

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics

STANDARD 1: NUMBER SENSE				
Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.1.1 Read and write whole numbers up to 1,000,000.	Unit 2, Sessions 1–4	September Calendar Grid September Calendar Collector September Problem Solving September–February Number Line	Set A3 Number & Operations: Place Value to Millions, Activities 1–3 and Ind. Worksheets 1–3 Bridges Practice Book, pp 21, 25, 29	Informal Set A3 Number & Operations: Place Value to Millions, Independent Worksheets 1–3 Bridges Practice Book, pp 25, 29 Formal Number Corner. Vol. 1 & 2, pages 59–63, 97–101, 366–365 (Baseline Assessment, Checkups 2 & 4)
4.1.2 Identify and write whole numbers up to 1,000,000, given a place-value model.	Unit 2, Sessions 1–4	September Calendar Grid September Calendar Collector September Problem Solving	Set A3 Number & Operations: Place Value to Millions, Activities 1–3 and Ind. Worksheets 1–3	Informal Set A3 Number & Operations: Place Value to Millions, Independent Worksheets 1–3
4.1.3 Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand.		November Number Line December Number Line January Number Line	Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1–3 Bridges Practice Book, p 9	Formal Number Corner Teacher’s Guide, Vol. 2, pp 211–214 (Checkup 2)
4.1.4 Order and compare whole numbers using symbols for “less than” (<), “equal to” (=), and “greater than” (>).		September Number Line November Number Line December Number Line January Number Line	Set A3 Number & Operations: Place Value to Millions, Activities 1–3 and Ind. Worksheets 1–3 Bridges Practice Book, pp 132, 134	Formal Number Corner Teacher’s Guide, Vol. 1, pp 59–63 (Baseline Assessment) Number Corner Teacher’s Guide, Vol. 2, pp 365–369 (Checkup 4)
4.1.5 Rename and rewrite whole numbers as fractions.		April Calendar Collector	Set A6 Number & Operations: Fractions & Mixed Numbers, Act. 1 & 2 Bridges Practice Book, p 109	
4.1.6 Name and write mixed numbers, using objects or pictures		November Calendar Collector April Calendar Collector	Set A6 Number & Operations: Fractions & Mixed Numbers, Act. 1 & 2 Bridges Practice Book, pages 45, 46, 47, 63, 101, 103	

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 1: NUMBER SENSE				
Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.1.7 Name and write mixed numbers as improper fractions, using objects or pictures.		April Calendar Collector	Set A6 Number & Operations: Fractions & Mixed Numbers, Act. 1 & 2 Set A9 Number & Operations: Adding & Subtracting Fractions, Independent Worksheets 1, 2 & 3 Bridges Practice Book, pp 45, 47, 63, 101, 109	
4.1.8 Write tenths and hundredths in decimal and fraction notations. Know the fraction and decimal equivalents for halves and fourths.	Unit 5, Session 4 Unit 6, Sessions 7–10, 12–14, 18–20 Unit 6, pp 715, 723–724, 730 (Home Connections 46, 47, 48) Unit 8, Session 14	December Calendar Collector March–May Number Line	Bridges Practice Book, pages 111, 115, 117, 118, 120, 137	Informal Unit 6, Sessions 9–10, 13 (Work Samples)
				Formal Unit 6, Sessions 1 & 22 (Unit Pre-and Post-Assessments & Student Reflection Sheet) Number Corner Teacher’s Guide, pp 211–214, 365–369 (Checkups 2 & 4)
4.1.9 Round two-place decimals to tenths or to the nearest whole number.	Unit 6, Sessions 19, 21 Unit 8, Sessions 13, 16, 18	March Number Line	Bridges Practice Book, p 117	

STANDARD 2: COMPUTATION				
Students solve problems involving addition, subtraction, multiplication, and division of whole numbers and understand the relationships among these operations. They extend their use and understanding of whole numbers to the addition and subtraction of simple fractions and decimals.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.2.1 Understand and use standard algorithms for addition and subtraction.		October Problem Solving January Number Line May Calendar Collector	Bridges Practice Book, pp 1–5, 7, 8, 9, 12, 17, 37	Formal Number Corner Teacher’s Guide, Vol. 1, pp 59–63, 97–101 (Baseline, Checkup 1) Number Corner, Vol. 2, pp 211–214, 365–369 (Checkups 2, 4)

