

# Bridges Grade 5 Correlations to Common Core State Standards

## Common Core State Standards for Mathematics, Grade 5

In Grade 5, instructional time should focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

(1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)

(2) Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.

(3) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real world and mathematical problems.

## Grade 5 Overview

### Operations & Algebraic Thinking

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

### Number & Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

### Number & Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

### Measurement & Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

### Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

### 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 33 & 34.*

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

OPERATIONS AND ALGEBRAIC THINKING 5.OA				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Write and interpret numerical expressions.</b>				
1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Unit 1, Sessions 13, 14 Unit 1, pp 107–109 (WP 1B) Unit 2, Sessions 2, 3, 5–9, 11, 13 Unit 4, Session 3 Unit 7, Sessions 1 & 2 Unit 7, p 972 (Challenge)	Sept. Computational Fluency	Bridges Practice Book, pp 11, 12, 121, 122, 124	<b>Formal</b> Bridges, Vol. 1, pp 32–39, 138–144 (Unit 1 Pre & Post Assessments) Bridges, Vol. 4, pp 942–947, 1020–1024 (Unit 7 Pre & Post Assessments)
	Home Connections, Vol. 1 HC's 6, 7, 13, 14, 17, 18, 33, 41 Home Connections, Vol. 2 HC's 42, 47, 48, 59, 60, 61			
2. 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.	Unit 7, Sessions 4, 5, 7, 9, 11–13		Set B1 Algebra: Diagrams & Equations, Activity 1 and Ind. Worksheets 1 & 2 Bridges Practice Book, pp 1, 31, 125, 126, 128	<b>Formal</b> Bridges, Vol. 4, pp 942–947, 1020–1024 (Unit 7 Pre & Post Assessments)
	Home Connections, Vol. 2 HC's 52, 61, 62, 63, 64			
<b>Analyze patterns and relationships.</b>				
3. 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.	Unit 1, Sessions 5, 6, 16–18 Unit 7, Sessions 4–7, 9		Bridges Practice Book, pp 6, 7, 8, 33	<b>Formal</b> Bridges, Vol. 1, pp 32–39, 138–44 (Unit 1 Pre- and Post-Assessments) Bridges, Vol. 4, pp 942–948, 1020–1024 (Unit 7 Pre- and Post-Assessments)
	Home Connections, Vol. 1 HC's 2, 8 Home Connections, Vol. 2 HC's 61–64			

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS IN BASE TEN 5.NBT				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Understand the place value system.</b>				
1. 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.	Unit 2, Sessions 1 & 2 Unit 6, Sessions 8–12 Unit 6, pp 887–890, 894–895 (Work Place 6C)	November Calendar Grid February Calendar Grid Mar. Computational Fluency	Set A11 Number & Operations: Multiplying Decimals, Activities 1 & 2 and Ind. Worksheets 1 & 2 Bridges Practice Book, pp 111, 112, 113, 130	<b>Formal</b> Bridges, Vol 3, pp 779–783, 902–907 (Unit 6 Pre- and Post-Assessments) Number Corner Teacher’s Guide, Vol. 1, pp 57–60, 110–114 (Baseline Assessment, Checkup 1) Number Corner Teacher’s Guide, Vol. 2, pp 232–236, 320–324, 400–404 (Checkups 2–4)
	Home Connections, Vol. 2: HC’s 53, 54, 58			
2a. 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.	Unit 2, Sessions 1 & 2 Unit 4, Sessions 3–5 Unit 6, Sessions 8, 11	Nov. Computational Fluency Dec. Computational Fluency	Set A11 Number & Operations: Multiplying Decimals, Activities 1, 2, 4 Bridges Practice Book, pp 22, 23	
	Home Connections, Vol. 1 HC 33			
2b. Use whole-number exponents to denote powers of 10.			Set A11 Number & Operations: Multiplying Decimals, Activity 2 (Extension 3)	
3. Read, write, and compare decimals to thousandths.				
a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (\frac{1}{10}) + 9 \times (\frac{1}{100}) + 2 \times (\frac{1}{1000})$ .	Unit 6, Sessions 8–13, 15 Unit 6, pp 894–895 (WP 6C)	November Calendar Grid February Calendar Grid Mar. Computational Fluency	Bridges Practice Book, pp 111, 112, 113, 130	<b>Informal</b> Bridges Practice Book, pp 111, 112, 113, 130
	Home Connections, Vol. 2: HC’s 53, 54, 56, 58			
b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	Unit 6, Sessions 9, 13, 16, 17 Unit 6, pp 894–895 (WP 6C)	November Calendar Grid February Calendar Grid		<b>Formal</b> Bridges, Vol 3, pp 779–783, 902–907 (Unit 6 Pre- and Post-Assessments)
	Home Connections, Vol. 2: HC’s 51, 53, 54, 58			

