Bridges Grade 3 Correlations to Common Core State Standards

Common Core State Standards for Mathematics, Grade 3

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

(1) Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.

(2) Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, ½ of the paint in a small bucket could be less paint than ⅓ of the paint in a larger bucket, but ⅓ of a ribbon is longer than ⅕ of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.

(3) Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.

 (4) Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Grade 3 Overview

Operations & Algebraic Thinking
- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number & Operations in Base Ten
- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number & Operations—Fractions
- Develop understanding of fractions as numbers.

Measurement & Data
- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish linear and area measurements.

Geometry
- Reason with shapes and their attributes.

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Taken from the Common Core State Standards for Mathematics 2010, pages 21 & 22.

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

	OPERATIONS AND ALGEBRAIC THINKING 3.OA			
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Represent and solve problems involving multiplication and division.				
1. Interpret products of whole numbers, e.g., interpret 5 × 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 × 7.	Unit 4, Sessions 1–4, 7, 8, 9, 12, 15, 16, 18–20, 23 Unit 4, pp 465 (HC 13)	October Numbers Grid November Numbers Grid Dec. Computational Fluency Mar. Computational Fluency	Set A2 Number & Operations: Basic Multiplication & Division, Activities 1 & 2 and Ind. Worksheets 1, 8 Bridges Practice Book, pp 14, 16, 24, 25, 61–63, 65, 68, 69,	**Formal** Bridges, Vol. 2, pp 441–444, 562–569 (Unit 4 Pre- and PostAssessment)
2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 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 ÷ 8.	Unit 4, Sessions 1, 4, 9, 13, 23		Set A2 Number & Operations: Basic Multiplication & Division, Independent Worksheets 1, 2,5, 8 Bridges Practice Book, pp 67, 69, 105, 109	**Formal** Bridges, Vol. 2, pp 441–444, 562–569 (Unit 4 Pre- and PostAssessment)
3. 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.	Unit 4, Sessions 9, 12–14, 16, 23		Set A1 Number & Operations: Equal Expressions, Activity 1 and Ind. Worksheets 1 & 2 Set A2 Number & Operations: Basic Multiplication & Division, Activities 1 & 2 and Ind. Worksheets 1, 6, 8 Bridges Practice Book, pp 14, 16, 24, 25, 62, 66, 68, 72, 74, 76, 78, 124, 127, 129, 136	**Formal** Bridges, Vol. 2, pp 441–444, 562–569 (Unit 4 Pre- and PostAssessment)
4. 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 × ? = 48, 5 = x ÷ 3, 6 × 6 = ?.	Unit 4, Sessions 12–14	Mar. Computational Fluency	Set A1 Number & Operations: Equal Expressions, Activity 1 and Independent Worksheets 1 & 2 Set A2 Number & Operations: Basic Multiplication & Division, Independent Worksheet 4 Set A7 Number & Operations: Multiplication Beyond the Basics, Independent Worksheet 3 Bridges Practice Book, pp 61, 63–67, 69, 75, 77, 83, 113	**Informal** Bridges Practice Book, pp 61, 63–67, 69, 75, 77, 83, 113

Bridges Grade 3 Correlations to Common Core State Standards

OPERATIONS AND ALGEBRAIC THINKING 3.OA

Standard	Bridges	Number Corner	Bridges Supplement	Assessments
Understand properties of multiplication and the relationship between multiplication and division.				
5. 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 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) **Note** Students need not use formal terms for these properties.	Unit 4, Sessions 5–8, 18, 19, 22 Unit 4, p 492 (Introducing the Zero Facts) Unit 4, pp 551–552 (WP 4G) Unit 7, Sessions 12–17	October Magnetic Board May Magnetic Board May Computational Fluency	Set A2 Number & Operations: Basic Multiplication & Division, Activities 1 & 2 and Independent. Worksheets 3–7 Bridges Practice Book, pp 64, 83, 121, 122, 138	**Informal** Bridges Practice Book, pp 64, 83, 121, 122, 138
6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.	Unit 4, Sessions 13, 14, 19, 23 Unit 4, pp 488–489 (Sharing Students' Division Strategies)	Feb. Computational Fluency Mar. Computational Fluency	Set A2 Number & Operations: Basic Multiplication & Division, Independent Worksheets 1, 8 Bridges Practice Book, pp 67, 72, 83	**Informal** Bridges Practice Book, pp 67, 72, 83
Multiply and divide within 100.				
7. 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.	Unit 4, Sessions 5–10, 17, 20, 22 Unit 4, pp 495, 548, 564 (HC's 14, 16 & 17) Unit 5, p 603 (HC 18) Unit 7, pp 833, 855–856 (Home Connections 27 & 28)	September Numbers Grid October Numbers Grid November Numbers Grid Dec. Computational Fluency Feb. Computational Fluency Mar. Computational Fluency April Computational Fluency May Computational Fluency	Set A1 Number & Operations: Equal Expressions, Activity 1 and Independent Worksheets 1 & 2 Set A2 Number & Operations: Basic Multiplication & Division, Independent Worksheets 2–5, 8 Bridges Practice Book, pp 61, 63, 65, 67, 69, 70, 71, 73, 77, 79, 83, 111, 119, 121, 123, 135	**Informal** Bridges Practice Book, pp 61, 63, 65, 67, 69, 77, 79, 83, 119, 121, 123, 135 **Formal** Unit 4, Sessions 11, 21 (Multiplication Fluency Checkups 1 & 2) Unit 5, Session 9 (Multiplication Fluency Checkup 3) Number Corner Teacher's Guide, pp 266–268, 322–324 (Checkups 3 & 4)