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 2: COMPUTATION				
Students solve problems involving addition, subtraction, multiplication, and division of whole numbers and understand the relationships among these operations. They extend their use and understanding of whole numbers to the addition and subtraction of simple fractions and decimals.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.2.2 Represent as multiplication any situation involving repeated addition	Unit 1, Sessions 8, 11–17 Unit 2, Sessions 6–16	September–October Calendar Grid Sep–Nov, Jan–Feb Number Line Sep–November Calendar Collector Oct–Dec Computational Fluency	Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2–11, 13 and Ind. Worksheets 3, 4	Formal Unit 1, Sessions 7 & 21 (Unit Pre-and Post-Assessments) Unit 2, Sessions 5 & 21 (Unit Pre- and Post Assessments & Student Reflection Sheet)
4.2.3 Represent as division any situation involving the sharing of objects or the number of groups of shared objects	Unit 1, Sessions 9, 10 Unit 3, Sessions 12–19		Bridges Practice Book, pp 52, 54, 56, 58, 60,	Formal Unit 3, Session 20 (Unit 3 Post-Assessment)
4.2.4 Demonstrate mastery of the multiplication tables for numbers between 1 and 10 and of the corresponding division facts.	Unit 1, Sessions 11–17 Unit 1, pages 64, 72, 92, 105, 116 (HC’s 4, 5, 6, 8, 9) Unit 3, Sessions 13–14	Sept–Nov Number Line Oct–May Computational Fluency December Calendar Grid December Problem Solving January–February Number Line February Calendar Collector Number Corner Student Book, pages 6–7, 9–10, 15–16, 22–23, 25–26, 28–29, 34–35, 62, 65, 67, 85–86, 88, 92, 100	Bridges Practice Book, pages 5, 11, 13, 15, 17, 23, 25, 39, 42, 44, 51, 53, 57, 59, 63, 65, 81, 87, 93, 123, 129, 136, 139	Informal Unit 1, page 113 (Instructional Considerations for Rolling around Multiplication) Unit 1, Sessions 8 & 10 (Work Samples) January–March Computational Fluency (Quick Facts) Bridges Practice Book, pages 11, 23, 53, 65, 81, 136
				Formal Unit 1, Sessions 7 & 21 (Unit Pre-and Post-Assessments & Student Reflection Sheet) Number Corner Vol. 1 & 2, pages 60–63, 97–101, 211–214, 289–292, 365–368 (Baseline Assessment, Checkups 1–4)
4.2.5 Use a standard algorithm to multiply numbers up to 100 by numbers up to 10, using relevant properties of the number system.	Unit 2, Session 14 (see pages 219–220)	April Problem Solving	Set A5 Number & Operations: Multi-Digit Multiplication, Activities 5, 6, 12, 13 and Ind Worksheets 4, 9 Bridges Practice Book, pp 68, 77, 79, 87, 94, 95, 136	Formal Set A5 Number & Operations, Multi-Digit Multiplication, Activity 14