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS IN BASE TEN 5.NBT				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Understand the place value system.</b>				
4. Use place value understanding to round decimals to any place.			Set A11 Number & Operations: Multiplying Decimals, Ind. Worksheet 1 Bridges Practice Book, p 14	Number Corner Teacher's Guide, Vol. 1, pp 110–114 (Checkup 1) Number Corner Teacher's Guid, Vol. 2, pp 232–236, 320–321 (Checkups 2, 3)
<b>Perform operations with multi-digit whole numbers and with decimals to hundredths.</b>				
5. Fluently multiply multi-digit whole numbers using the standard algorithm.	Unit 2, Sessions 10–12	Nov. Computational Fluency Dec. Computational Fluency Jan. Computational Fluency	Bridges Practice Book, pp 25, 26, 28, 29, 30, 81	<b>Formal</b> Bridges, Vol. 1, pp 195–203, 298–306 (Unit 2 Pre & Post Assessments) Number Corner, Vol. 1, pp 57–60 (Baseline) Number Corner, Vol. 2, pp 232–236, 320–324 (Checkups 2, 3)
	Home Connections, Vol. 1: HC's 16, 17, 21 Home Connections, Vol. 2: HC's 49, 60, 61			
6. 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.	Unit 1, Sessions 7, 8, 11, 12 Unit 2, Sessions 13–20 Unit 2, p 289 (Division Challenge Problems) Unit 4, Sessions 2, 4–10 Unit 4, pp 548-550 (WP 4B) Unit 6, Sessions 2, 10	October Calendar Collector Dec. Computational Fluency Feb. Computational Fluency May Computational Fluency	Set A4 Number & Operations: Long Division, Activities 1 & 2 Set A11 Number & Operations: Multiplying Decimals, Activities 1–4 and Ind. Worksheets 1–5 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>Informal</b> Unit 2, Sessions 17 & 20 (Work Samples) Unit 5, Session 13 (Work Sample) Bridges Practice Book, pp 37–39, 64, 85, 91, 99, 131
	Home Connections, Vol. 1: HC's 2–4, 19, 21, 23, 32, 34–37, 41 Home Connections, Vol. 2: HC's 42, 47–49, 52, 57, 58, 60, 61, 64			

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS IN BASE TEN 5.NBT				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Perform operations with multi-digit whole numbers and with decimals to hundredths.</b>				
7a. 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.	Unit 6, Session 14 Unit 6, p 873 (Challenge)	Mar Computational Fluency	Set A11 Number & Operations: Multiplying Decimals, Activity 4 Bridges Practice Book, pp 112, 113, 114, 115, 116, 120, 130, 137, 138	Bridges, Vol 3, pp 779–783, 902–907 (Unit 6 Pre- and Post-Assessments) Number Corner Vol. 2, pp 320–324 (Checkup 3)
	Home Connections, Vol. 2: HC’s 55, 56, 58			
7a. 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.	Unit 2, Sessions 11, 12	Mar Computational Fluency	Set A11 Number & Operations: Multiplying Decimals, Activities 1–4 and Ind. Worksheets 3–5 Bridges Practice Book, pp 28, 34, 38	<b>Formal</b> Bridges, Vol. 1, pp 298–306 (Unit 2 Post Assessment)
	Home Connections, Vol. 2: HC’s 53 (Challenge)			

