying Fractions, Activities 2–7 & Ind. Worksheets 1–5 Set D2 Measurement: Volume, Activities 4, 5 & Ind. Worksheets 4, 5
<b>5.NF.7</b> Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (Note: Division of a fraction by a fraction is not a requirement at this grade.)	
<b>5.NF.7a</b> Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(\frac{1}{5}) \div 4$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(\frac{1}{5}) \div 4 = \frac{1}{20}$ because $(\frac{1}{20}) \times 4 = \frac{1}{5}$ .	Set A12 Number & Operations: Dividing Fractions & Whole Numbers Activities 2–7 & Ind. Worksheets 1–3
<b>5.NF.7b</b> Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (\frac{1}{5})$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$ .	Set A12 Number & Operations: Dividing Fractions & Whole Numbers Activities 2–7 & Ind. Worksheets 1–3
<b>5.NF.7c</b> Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $\frac{1}{2}$ lb of chocolate equally? How many $\frac{1}{3}$ -cup servings are in 2 cups of raisins?	Set A12 Number & Operations: Dividing Fractions & Whole Numbers Activities 2–7 & Ind. Worksheets 1–3
<b>5.MD Measurement and Data</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Convert like measurement units within a given measurement system.</b>	
<b>5.MD.1</b> Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	Set D2 Measurement: Volume, Activities 4, 5 & Ind. Worksheets 4, 5 Bridges Practice Book, pp 17, 27, 28, 54, 72, 74, 86, 91
<b>Represent and interpret data.</b>	
<b>5.MD.2</b> Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	Set D2 Measurement: Volume, Activities 4, 5 & Ind. Worksheets 4, 5
<b>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</b>	



<b>5.MD Measurement and Data</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>5.MD.3</b> Recognize volume as an attribute of solid figures and understand concepts of volume measurement.	
<b>5.MD.3a</b> A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.	Set D2 Measurement: Volume, Activities 1–3 & Ind. Worksheets 1–3
<b>5.MD.3b</b> A solid figure which can be packed without gaps or overlaps using $n$ unit cubes is said to have a volume of $n$ cubic units.	Set D2 Measurement: Volume, Activities 1–3 & Ind. Worksheets 1–3
<b>5.MD.4</b> Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Set D2 Measurement: Volume, Activities 1–3 & Ind. Worksheets 1–3
<b>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</b>	
<b>5.MD.5</b> Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	
<b>5.MD.5a</b> Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.	Set D2 Measurement: Volume, Activities 1–3 & Ind. Worksheets 1–3
<b>5.MD.5b</b> Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	Set D2 Measurement: Volume, Activities 1–3 & Ind. Worksheets 1–3 Bridges Practice Book, pp 57, 59, 60, 65, 69
<b>5.MD.5c</b> Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.	Set D2 Measurement: Volume, Activities 3–5 & Ind. Worksheets 3–5

<b>5.G Geometry</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Graph points on the coordinate plane to solve real-world and mathematical problems.</b>	
<b>5.G.1</b> Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Set A10 Number & Operations: Integers, Activity 3 & Ind. Worksheets 2, 3
<b>5.G.2</b> Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Set A10 Number & Operations: Integers, Activity 3 & Ind. Worksheets 2, 3 Bridges Practice Book, pp 55, 98
<b>Classify two-dimensional figures into categories based on their properties.</b>	
<b>5.G.3</b> Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	Set C1 Geometry: Triangles & Quadrilaterals, Activities 1, 2 & Ind. Worksheets 1–4 Bridges Practice Book, pp 41, 43, 44, 97, 140
<b>5.G.4</b> Classify two-dimensional figures in a hierarchy based on properties.	Set C1 Geometry: Triangles & Quadrilaterals, Activities 1, 2 & Ind. Worksheets 1–4