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 2: COMPUTATION				
Students solve problems involving addition, subtraction, multiplication, and division of whole numbers and understand the relationships among these operations. They extend their use and understanding of whole numbers to the addition and subtraction of simple fractions and decimals.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system.	Unit 3, pp 376–379 (About the Algorithm for Long Division) Note: Division, including the standard algorithm, is addressed extensively in Bridges, Grade 5.		Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1–3	
4.2.7 Understand the special properties of 0 and 1 in multiplication and division.	Unit 1, Sessions 11–13	Number Corner Teachers Guide, p 87 (Multiplication Strategies)		
4.2.8 Add and subtract simple fractions with different denominators, using objects or pictures.	Unit 3, Sessions 3, 8–9 Unit 3, pages 332–334 (WP 3A) Unit 6, Session 3	December Calendar Collector March Problem Solving April Calendar Collector	Set A6 Number & Operations: Fractions & Mixed Numbers, Activity 1 Set A9 Number & Operations: Adding & Subtracting Fractions, Independent Worksheets 1, 2 & 3 Bridges Practice Book, pages 48, 102, 103	Informal Bridges Practice Book, pp 102, 103
				Formal Unit 3, Sessions 2 & 20 (Unit Pre- and Post-Assessments)
4.2.9 Add and subtract decimals (to hundredths), using objects or pictures.	Unit 6, Sessions 15–17, 20 Unit 6, pp 730, 740 (Home Connections 48, 49) Unit 6, pp 755–756 (WP 6D) Unit 8, Session 13	March, April & May Number Line	Bridges Practice Book, pp 5, 6, 32, 38, 40, 89, 112, 114, 116, 120	Formal Unit 6, Sessions 1 & 22 (Unit Pre- and Post-Assessments) Number Corner Teacher’s Guide, pp 60–63, 211–214 (Baseline Checkup, Checkup 2)
4.2.10 Use a standard algorithm to add and subtract decimals (to hundredths).	Unit 6, Session 17		Bridges Practice Book, pp 5, 112, 114, 116, 120	
4.2.11 Know and use strategies for estimating results of any whole-number computations	Unit 2, Sessions 7, 9–11, 20 Unit 3, Session 18	November Number Line December Problem Solving December Number Line January Number Line May Calendar Collector	Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1–3 Set A5 Number & Operations: Multi-Digit Multiplication, Act. 2, 4, 9, 13 Bridges Practice Book, pp 73, 75, 94, 96, 98, 100	Formal Set A5 Number & Operations: Multi-Digit Multiplication, Activities 1, 14 Number Corner Teacher’s Guide, Vol. 2, pp 211–214 (Checkup 2)
4.2.12 Use mental arithmetic to add or subtract numbers rounded to hundreds or thousands.		Nov – Jan Number Line December Problem Solving		

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 3: ALGEBRA AND FUNCTIONS				
Students use and interpret variables, mathematical symbols, and properties to write and simplify numerical expressions and sentences. They understand relationships among the operations of addition, subtraction, multiplication, and division.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.3.1 Use letters, boxes, or other symbols to represent any number in simple expressions, equations, or inequalities (i.e., demonstrate an understanding of and the use of the concept of a variable).	Unit 7, Session 10		Set B1 Algebra: Equations & Operations, Activities 1–4 and Ind. Worksheets 1–3 Bridges Practice Book, pp 3, 11, 15, 61, 65, 123, 124, 128, 136	Formal Number Corner, Vol. 2, pp 289–292 (Checkup 3)
4.3.2 Use and interpret formulas to answer questions about quantities and their relationships		February Calendar Grid	Set B1 Algebra: Equations & Operations, Activities 1–4 and Ind. Worksheets 1–3 Bridges Practice Book, pp 123, 124, 128	
4.3.3 Understand that multiplication and division are performed before addition and subtraction in expressions without parentheses.			Set B1 Algebra: Equations & Operations, Activities 1–4 and Ind. Worksheets 1–3	Informal Set B1 Algebra: Equations & Operations, Ind. Worksheets 1, 3
4.3.4 Understand that an equation such as $y = 3x + 5$ is a rule for finding a second number when a first number is given.		February Calendar Grid	Set B1 Algebra: Equations & Operations, Activities 1–4 and Ind. Worksheets 1–3	
4.3.5 Continue number patterns using multiplication and division.	Unit 2, Sessions 2, 4, 12 Unit 6, Sessions 5, 9 Unit 7, Sessions 1–3, 5–8, 13 Unit 7, p 793 (HC 50)	September Calendar Grid September Calendar Collector October Calendar Grid October Calendar Collector November Calendar Collector September–Feb Number Line February Calendar Grid	Bridges Practice Book, pp 125, 126, 129	Formal Unit 7, Sessions 4 & 14 (Unit Pre- and Post-Assessments)
4.3.6 Recognize and apply the relationships between addition and multiplication, between subtraction and division, and the inverse relationship between multiplication and division to solve problems.	Unit 1, Sessions 9, 10 Unit 3, Session 12–16, 19 Unit 6, p 661 (HC 42)		Set B1 Algebra: Equations & Operations, Activities 1–4 and Independent Worksheets 1–3 Bridges Practice Book, pp 13, 25, 65, 87, 123, 126, 129	