NUMBER AND OPERATIONS—FRACTIONS 5.NF				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Use equivalent fractions as a strategy to add and subtract fractions.</b>				
1. 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, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$ .)	Unit 4, Sessions 11–16, 19, 20 Unit 4, pp 617–619 (Dozens of Eggs) Unit 6, Sessions 5–7, 14	November Calendar Grid Nov. Calendar Collector Mar Computational Fluency Apr Computational Fluency	Set A6 Number & Operations: Fraction Concepts, Activities 1 & 2 and Ind. Worksheets 1–3 Bridges Practice Book, pp 76–79, 80, 84, 107–110, 114, 115, 117–119, 127, 129, 133–135, 137	<b>Formal</b> Bridges, Vol. 2, pp 498–504, 626–632 (Unit 4 Pre- and Post-Assessments) Bridges, Vol 3, pp 779–783, 902–907 (Unit 6 Pre- and Post-Assessments) Number Corner Vol. 1, pp 57–68 (Baseline) Number Corner, Vol. 2, pp 320–324, 400–404 (Checkups 3 & 4)
	Home Connections, Vol. 1 HC’s 23, 40, 41 Home Connections, Vol. 2 HC’s 51, 52, 58			

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS—FRACTIONS 5.NF				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Use equivalent fractions as a strategy to add and subtract fractions.</b>				
2. 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 $\frac{3}{7} < \frac{1}{2}$ .	Unit 4, Sessions 11–16, 19, 20–22 Unit 6, Sessions 5–7, 14 Unit 6, page 890 (Challenge) Unit 6, page 895 (Challenge)	November Calendar Grid Nov. Calendar Collector Mar Computational Fluency Apr Computational Fluency Number Corner Student Book, page 58	Set A9 Number & Operations: Multiplying Fractions, Activity 1 Set A11 Number & Operations: Multiplying Decimals, Activity 3 Bridges Practice Book, pp 78, 80, 93, 94, 119, 133, 134, 135, 136	<b>Informal</b> Work Samples: Unit 4, Sessions 15, 16 Unit 6, Sessions 6, 14
	Home Connections, Vol. 1: HC's 23, 40, 41 Home Connections, Vol. 2: HC 51, 52, 56, 58			
<b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b>				
3. 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?	Unit 4, p 567 (Discussing the Connection between Division and Fractions) Unit 6, Session 2 Unit 6, pp 856–857 (Challenge) Unit 6, pp 896–898 (WP 6D)  Home Connections, Vol. 1 HC 37	Mar Computational Fluency		
4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.				
a. 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, $(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}$ .)	Unit 4, Sessions 13, 15, 16	Mar Computational Fluency April Problem Solving	Set A11 Number & Operations: Multiplying Decimals, Activities 1, 3	
	Home Connections, Vol. 1 HC 36			

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS—FRACTIONS 5.NF				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b>				
4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.				
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.			Set A9 Number & Operations: Multiplying Fractions, Activities 2–4 and Ind. Worksheets 1–3 Set A11 Number & Operations: Multiplying Decimals, Activity 4	
5. Interpret multiplication as scaling (resizing) by:				
a. 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.	Unit 4, Sessions 3–5, 10 Unit 7, Sessions 8, 10, 11 Home Connections, Vol. 1 HC 33 Home Connections, Vol. 2 HC 65		Set A11 Number & Operations: Multiplying Decimals, Activities 1, 2, 4	
5. Interpret multiplication as scaling (resizing) by:				
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.	Unit 6, Sessions 3, 4, 5, 6, 7 Home Connections, Vol 2 HC's 50, 51		Set A9 Number & Operations: Multiplying Fractions, Activities 2, 3, 4 Practice Book, pp 103, 104, 106, 127, 129	
6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	Unit 4, Sessions 13, 15, 16, 20 Unit 4, p 602 (Eggsplorations) Unit 6, Sessions 3, 4, 16 Unit 6, pp 892–893 (WP 6B) Home Connections, Vol. 1 HC's 36, 39, 40 Home Connections, Vol. 2 HC's 52, 57, 58	April Problem Solving	Set A9 Number & Operations: Multiplying Fractions, Activities 2, 3 and Ind. Worksheets 1, 3 Set A11 Number & Operations: Multiplying Decimals, Activity 1	

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS—FRACTIONS 5.NF				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b>				
7. 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.)				
a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(\frac{1}{3}) \div 4$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(\frac{1}{3}) \div 4 = \frac{1}{12}$ because $(\frac{1}{12}) \times 4 = \frac{1}{3}$ .	Not Yet Addressed			
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 $20 \times (\frac{1}{5}) = 4$ .	Not Yet Addressed			
c. 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?	Unit 4, Session 20			
	Home Connections, Vol. 1 HC 40			

