

# Bridges Grade 3 Supplement Sets

## Correlations to Common Core State Standards

### BY SET

Set A1	Number & Operations: Equal Expressions.....	2
Set A2	Number & Operations: Equal Expressions.....	2
Set A3	Number & Operations: Multi-Digit Addition & Subtraction.....	3
Set A5	Number & Operations: Fractions.....	3
Set A6	Number & Operations: Estimating to Add & Subtract.....	4
Set A7	Number & Operations: Multiplication Beyond the Basics.....	4
Set C2	Geometry: Triangles & More.....	4
Set C4	Geometry: Quadrilaterals.....	4
Set D2	Measurement: Area.....	5
Set D3	Measurement: Telling Time.....	5
Set D5	Measurement: Area in U.S. Customary Units.....	5
Set D6	Measurement: Area in Metric Units.....	5
Set D7	Measurement: Masses & Volumes.....	5
Set E1	Data Analysis: Graphing.....	6
Set E3	Data Analysis: Line Plots.....	6

### BY STANDARD

3.OA	Operations and Algebraic Thinking.....	7
3.NBT	Number and Operations in Base Ten.....	8
3.NF	Number and Operations—Fractions.....	8
3.MD	Measurement and Data.....	9
3.G	Geometry.....	10

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.

### Set A1 Number & Operations: Equal Expressions

	Activity		Worksheets	
	1	2	1	2
<b>3.OA Operations and Algebraic Thinking</b>				
<b>3.OA.2</b> Interpret whole-number quotients of whole numbers, e.g., 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. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ .	•		•	•
<b>3.OA.3</b> Use multiplication and division within 100 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.	•		•	•
<b>3.OA.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times \underline{\quad} = 48$ , $5 = \underline{\quad} \div 3$ , $6 \times 6 = \underline{\quad}$	•		•	•
<b>3.OA.7</b> Fluently multiply and divide within 100, 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.	•		•	•
<b>3.OA.8</b> 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.	•		•	

### Set A2 Number & Operations: Equal Expressions

	Activities		Worksheets							
	1	2	1	2	3	4	5	6	7	8
<b>3.OA Operations and Algebraic Thinking</b>										
<b>3.OA.1</b> Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .			•		•	•				•
<b>3.OA.2</b> Interpret whole-number quotients of whole numbers, e.g., 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. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ .			•		•	•				•
<b>3.OA.3</b> Use multiplication and division within 100 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.			•		•	•				•
<b>3.OA.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times \underline{\quad} = 48$ , $5 = \underline{\quad} \div 3$ , $6 \times 6 = \underline{\quad}$						•				
<b>3.OA.5</b> Apply properties of operations as strategies to multiply and divide. Examples: 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 $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.) <b>Note</b> Students need not use formal terms for these properties.					•	•	•			
<b>3.OA.6</b> Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.			•							•
<b>3.OA.7</b> Fluently multiply and divide within 100, 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.				•	•	•	•			•
<b>3.OA.8</b> 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.								•		
<b>3.OA.9</b> Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.				•						

Set A2 Number & Operations: Equal Expressions (cont.)	Activities		Worksheets							
	1	2	1	2	3	4	5	6	7	8
<b>3.MD Measurement and Data</b>										
<b>3.MD.7b</b> 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.					•		•	•		
<b>3.MD.7c</b> 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.	•	•								

Set A3 Number & Operations: Multi-Digit Addition & Subtraction	Activities					Worksheets			
	1	2	3	4	5	1	2	3	4
<b>3.OA Operations and Algebraic Thinking</b>									
<b>3.OA.8</b> 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.		•				•	•	•	•
<b>3.NBT Number and Operations in Base Ten</b>									
<b>3.NBT.1</b> Use place value understanding to round whole numbers to the nearest 10 or 100.					•				•
<b>3.NBT.2</b> 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.	•	•	•	•	•	•	•	•	
<b>3.MD Measurement and Data</b>									
<b>3.MD.1b</b> Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.								•	