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 3: ALGEBRA AND FUNCTIONS				
Students use and interpret variables, mathematical symbols, and properties to write and simplify numerical expressions and sentences. They understand relationships among the operations of addition, subtraction, multiplication, and division.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.3.7 Relate problem situations to number sentences involving multiplication and division.	Unit 1, Session 10 Unit 1, p 64 (HC 4) Unit 2, Sessions 6, 7, 9, 12, 14, 17–19 Unit 2, pp 163, 244 (HC's 11 & 17) Unit 2, p 192 (Multiplication Challenge Problems) Unit 3, Session 12, 13, 17, 18 Unit 8, Sessions 14, 17, 18	November Problem Solving February–April Problem Solving	Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2, 4, 9, 13 and Independent Worksheets 1, 2, 3, 5, 9 Set B1 Algebra: Equations & Operations, Activities 1, 2, 3, 4, and Independent Worksheets 1, 2 & 3 Bridges Practice Book, pp 14, 16, 18, 24, 30, 34, 36, 54, 58, 60, 69, 70, 72, 74, 76, 80, 88, 96, 99, 104, 106, 116, 123, 124, 128	Informal Unit 2, Session 14 (Work Sample) Unit 3, sessions 13 & 17 (Work Samples) Bridges Practice Book, pp 74, 80, 116 Formal Unit Pre- and Post-Assessments: Unit 1, Sessions 7 & 21 Unit 2, Sessions 5 & 21 Unit 3, Sessions 2 & 20 Number Corner Teacher's Guide, pp 60–63, 289–292 (Baseline Assessment, Checkup 3) Set A5 Number & Operations: Multi-Digit Multiplication, Activities 1 & 14
4.3.8 Plot and label whole numbers on a number line up to 100. Estimate positions on the number line.		Sept–March Number Line		

STANDARD 4: GEOMETRY				
Students show an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.4.1 Identify, describe, and draw rays, right angles, acute angles, obtuse angles, and straight angles using appropriate mathematical tools and technology.	Unit 4, Sessions 1, 2, 4 Unit 4, pages 463–465 (WP 4A) Unit 4, pages 432, 446, 458 (Home Connections 29, 30, 31)	November Calendar Grid April Calendar Grid	Set C2 Geometry: 2- & 3-Dimensional Shapes, Ind. Worksheets 1 & 4	Formal Unit 4, Sessions 3 & 21 (Unit Pre- and Post-Assessments)
4.4.2 Identify, describe, and draw parallel, perpendicular, and oblique lines using appropriate mathematical tools and technology.	Unit 1, Sessions 2, 3 Unit 4, Session 4 Unit 4, pages 463–465 (WP 4A) Unit 4, pages 446, 458 (HC 30, 31)		Set C1 Geometry: Parallel, Perpendicular & Intersecting, Activity 1 and Independent Worksheets 1 & 2 Set C2 Geometry: 2- & 3-D Shapes, Independent Worksheets 1, 2, 3	Formal Unit 4, Sessions 3 & 21 (Unit Pre- and Post-Assessments)

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 4: GEOMETRY				
Students show an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.4.3 Identify, describe, and draw parallelograms, rhombuses, and trapezoids, using appropriate mathematical tools and technology.	Unit 1, Sessions 2, 3 Unit 4, Sessions 2, 5–12 Unit 4, pages 446, 458, 481, 507 (HC's 30, 31, 32, 34)	April Calendar Grid	Set C2 Geometry: 2- and 3-Dimensional Shapes, Independent Worksheets 1 & 2	Formal Unit Pre- and Post-Assessments Unit 1, Sessions 1 & 21 Unit 4, Sessions 3 & 21
4.4.4 Identify congruent quadrilaterals and give reasons for congruence using sides, angles, parallels, and perpendiculars.	Unit 3, Session 1 Unit 4, Sessions 5–7			
4.4.5 Identify and draw lines of symmetry in polygons.	Unit 1, Sessions 2, 3 Unit 3, Session 1 Unit 4, Sessions 2, 5, 9, 12 Unit 4, pp 473–475 (WP 4C) Unit 4, pp 458, 516 (Home Connections 31, 35)	April Calendar Grid		Formal Bridges, Vol. 1, pp 24–27, 125–134 (Unit 1 Pre- and Post-Assessments) Bridges, Vol. 2, pp 423–426, 517–525 (Unit 4 Pre- and Post-Assessments)
4.4.6 Construct cubes and prisms and describe their attributes.	Unit 4, Sessions 13, 15–20 Unit 4, p 507 (Home Connection 34)			Formal Unit 4, Sessions 3 & 21 (Unit 4 Pre- and Post-Assessments)