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

OPERATIONS AND ALGEBRAIC THINKING 3.OA				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Solve problems involving the four operations, and identify and explain patterns in arithmetic.				
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.	Unit 2, Sessions 25–27, 29 Unit 4, Sessions 9, 12–14 Unit 5, Sessions 3, 5, 10, 12, 13, 17 Unit 6, Sessions 1, 4 Unit 5, p 675 (HC 21)	Jan. Coins, Clocks & Bills Feb. Coins, Clocks & Bills April Coins, Clocks & Bills May Magnetic Board May Clocks, Coins & Bills	Set A1 Number & Operations: Equal Expressions, Activity 1 and Independent Worksheet 1 Set A2 Number & Operations: Basic Multiplication & Division, Activities 1 & 2 and Ind. Worksheet 6 Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Activity 2 and Independent Worksheets 1–4 Set A6 Number & Operations: Estimating to Add & Subtract, Independent 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	**Formal** Bridges, Vol. 3, pp 695–699, 774–781 (Unit 6 Pre- and Post-Assessment) Number Corner Teacher's Guide, pp 200–202 (Checkup 2)
9. 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.	Unit 1, Sessions 4–9, 14, 16–18 Unit 1, p 154 (HC 3) Unit 1, pp 86–87 (WP 1B) Unit 2, Sessions 1–3, 5, 6, 9, 10, 13, 14 Unit 4, Sessions 2, 6, 10, 15, 17, 18, 20 Unit 4, p 548 (HC 16) Unit 5, Sessions 7, 8, 14, 15	September Numbers Grid September Magnetic Board October Numbers Grid November Numbers Grid December Calendar Grid Feb. Computational Fluency	Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheet 2 Bridges Practice Book, pp 1, 5, 31, 35, 67, 121, 135	**Informal** Set A2 Number & Operations: Basic Multiplication & Division, Ind. Worksheet 2

NUMBER AND OPERATIONS IN BASE TEN 3.NBT				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Use place value understanding and properties of operations to perform multi-digit arithmetic.				
1. Use place value understanding to round whole numbers to the nearest 10 or 100.	Unit 2, Sessions 16, 17 Unit 5, pp 255–257 (WP 2D) Unit 5, Sessions 4, 5, 16–18 Unit 5, p 628 (HC 19)	Jan. Computational Fluency May Coins, Clocks & Bills	Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Activity 5 and Independent Worksheet 4 Set A6 Number & Operations: Estimating to Add & Subtract, Independent Worksheets 1–3 Bridges Practice Book, pp 85–89, 91, 93, 95, 99, 131	**Informal** Bridges Practice Book, pp 85, 86, 87, 89, 91, 93, 95, 99, 131 **Formal** Bridges, Vol. 1, pp 232–236, 336–342 (Unit 2 Pre- and Post-Assessment) Number Corner Teacher's Guide, pp 200–202 and 266–268 (Checkups 2, & 3)