Set A5 Number & Operations: Fractions	Activities			Worksheets		
	1	2	3	1	2	3
<b>3.NF Number and Operations—Fractions</b>						
<b>3.NF.1</b> 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 of size $\frac{1}{b}$ .	•			•	•	•
<b>3.NF.2</b> Understand a fraction as a number on the number line; represent fractions on a number line diagram. <b>3.NF.2a</b> 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. <b>3.NF.2b</b> 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.	•	•	•	•	•	•
<b>3.NF.3</b> Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. <b>3.NF.3a</b> Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. <b>3.NF.3b</b> Recognize and generate simple equivalent fractions, e.g., $\frac{1}{2} = \frac{2}{4}$ , $\frac{1}{6} = \frac{2}{3}$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model. <b>3.NF.3c</b> Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = \frac{3}{1}$ ; recognize that $\frac{6}{1} = 6$ ; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram. <b>3.NF.3d</b> 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.				•	•	•

### Set A6 Number & Operations: Estimating to Add & Subtract

Worksheets		
1	2	3

3.OA Operations and Algebraic Thinking			
3.OA.8 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.	•	•	•
3.NBT Number and Operations in Base Ten			
3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	•	•	•
3.NBT.2 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.	•	•	•

### Set A7 Number & Operations: Multiplication Beyond the Basics

Activities	Worksheets		
1	1	2	3

3.NBT Number and Operations in Base Ten			
3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	•	•	•
3.MD Measurement and Data			
3.MD.1a Tell and write time to the nearest minute and measure time intervals in minutes.			•
3.MD.7b 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.MD.7c 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.	•		

### Set C2 Geometry: Triangles & More

Activities			Worksheets			
1	2	3	1	2	3	4

3.G Geometry						
3.G.1a 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).		•			•	•

### Set C4 Geometry: Quadrilaterals

Activities					Worksheets		
1	2	3	4	5	1	2	3

3.MD Measurement and Data							
3.MD.8a Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, and finding an unknown side length,			•	•			•
3.MD.8b Exhibit rectangles with the same perimeter and different areas or with the same area and different perimeters.							•
3.G Geometry							
3.G.1a 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).	•	•	•	•	•	•	
3.G.1b Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	•	•	•	•	•	•	•

### Set D2 Measurement: Area

	Activities		Worksheets
	1	2	1
<b>3.MD Measurement and Data</b>			
<p><b>3.MD.5</b> Recognize area as an attribute of plane figures and understand concepts of area measurement:</p> <p><b>3.MD.5a</b> 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.</p> <p><b>3.MD.5b</b> A plane figure which can be covered without gaps or overlaps by <math>n</math> unit squares is said to have an area of <math>n</math> square units.</p>	•	•	•
<b>3.MD.6</b> Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	•	•	•
<b>3.MD.7b</b> 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.			•
<b>3.MD.7c</b> 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.	•	•	
<b>3.MD.7d</b> 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.	•	•	

### Set D3 Measurement: Telling Time

	Activities		Worksheets	
	1		1	2
<b>3.MD Measurement and Data</b>				
<b>3.MD.1a</b> Tell and write time to the nearest minute and measure time intervals in minutes.	•		•	•

### Set D5 Measurement: Area in U.S. Customary Units

	Activities		Worksheets
	1	2	1
<b>3.MD Measurement and Data</b>			
<p><b>3.MD.5</b> Recognize area as an attribute of plane figures and understand concepts of area measurement:</p> <p><b>3.MD.5a</b> 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.</p> <p><b>3.MD.5b</b> A plane figure which can be covered without gaps or overlaps by <math>n</math> unit squares is said to have an area of <math>n</math> square units.</p>	•	•	•
<b>3.MD.6</b> Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	•	•	•
<b>3.MD.7a</b> 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.		•	•