STANDARD 5: MEASUREMENT				
Students understand perimeter and area, as well as measuring volume, capacity, time, and money.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter.			Set C2 Geometry: 2- & 3-D Shapes, Independent Worksheets 1, 2, 3	
4.5.2 Subtract units of length that may require renaming of feet to inches or meters to centimeters.	Unit 8, Sessions 8, 13			
4.5.3 Know and use formulas for finding the perimeters of rectangles and squares.	Unit 1, Session 18–20 Unit 1, pp 123–124 (HC 10) Unit 3, p 285 (HC 19)	January Problem Solving April Calendar Grid	Set D6 Measurement: Area & Perimeter, Activities 2–4 and Independent Worksheets 1 & 2 Bridges Practice Book, pp 19, 20, 21, 22, 88, 139	

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 5: MEASUREMENT				
Students understand perimeter and area, as well as measuring volume, capacity, time, and money.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.5.4 Know and use formulas for finding the areas of rectangles and squares.	Unit 1, Session 18–20 Unit 1, pp 123–124 (HC 10) Unit 3, p 285 (HC 19)	April Calendar Grid	Set D5 Measurement: Area in Metric Units, Activities 1 & 2 and Ind. Worksheet 1 Set D6 Measurement: Area & Perimeter, Activities 1, 3, 4 and Independent Worksheets 1 & 2 Bridges Practice Book, pp 19, 20, 22, 64, 80, 88, 121, 122, 130, 138, 139, 140	
4.5.5 Estimate and calculate the area of rectangular shapes using appropriate units, such as square centimeter (cm ²), square meter (m ²), square inch (in ²), or square yard (yd ²).			Set D5 Measurement: Area in Metric Units, Activities 1 & 2 and Ind. Worksheet 1 Set D6 Measurement: Area & Perimeter, Activities 3, 4 and Independent Worksheets 1 & 2 Bridges Practice Book, pp 20, 22, 64, 88,	
4.5.6 Understand that rectangles with the same area can have different perimeters and that rectangles with the same perimeter can have different areas.	Unit 1, Session 18–20 Unit 1, pages 123–124 (HC 10)	January Problem Solving Number Corner Student Book, p 55	Set D6 Measurement: Area & Perimeter, Activities 3 & 4 Bridges Practice Book, p 122	
4.5.7 Find areas of shapes by dividing them into basic shapes such as rectangles.	Unit 4, pages 461–462 and 465–467 (Work Place 4B) Unit 6, Session 4 Unit 6, page 693 (HC 45)		Set D5 Measurement: Area in Metric Units, Activity 2 (Extension) Set D6 Measurement: Area & Perimeter, Activity 4 Bridges Practice Book, pp 19, 88, 121, 139	Informal Bridges Practice Book, pp 19, 121
4.5.8 Use volume and capacity as different ways of measuring the space inside a shape.	Unit 4, Session 15	October Calendar Collector March Calendar Collector		

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 5: MEASUREMENT				
Students understand perimeter and area, as well as measuring volume, capacity, time, and money.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.5.9 Add time intervals involving hours and minutes.	Unit 3, Session 9 Unit 3, page 329 (HC 23)	January Calendar Grid January Problem Solving Number Corner Student Book, pages 47, 48, 56–58, 60	Bridges Practice Book, pages 7, 27, 28, 50, 62, 91, 93, 100	Formal Number Corner Teacher's Guide, pages 60–63, 211–214 (Baseline Assessment, Checkup 2)
4.5.10 Determine the amount of change from a purchase		Number Corner Blacklines (Support Activity 9, Finish with 10 Dollars)	Bridges Practice Book, pages 5, 6, 32, 40, 99, 116	Formal Number Corner Teacher's Guide, pages 59–63 (Checkup 1)