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS IN BASE TEN 3.NBT				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Use place value understanding and properties of operations to perform multi-digit arithmetic.				
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.	Unit 2, Sessions 7, 8, 17–19, 22–27, 29 Unit 2, page 337 (HC 9) Unit 5, Sessions 2, 3, 5, 6, 10, 12, 13, 17, 19 Unit 6, Session 1 Unit 7, Session 1	Nov. Computational Fluency November Magnetic Board December Numbers Grid January Numbers Grid Jan. Computational Fluency January Coins, Clocks & Bills March Magnetic Board March Numbers Grid May Coins, Clocks & Bills Number Corner Student Book, pages 35, 40, 62	Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Activities 1–5 and Independent Worksheets 1–3 Set A6 Number & Operations: Estimating to Add & Subtract, Independent 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	**Informal** Bridges Practice Book, pages 39, 87, 89, 90, 92, 93, 96, 99, 100, 126 **Formal** Bridges, Vol. 1, pp 232–236, 336–342 (Unit 2 Pre- and Post-Assessment) Bridges, Vol. 2, pp 583–585, 673–680 (Unit 5 Pre- and Post-Assessment) Number Corner Teacher's Guide, pp 200–202, 266–268 and 322–324 (Checkups 2, 3, & 4)
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	Unit 7, Sessions 12–17	April Numbers Grid May Magnetic Board	Set A7 Number & Operations: Multiplication Beyond the Basics, Activity 1 and Ind. Worksheets 1–3 Bridges Practice Book, pp 64, 83, 113, 121, 122, 138	**Formal** Number Corner Teacher's Guide, pp 322–324 (Checkup 4)

NUMBER AND OPERATIONS—FRACTIONS 3.NF				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
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.)				
1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.	Unit 6, Sessions 5–9, 12–15	December Magnetic Board January Magnetic Board February Magnetic Board April Calendar Grid May Calendar Grid	Set A5 Number & Operations: Fractions, Activity 1 Bridges Practice Book, pp 8, 10, 30, 103, 125	**Formal** Bridges, Vol. 3, pp 695–699, 774–779 (Unit 6 Pre- and Post-Assessment) Number Corner Teacher's Guide, pp 322–324 (Checkup 4)
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.				
a. Represent a fraction $1/b$ 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 $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.	Unit 6, Sessions 14, 15 (fractions on a ruler)		Set A5 Number & Operations: Fractions, Activity 1 Bridges Practice Book, p 133	

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS—FRACTIONS 3.NF				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
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.)				
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.				
b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	Unit 6, Sessions 14, 15 (fractions on a ruler)		Set A5 Number & Operations: Fractions, Activity 1 Bridges Practice Book, pp 112, 114, 133	
3. Explain equivalence of fractions in special cases, amd compare fractions by reasoning about their size.				
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	Unit 6, Sessions 6, 8, 9, 13–15	January Magnetic Board April Calendar Grid	Bridges Practice Book, p 105	**Formal** Number Corner Teacher's Guide, pp 322–324 (Checkup 4)
b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	Unit 6, Sessions 6, 8, 13–15	January Magnetic Board April Calendar Grid May Calendar Grid		**Formal** Number Corner Teacher's Guide, pp 322–324 (Checkup 4)
c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.	Unit 6, Sessions 9, 12	January Magnetic Board February Magnetic Board May Calendar Grid		
d. 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.	Unit 6, Sessions 5–8, 13, 14	December Magnetic Board January Magnetic Board	Bridges Practice Book, pp 30, 103, 108–110, 112, 114–117, 125, 128	**Informal** Bridges Practice Book, pp 30, 103, 108–110, 112, 114–117, 125, 128

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

MEASUREMENT AND DATA 3.MD				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.				
1a. Tell and write time to the nearest minute and measure time intervals in minutes.		October Coins, Clocks & Bills Nov. Coins, Clocks & Bills Dec. Coins, Clocks & Bills January Calendar Grid March Coins, Clocks & Bills	Set A7 Number & Operations: Multiplication Beyond the Basics, Independent Worksheet 3 Set D3 Measurement: Telling Time, Activity 1 and Ind. Worksheets 1 & 2 Bridges Practice Book, pp 12, 17, 34	**Formal** Number Corner Teacher's Guide, pp 92–94, 266–268 (Checkups 1, 3)
1b. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.		Nov. Coins, Clocks & Bills Dec. Coins, Clocks & Bills January Calendar Grid March Coins, Clocks & Bills	Set A3 Number & Operations: Multi-Digit Addition & Subtraction, Independent Worksheet 3 Bridges Practice Book, pp 17, 20, 70, 120	**Formal** Number Corner Teacher's Guide, pp 92–94, 266–268 (Checkups 1, 3)
2a. Measure and estimate liquid volumes using standard units of liters (l).	Unit 7, Session 9 Unit 7, pp 829–830 (WP 7B)			
2b. Measure and estimate masses of objects using standard units of grams (g) and kilograms (kg).	Unit 5, Session 9 Unit 5, pp 621–623 (WP 5C)			
2c. 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.			Bridges Practice Book, p 82	
Represent and interpret data.				
3a. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.	Unit 1, Session 3		Set E1 Data Analysis: Graphing, Activities 1–3 and Ind. Worksheets 1 & 2 Bridges Practice Book, pp 4, 132	
3b. 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.	Unit 1, Session 3	December Data Collector February Data Collector	Set E1 Data Analysis: Graphing, Activities 1–3 and Independent Worksheets 1 & 2 Bridges Practice Book, pp 2, 4, 132	**Formal** Number Corner Teacher's Guide, pp 200–202 (Checkup 2)