### Set D6 Measurement: Area in Metric Units

	Activities		Worksheets
	1	2	1
<b>3.MD Measurement and Data</b>			
<p><b>3.MD.5</b> Recognize area as an attribute of plane figures and understand concepts of area measurement:</p> <p><b>3.MD.5a</b> 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.</p> <p><b>3.MD.5b</b> A plane figure which can be covered without gaps or overlaps by <math>n</math> unit squares is said to have an area of <math>n</math> square units.</p>	•	•	•
<b>3.MD.6</b> Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	•		
<b>3.MD.7a</b> 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.	•	•	•

### Set D7 Measurement: Masses & Volumes

	Activities		Worksheets	
	1		1	2
<b>3.MD Measurement and Data</b>				
<b>3.MD.2c</b> Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	•		•	•

### Set E1 Data Analysis: Graphing

	Activities			Worksheets	
	1	2	3	1	2
<b>3.MD Measurement and Data</b>					
<b>3.MD.3a</b> Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.	•	•	•	•	•
<b>3.MD.3b</b> Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	•	•	•	•	•

### Set E3 Data Analysis: Line Plots

	Activities			Worksheets	
	1	2	3	1	2
<b>3.MD Measurement and Data</b>					
<b>3.MD.4</b> 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.	•	•	•		

<b>3.OA Operations and Algebraic Thinking</b>	
Standard	Supplements & Practice Book Pages
<b>Represent and solve problems involving multiplication and division.</b>	
<b>3.OA.1</b> Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .	Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 1, 3, 4, 8 Bridges Practice Book, pp 14, 16, 24, 25, 61–63, 65, 68, 69
<b>3.OA.2</b> Interpret whole-number quotients of whole numbers, e.g., 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. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ .	Set A1 Number & Operations: Equal Expressions, Activity 1 & Ind. Worksheets 1, 2 Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 1, 3, 4, 8 Bridges Practice Book, pp 67, 69, 105, 109
<b>3.OA.3</b> Use multiplication and division within 100 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.	Set A1 Number & Operations: Equal Expressions, Activity 1 & Ind. Worksheets 1, 2 Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 1, 3, 4, 8 Bridges Practice Book, pp 14, 16, 24, 25, 62, 66, 68, 72, 74, 76, 78, 124, 127, 129, 136
<b>3.OA.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times \underline{\quad} = 48$ , $5 = \underline{\quad} \div 3$ , $6 \times 6 = \underline{\quad}$	Set A1 Number & Operations: Equal Expressions, Activity 1 & Ind. Worksheets 1, 2 Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheet 4 Bridges Practice Book, pp 61, 63–67, 69, 75, 77, 83, 113
<b>Understand properties of multiplication and the relationship between multiplication and division.</b>	
<b>3.OA.5</b> Apply properties of operations as strategies to multiply and divide. Examples: 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 $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.) <b>Note</b> Students need not use formal terms for these properties.	Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 3–5 Bridges Practice Book, pp 64, 83, 121, 122, 138
<b>3.OA.6</b> Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.	Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 1, 8 Bridges Practice Book, pp 67, 72, 83
<b>Multiply and divide within 100.</b>	
<b>3.OA.7</b> Fluently multiply and divide within 100, 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.	Set A1 Number & Operations: Equal Expressions, Activity 1 & Ind. Worksheets 1, 2 Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 2–5, 8 Bridges Practice Book, pp 61, 63, 65, 67, 69, 70, 71, 73, 77, 79, 83, 111, 119, 121, 123, 135
<b>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</b>	
<b>3.OA.8</b> 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.	Set A1 Number & Operations: Equal Expressions, Activity 1 & Ind. Worksheet 1 Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheet 6 Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Activity 2 & Ind. Worksheets 1–4 Set A6 Number & Operations: Estimating to Add & Subtract, Ind. Worksheets 1–3 Bridges Practice Book, pp 18, 26, 28, 32, 33, 38, 40, 53, 70, 74, 78, 80, 90, 96, 98, 100, 104, 106, 118, 120, 126–129, 134, 136
<b>3.OA.9</b> Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheet 2 Bridges Practice Book, pp 1, 5, 31, 35, 67, 121, 135