STANDARD 6: DATA ANALYSIS AND PROBABILITY				
Students organize, represent, and interpret numerical and categorical data and clearly communicate their findings. They show outcomes for simple probability situations.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.6.1 Represent data on a number line and in tables, including frequency tables.	Unit 5, Sessions 3, 5, 12, 13 Unit 8, Sessions 2–4, 7, 9, 11, 16–18	January Calendar Collector February Calendar Collector March Calendar Collector May Calendar Collector	Bridges Practice Book, pp 89, 132	Formal Unit 5, Session 18 (Unit Post-Assessment) Unit 8, Session 19 (Unit Post-Assessment)
4.6.2 Interpret data graphs to answer questions about a situation.	Unit 5, Sessions 5, 13 Unit 7, Sessions 11, 12 Unit 7, p 844 (HC 53) Unit 8, Sessions 3, 5, 6, 10, 11, 17, 18	January Calendar Collector February Calendar Collector	Bridges Practice Book, pp 82, 85, 89, 91, 92, 131, 132, 133	Formal Unit Pre- and Post-Assessments: Unit 5, Sessions 1 & 18 Unit 7, Sessions 4 & 14 Unit 8, Sessions 1 & 19 Number Corner Teacher's Guide, Vol. 2, pp 282–294, 365–369 (Checkups 3, 4)
4.6.3 Summarize and display the results of probability experiments in a clear and organized way.	Unit 5, Sessions 5, 7–9, 12–15 Unit 5, page 600 (HC 39)	January Calendar Collector February Calendar Collector Number Corner Student Book, pages 49, 59, 63, 69	Set E1 Data Analysis: Probability & Technology, Activities 1, 2 and Ind. Workseet 1	Informal Unit 5, Session 15 (Work Sample) Formal Unit 5, Session 18 (Unit Post-Assessment)

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 7: PROBLEM SOLVING				
Students make decisions about how to approach problems and communicate their ideas.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.7.1 Analyze problems by identifying relationships, telling relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.	Unit 2, Sessions 14, 19 Unit 3, Sessions 13, 17–18 Unit 4, Sessions 1, 13 Unit 5, Sessions 15–16 Unit 7, Sessions 1, 9, 11–13 Unit 8, Sessions 13, 15, 17–18	September–May Calendar Grid February–May Problem Solving Note: See February, pages 243–244, Introducing the Problem Solving Solution Page.	Bridges Practice Book, pp 40, 62, 69, 70, 72, 76, 78, 97, 140	Formal Unit 2, Sessions 5 & 21 (Unit Pre- and Post-Assessments)
4.7.2 Decide when and how to break a problem into simpler parts.		September–May Problem Solving	Set E1 Data Analysis: Probability & Technology, Activities 1, 2 and Ind. Workseet 1	
4.7.3 Apply strategies and results from simpler problems to solve more complex problems.	Unit 1, Sessions 9, 10, 12 Unit 2, Sessions 11, 14, 19, 20 Unit 3, Sessions 13, 15, 17–19 Unit 5, Sessions 16–17 Unit 6, Sessions 15–17 Unit 7, pages 826–827 (Challenge) Unit 8, Sessions 13, 14, 17	March–May Problem Solving	Set E1 Data Analysis: Probability & Technology, Activities 1, 2 and Ind. Workseet 1	
4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.	Unit 2, Sessions 14, 19, 20 Unit 3, Sessions 13, 17, 18 Unit 5, Session 14 Unit 6, Sessions 3, 4, 10, 15–17 Unit 7, Session 1–3, 6–8, 13 Unit 8, Session 13, 17, 18	February–May Problem Solving Note: See February, pages 243–244, Introducing the Problem Solving Solution Page. Number Corner Student Book, pages 8, 11, 14–15, 17, 24, 27, 30, 39, 46, 56–58, 60–61, 64, 66, 70, 73, 78, 82, 89, 90–100, 103–104, 106	Set A5 Number and Operations: Multi-Digit Multiplication, Activities 6, 12, 13 and Independent Worksheet 5 Bridges Practice Book, pages 2, 4,	Informal Unit 2, pages 253–254 (Revising Work from Session 19)
			6, 8, 10, 12, 14, 16, 18, 24, 26, 30, 32, 34, 36, 38, 40, 48, 54, 56, 58, 60, 62, 64, 70, 74, 76, 78, 80, 94, 96, 98, 99, 100, 116, 130, 138, 140	Formal Unit 2, Sessions 5 & 21 (Unit Pre- and Post-Assessments) Unit 7, Sessions 4 & 14 (Unit Pre- and Post-Assessments)c
4.7.5 Express solutions clearly and logically by using the appropriate mathematical terms and notation. Support solutions with evidence in both verbal and symbolic work.	Unit 2, Session 14, 20 Unit 3, Sessions 13, 15 Unit 4, Sessions 5, 7–9 Unit 5, Session 13–14 Unit 6, Sessions 15–17 Unit 7, Sessions 1–3, 13 Unit 8, Sessions 5–6, 13	October–May Problem Solving	Set A5 Number and Operations: Multi-Digit Multiplication, Activities 6, 11, 12, 13 and Independent Worksheet 5 Bridges Practice Book, page 98	