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

MEASUREMENT AND DATA 5.MD				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Convert like measurement units within a given measurement system.</b>				
1. 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.	Unit 1, Session 1 Unit 2, Sessions 1 & 2 Unit 4, Sessions 6, 9 Unit 4, p 517 (Timely Problems) Unit 4, p 553 (WP 4C) Unit 6, Session 13 Unit 7, Session 8	November Calendar Collector March Calendar Grid March Calendar Collector April Problem Solving	Bridges Practice Book, pp 17, 27, 28, 54, 72, 74, 86, 91	<b>Formal</b> Number Corner Teacher's Guide, Vol. 2, pp 232–236, (Checkup 2)
	Home Connections, Vol. 1: HC's 11, 15, 18 Home Connections, Vol. 2: HC 62			
<b>Represent and interpret data.</b>				
2. 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.	Not Yet Addressed			
<b>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</b>				
3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement.				
a. 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.	Unit 3, Session 20	January Calendar Grid April Calendar Grid	Set D2 Measurement: Volume, Activities 1 & 2, and Independent Worksheets 1 & 2	
	Home Connections, Vol. 1: HC 31			
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.		January Calendar Grid April Calendar Grid	Set D2 Measurement: Volume, Activities 1 & 2, and Independent Worksheets 1 & 2	
4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.		January Calendar Grid April Calendar Grid	Set D2 Measurement: Volume, Activities 1 & 2, and Independent Worksheets 1 & 2	Number Corner Teacher's Guid, Vol. 2, pp 232–236, (Checkup 2)

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

MEASUREMENT AND DATA 5.MD				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</b>				
5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.				
a. 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.	Unit 3, Session 20	January Calendar Grid	Set D2 Measurement: Volume, Activities 1 & 2 and Ind. Worksheets 1 & 2	
	Home Connections, Vol. 1: HC 31	April Calendar Grid		
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.		April Calendar Grid	Set D2 Measurement: Volume, Activities 1 & 2 and Ind. Worksheets 1 & 2 Bridges Practice Book, pp 57, 59, 60, 65, 69	<b>Formal</b> Bridges, Vol. 2, pp 463–468 (Unit 3 Post-Assessment) Number Corner Teacher’s Guide, pp 232–236, 400–404 (Checkups 2 and 4)
c. 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.		January Calendar Grid		

# Bridges Grade 5 Correlations to Common Core State Standards (cont.)

GEOMETRY 5.G				
Standard	Bridges	Number Corner	Bridges Supplement	Assessments
<b>Graph points on the coordinate plane to solve real-world and mathematical problems.</b>				
1. 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).	Unit 1, Session 18 Unit 3, Session 17 Unit 7, Sessions 4–6	March Calendar Grid	Set A10 Number & Operations: Integers, Activity 3 and Independent Worksheets 2 & 3	<b>Formal</b> Bridges, Vol. 2, pp 356–361, 463–468 (Unit 3 Pre- and Post-Assessments) Number Corner, Vol. 2, pp 320–324 (Checkup 3)
	Home Connections, Vol. 1 HC's 28, 29			
2. 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.	Unit 3, Session 17	Oct. Computational Fluency March Calendar Grid	Set A10 Number & Operations: Integers, Activity 3 and Independent Worksheets 2, 3 Bridges Practice Book, pp 55, 98	
<b>Classify two-dimensional figures into categories based on their properties.</b>				
3. 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.	Unit 3, Sessions 1, 8, 13, 14 Unit 3, pp 432–433 (WP 3B)	September Calendar Grid October Calendar Grid	Set C1 Geometry: Triangles & Quadrilaterals, Activities 1 & 2 and Ind. Worksheets 1–4 Bridges Practice Book, pp 41, 43, 44, 97, 140	<b>Informal</b> Bridges Practice Book, pp 41, 43, 97
	Home Connections, Vol. 1 HC 24			
4. Classify two-dimensional figures in a hierarchy based on properties.			Set C1 Geometry: Triangles & Quadrilaterals, Activities 1 & 2 and Ind. Worksheets 1–4	