<b>3.NBT Number and Operations in Base Ten</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
Use place value understanding and properties of operations to perform multi-digit arithmetic.	
<b>3.NBT.1</b> Use place value understanding to round whole numbers to the nearest 10 or 100.	Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Activity 5 & Ind. Worksheet 4 Set A6 Number & Operations: Estimating to Add & Subtract, Ind. Worksheets 1–3 Bridges Practice Book, pp 85–89, 91, 93, 95, 99, 131
<b>3.NBT.2</b> 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.	Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Activities 1–5 & Ind. Worksheets 1–3 Set A6 Number & Operations: Estimating to Add & Subtract, Ind. Worksheets 1–3 Bridges Practice Book, pp 9, 27, 29, 31, 33, 36, 39, 40, 51, 53, 81, 87, 89, 90, 92–94, 96, 99, 100, 101, 107, 118, 123, 126, 129, 137
<b>3.NBT.3</b> Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	Set A7 Number & Operations: Multiplication Beyond the Basics, Activity 1 & Ind. Worksheets 1–3 Bridges Practice Book, pp 64, 83, 113, 121, 122, 138

<b>3.NF Number and Operations—Fractions</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
Develop understanding of fractions as numbers. (Note: Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)	
<b>3.NF.1</b> 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 of size $\frac{1}{b}$ .	Set A5 Number & Operations: Fractions, Activities 1, 3 & Ind. Worksheets 1–3 Bridges Practice Book, pp 8, 10, 30, 103, 125
<b>3.NF.2</b> Understand a fraction as a number on the number line; represent fractions on a number line diagram.	
<b>3.NF.2a</b> 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.	Set A5 Number & Operations: Fractions, Activities 1–3 & Ind. Worksheets 1–3 Bridges Practice Book, p 133
<b>3.NF.2b</b> 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.	Set A5 Number & Operations: Fractions, Activities 1–3 & Ind. Worksheets 1–3 Bridges Practice Book, pp 112, 114, 133
Develop understanding of fractions as numbers. (Note: Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)	
<b>3.NF.3</b> Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	
<b>3.NF.3a</b> Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	Set A5 Number & Operations: Fractions, Activities 2, 3 & Ind. Worksheets 1–3 Bridges Practice Book, p 105
<b>3.NF.3b</b> Recognize and generate simple equivalent fractions, e.g., $\frac{1}{2} = \frac{2}{4}$ , $\frac{1}{3} = \frac{2}{6}$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model.	Set A5 Number & Operations: Fractions, Activities 2, 3 & Ind. Worksheets 1–3
<b>3.NF.3c</b> Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: 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.	Set A5 Number & Operations: Fractions, Activities 2, 3 & Ind. Worksheets 1–3
<b>3.NF.3d</b> 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.	Set A5 Number & Operations: Fractions, Activities 2, 3 & Ind. Worksheets 1–3 Bridges Practice Book, pp 30, 103, 108–110, 112, 114–117, 125, 128