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 7: PROBLEM SOLVING				
Students make decisions about how to approach problems and communicate their ideas.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.7.6 Recognize the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.	Unit 2, Sessions 3, 5, 7, 9, 11, 14–16 Unit 2, p 174 (HC 12) Unit 3, Sessions 18, 19 Unit 3, pp 345–346, 354 (Home Connections 24, 25) Unit 8, Sessions 10, 13, 16, 17	December Problem Solving April Problem Solving	Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1, 2 & 3 Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2–13 and Ind. Worksheets 1–9 Bridges Practice Book, pp 23, 24, 33, 34, 35, 36, 53, 61, 63, 66, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 87, 88, 94, 95, 96, 104, 116, 135, 136, 140	Informal Unit 2, Session 14 (Work Sample) Bridges Practice Book, pp 68, 75, 77, 79, 87, 94, 95, 96, 136, 140
4.7.7 Know and use appropriate methods for estimating results of whole-number computations.	Unit 2, Sessions 7, 9, 11, 14–16 Unit 3, Sessions 18, 19	December Problem Solving April Problem Solving	Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1, 2 & 3 Set A5 Number & Operations: Multi-Digit Multiplication, Activities 2–13 and Ind. Worksheets 1–9 Bridges Practice Book, pp 23, 24, 33, 34, 35, 36, 53, 61, 63, 66, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 87, 88, 94, 95, 96, 104, 116, 136, 140	Informal Unit 2, Session 14 (Work Sample) Bridges Practice Book, pp 68, 75, 77, 79, 87, 94, 95, 96, 136, 140 Formal Unit 2, Sessions 5 & 21 (Unit Pre- and Post Assessments & Student Reflection Sheet) Set A5 Number & Operations, Multi-Digit Multiplication, Activities 1 & 14
4.7.8 Make precise calculations and check the validity of the results in the context of the problem.	Unit 1, Session 17 Unit 2, Sessions 12, 19–20 Unit 3, Sessions 13, 15, 18 Unit 4, Session 18 Unit 6, Sessions 15–17 Unit 8, Sessions 5–6, 10–11	October–May Problem Solving	Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1, 2 & 3 Bridges Practice Book, pp 94, 96, 100, 135, 140	Informal Unit 2, pages 253–254 (Revising Work from Session 19) Bridges Practice Book, pp 94, 96, 100, 135, 140
4.7.9 Decide whether a solution is reasonable in the context of the original situation.	Unit 1, Session 17 Unit 2, Sessions 12, 19–20 Unit 3, Sessions 13, 15, 18 Unit 4, Session 18 Unit 6, Sessions 15–17 Unit 8, Sessions 5–6, 10–11	October–May Problem Solving	Set A4 Number & Operations: Estimating to Multiply & Divide, Independent Worksheets 1, 2 & 3 Bridges Practice Book, pp 94, 96, 100, 135, 140	Informal Unit 2, pages 253–254 (Revising Work from Session 19) Bridges Practice Book, pp 94, 96, 100, 135, 140

Bridges Grade 4 Correlations to Indiana Academic Standards for Mathematics (cont.)

STANDARD 7: PROBLEM SOLVING				
Students make decisions about how to approach problems and communicate their ideas.				
Standards	Bridges	Number Corner	Bridges Supplement	Assessments
4.7.10 Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.	Unit 1, Sessions 9–10, 12 Unit 3, Sessions 13, 15 Unit 2, Sessions 11, 14,19–20 Unit 5, Sessions 16–17 Unit 6, Sessions 15–17 Unit 7, pages 826–827 (Challenge)	March–May Problem Solving	Set E1 Data Analysis: Probability & Technology, Activities 1, 2 and Ind. Workseet 1	