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

MEASUREMENT AND DATA 3.MD				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Represent and interpret data.				
4. 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.	Not Yet Addressed			
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.				
5. Recognize area as an attribute of plane figures and understand concepts of area measurement.				
a. 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 and Independent. Worksheet 1 Set D5 Measurement: Area in US Customary Units, Activity 2 and Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Activities 1, 2 and Ind. Worksheet 1	
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 and Independent Worksheet 1 Set D5 Measurement: Area in US Customary Units, Activity 2 and Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Activities 1, 2 and Ind. Worksheet 1	
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	Unit 7, Session 8	October Calendar Grid October Magnetic Board	Set D2 Measurement: Area, Activities 1 & 2 and Ind. Worksheet 1 Set D5 Measurement: Area in US Customary Units, Activities 1 & 2 Set D6 Measurement: Area in Metric Units, Activity 1	**Informal** Supplement Set D2 Measurement: Area, Independent Worksheet 1
7. Relate area to the operations of multiplication and addition.				
a. 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 and Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Activities 1, 2 and Ind. Worksheet 1	**Informal** Set D5 Measurement: Area in US Customary Units, Ind. Worksheet 1 Set D6 Measurement: Area in Metric Units, Ind. Worksheet 1

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

MEASUREMENT AND DATA 3.MD				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.				
7. Relate area to the operations of multiplication and addition.				
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.	Unit 4, Sessions 4, 5, 8, 22 Unit 4, p 495 (HC 14) Unit 5, Session 8	October Calendar Grid October Magnetic Board Dec. Computational Fluency May Magnetic Board	Set A2 Number & Operations: Basic Multiplication & Division, Independent Worksheets 3, 5, 6 Set A7 Number & Operations: Multiplication Beyond the Basics, Activity 1 Set D2 Measurement: Area, Independent Worksheet 1 Bridges Practice Book, pp 67, 69, 75, 77	**Formal** Bridges, Vol. 2, pp 441–444, 562–569 (Unit 4 Pre- and PostAssessment)
c. 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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	Unit 7, Sessions 12–17	October Calendar Grid October Magnetic Board May Magnetic Board	Set A2 Number & Operations: Basic Multiplication & Division, Activities 1 & 2 Set A7 Number & Operations: Multiplication Beyond the Basics, Activity 1	**Formal** Bridges, Vol. 3, pp 796–799, 875–881 (Unit 7 Pre- and Post-Assessment)
d. 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.	Unit 4, Sessions 7, 8, 20 Unit 7, Sessions 12–17			
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.				
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,	Unit 5, Sessions 7, 8	March Data Collector	Set C4 Geometry: Quadrilaterals, Activities 4, 5 andIndependent Worksheet 3 Bridges Practice Book, pp 44, 46, 48, 50, 54, 60, 106, 119, 130, 134, 135	**Formal** Number Corner Teacher's Guide, pp 266–268 (Checkup 3)
8b. Exhibit rectangles with the same perimeter and different areas or with the same area and different perimeters.	Unit 5, Sessions 7, 8		Set C4 Geometry: Quadrilaterals, Independent Worksheet 3	**Informal** Set C4 Geometry: Quadrilaterals, Independent Worksheet 3

Bridges Grade 3 Correlations to Common Core State Standards (cont.)

GEOMETRY 3.G				
Standard	**Bridges**	**Number Corner**	**Bridges Supplement**	**Assessments**
Reason with shapes and their attributes.				
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).	Unit 3, Sessions 2–4, 12	November Calendar Grid	Set C2 Geometry: Triangles & More, Activity 2 and Ind. Worksheets 3 & 4 Set C4 Geometry: Quadrilaterals, Activities 1–5 and Ind. Worksheets 1 & 2 Bridges Practice Book, pp 45, 47, 55, 56, 139, 140	**Informal** Bridges Practice Book, pp 45, 47, 55, 56, 139, 140
1b. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.		November Calendar Grid	Set C4 Geometry: Quadrilaterals, Activities 1–5 and Ind. Worksheets 1–3 Bridges Practice Book, pp 45, 46, 139, 140	**Informal** Bridges Practice Book, pp 45, 46, 139, 140
2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as ¼ of the area of the shape.	Unit 3, Sessions 3, 11, 12 Unit 6, Sessions 5–9, 11, 13, 14	April Calendar Grid		**Formal** Bridges, Vol. 3, pp 695–699, 774–779 (Unit 6 Pre- and Post-Assessment)