## Bridges Grade 3 Supplement Sets—CCSS Correlations by Standard

<b>3.MD Measurement and Data</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</b>	
<b>3.MD.1a</b> Tell and write time to the nearest minute and measure time intervals in minutes.	Set A7 Number & Operations: Multiplication Beyond the Basics, Ind. Worksheet 3 Set D3 Measurement: Telling Time, Activity 1 & Ind. Worksheets 1, 2 Bridges Practice Book, pp 12, 17, 34
<b>3.MD.1b</b> Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Ind. Worksheet 3 Bridges Practice Book, pp 17, 20, 70, 120
<b>3.MD.2c</b> Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	Set D7 Measurement: Masses & Volumes, Activity 1 & Ind. Worksheets 1, 2 Bridges Practice Book, p 82
<b>Represent and interpret data.</b>	
<b>3.MD.3a</b> Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.	Set E1 Data Analysis: Graphing, Activities 1–3 & Ind. Worksheets 1, 2 Bridges Practice Book, pp 4, 132
<b>3.MD.3b</b> Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	Set E1 Data Analysis: Graphing, Activities 1–3 & Ind. Worksheets 1, 2 Bridges Practice Book, pp 2, 4, 132
<b>Represent and interpret data.</b>	
<b>3.MD.4</b> 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.	Set E3 Data Analysis: Line Plots, Activities 1–3

## Bridges Grade 3 Supplement Sets—CCSS Correlations by Standard

<b>3.MD Measurement and Data</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</b>	
<b>3.MD.5</b> Recognize area as an attribute of plane figures and understand concepts of area measurement.	
<b>3.MD.5a</b> 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.	Set D2 Measurement: Area, Activities 1, 2 & Ind. Worksheet 1 Set D5 Measurement: Area in US Customary Units, Activity 2 & Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Activities 1, 2 & Ind. Worksheet 1
<b>3.MD.5b</b> 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.	Set D2 Measurement: Area, Activities 1, 2 & Ind. Worksheet 1 Set D5 Measurement: Area in US Customary Units, Activity 2 & Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Activities 1, 2 & Ind. Worksheet 1
<b>3.MD.6</b> Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	Set D2 Measurement: Area, Activities 1, 2 & Ind. Worksheet 1 Set D5 Measurement: Area in US Customary Units, Activities 1, 2 Set D6 Measurement: Area in Metric Units, Activity 1
<b>3.MD.7</b> Relate area to the operations of multiplication and addition.	
<b>3.MD.7a</b> 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.	Set D5 Measurement: Area in US Customary Units, Activity 2 & Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Activities 1, 2 & Ind. Worksheet 1
<b>3.MD.7b</b> 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.	Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheets 3, 5, 6 Set A7 Number & Operations: Multiplication Beyond the Basics, Activity 1 Set D2 Measurement: Area, Ind. Worksheet 1 Bridges Practice Book, pp 67, 69, 75, 77
<b>3.MD.7c</b> 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.	Set A2 Number & Operations: Basic Multiplication & Division, Activities 1, 2 Set A7 Number & Operations: Multiplication Beyond the Basics, Activity 1 Set D2 Measurement: Area, Activities 1 & 2
<b>3.MD.7d</b> 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.	Set D2 Measurement: Area, Activities 1 & 2
<b>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</b>	
<b>3.MD.8a</b> Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, and finding an unknown side length,	Set C4 Geometry: Quadrilaterals, Activities 4, 5 & Ind. Worksheet 3 Bridges Practice Book, pp 44, 46, 48, 50, 54, 60, 106, 119, 130, 134, 135
<b>3.MD.8b</b> Exhibit rectangles with the same perimeter and different areas or with the same area and different perimeters.	Set C4 Geometry: Quadrilaterals, Ind. Worksheet 3

<b>3.G Geometry</b>	
<b>Standard</b>	<b>Supplements &amp; Practice Book Pages</b>
<b>Reason with shapes and their attributes.</b>	
<b>3.G.1a</b> 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).	Set C2 Geometry: Triangles & More, Activity 2 & Ind. Worksheets 3, 4 Set C4 Geometry: Quadrilaterals, Activities 1–5 & Ind. Worksheets 1, 2 Bridges Practice Book, pp 45, 47, 55, 56, 139, 140
<b>3.G.1b</b> Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	Set C4 Geometry: Quadrilaterals, Activities 1–5 & Ind. Worksheets 1–3 Bridges Practice Book, pp 45, 46, 139, 140