bridges in mathematics

GRADE 3

Bridges & Number Corner Third Edition

CORRELATIONS

Indiana Academic Standards for Mathematics

number corner

3 PS — Mathematics Process Standards

Standard	Descriptor	Citations	
Mathematics Process Standards			
PS.1	Make sense of problems and persevere in solving them.	**Bridges in Mathematics** Unit 2: M1 S1; M1 S2 Unit 3: M1 S1; M3 S1 Unit 4: M2 S3 Unit 5: M1 S4; M2 S1 Unit 7: M4 S4 Unit 8: M1 S3; M4 S1	**Number Corner** September: Solving Problems October: Solving Problems November: Solving Problems February: Calendar Collector March: Solving Problems April: Calendar Collector, Solving Problems May: Solving Problems
PS.2	Reason abstractly and quantitatively.	**Bridges in Mathematics** Unit 1: M2 S1; M4 S3; M4 S5 Unit 2: M2 S5 Unit 3: M1 S1 Unit 4: M1 S2 Unit 5: M4 S4 Unit 7: M4 S1 Unit 8: M3 S6; M4 S1; M3 S6	**Number Corner** September: Computational Fluency November: Solving Problems January: Solving Problems April: Calendar Grid May: Solving Problems
PS.3	Construct viable arguments and critique the reasoning of others.	**Bridges in Mathematics** Unit 1: M2 S4; M3 S3; M4 S2 Unit 2: M1 S1 Unit 3: M1 S6; M4 S2 Unit 4: M3 S3 Unit 5: M2 S4 Unit 6: M4 S3 Unit 8: M4 S1	**Number Corner** October: Solving Problems November: Computational Fluency December: Calendar Grid January: Solving Problems February: Solving Problems March: Solving Problems May: Calendar Collector, Number Line
PS.4	Model with mathematics.	**Bridges in Mathematics** Unit 1: M1 S1; M1 S2; M4 S5 Unit 2: M2 S2 Unit 4: M3 S4; M4 S3 Unit 5: M1 S3 Unit 6: M3 S2 Unit 7: M4 S2 Unit 8: M3 S3	**Number Corner** May: Calendar Grid

Standard	Descriptor	Citations	
Mathematics Process Standards			
PS.5	Use appropriate tools strategically.	**Bridges in Mathematics** Unit 1: M2 S5; M3 S1 Unit 3: M1 S2; M2 S4 Unit 4: M2 S4 Unit 6: M1 S5 Unit 7: M2 S2 Unit 8: M1 S3; M4 S2	**Number Corner** December: Calendar Collector January: Calendar Collector February: Calendar Collector April: Calendar Collector, Number Line
PS.6	Attend to precision.	**Bridges in Mathematics** Unit 1: M3 S1 Unit 2: M4 S2 Unit 3: M3 S4 Unit 4: M1 S6; M4 S1 Unit 5: M3 S3; M4 S2 Unit 6: M1 S4 Unit 7: M2 S4; M4 S4 Unit 8: M1 S1; M1 S2; M4 S4	**Number Corner** November: Calendar Collector, Computational Fluency December: Computational Fluency January: Number Line February: Number Line March: Number Line May: Number Line
PS.7	Look for and make use of structure.	**Bridges in Mathematics** Unit 1: M1 S1; M1 S2; M2 S1; M2 S3; M3 S5 Unit 2: M2 S2; M3 S4 Unit 3: M2 S2 Unit 4: M1 S2 Unit 8: M1 S3; M3 S6; M4 S4	**Number Corner** September: Calendar Grid, Number Line October: Calendar Grid, Number Line November: Calendar Grid, Number Line December: Calendar Grid, Number Line January: Calendar Grid, Number Line February: Calendar Grid, Number Line March: Calendar Grid, Number Line April: Solving Problems May: Computational Fluency
PS.8	Look for and express regularity in repeated reasoning.	**Bridges in Mathematics** Unit 1: M1 S4 Unit 2: M2 S4; M3 S2 Unit 3: M4 S1 Unit 4: M3 S2 Unit 5: M1 S2 Unit 6: M3 S3 Unit 7: M3 S4 Unit 8: M1 S1; M2 S5	**Number Corner** November: Number Line December: Solving Problems January: Computational Fluency February: Computational Fluency March: Calendar Grid, Calendar Collector, Computational Fluency April: Computational Fluency May: Calendar Grid, Calendar Collector

3 3.NS — Number Sense

Standard	Descriptor	Citations	
Number Sense			
3.NS.1	Read and write whole numbers up to 10,000. Use words, models, standard form, and expanded form to represent and show equivalent forms of whole numbers up to 10,000.	**Bridges in Mathematics** Unit 3: M1 S2; M1 S4; M3 S2; M4 S2	**Number Corner** September: Number Line October: Number Line
3.NS.2	Model unit fractions as the quantity formed by 1 part when a whole is partitioned into equal parts; model non-unit fractions as the quantity formed by iterations of unit fractions. [In grade 3, limit denominators of fractions to 2, 3, 4, 6, 8.] (E)	**Bridges in Mathematics** Unit 4: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 6: M4 S1; M4 S2 Unit 7: M3 S3; M3 S4; M3 S5; M3 S6; M4 S1; M4 S3	**Number Corner** October: Calendar Collector December: Calendar Grid February: Calendar Collector April: Calendar Collector
3.NS.3	Model a non-unit fraction on a number line by marking equal lengths from 0, identifying each part as a unit fraction and locating the non-unit fraction as the endpoint on the number line. (E)	**Bridges in Mathematics** Unit 4: M3 S4 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5	**Number Corner** November: Calendar Collector January: Number Line February: Number Line March: Number Line April: Number Line May: Number Line

Standard	Descriptor	Citations	
Number Sense			
3.NS.4	Use fraction models to represent two simple equivalent fractions with attention to how the number and size of the parts differ even though the quantities are the same. Use this principle to generate simple equivalent fractions (e.g., 1/2 = 2/4, 4/6 = 2/3).	**Bridges in Mathematics** Unit 4: M3 S3 Unit 6: M4 S2; M4 S3 Unit 7: M3 S1; M3 S2; M3 S3; M3 S5; M3 S6; M4 S1; M4 S3	**Number Corner** December: Calendar Grid January: Calendar Grid March: Number Line April: Calendar Grid, Calendar Collector May: Calendar Grid, Number Line
3.NS.5	Compare two fractions with the same numerator or the same denominator by reasoning about their size based on the same whole. Record the results of comparisons with the symbols > , = , or < , and justify the conclusions (e.g., by using a visual fraction model). (E)	**Bridges in Mathematics** Unit 4: M3 S2; M3 S5 Unit 6: M4 S2	**Number Corner** January: Calendar Grid February: Number Line March: Number Line
3.NS.6	Use place value understanding to round two- and three-digit whole numbers to the nearest 10 or 100.	**Bridges in Mathematics** Unit 3: M1 S2; M1 S3; M1 S4; M3 S1; M3 S2; M3 S3; M3 S4	**Number Corner** November: Number Line December: Number Line January: Solving Problems

3 3.CA — Computation and Algebraic Thinking

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
3.CA.1	Fluently add and subtract multidigit whole numbers using strategies and algorithms based on place value, properties of operations, and relationships between addition and subtraction.	**Bridges in Mathematics** Unit 1: M2 S4; M2 S5; M3 S2; M3 S3; M3 S5; M4 S2; M4 S4 Unit 3: M1 S1; M1 S6; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M4 S1; M4 S2; M4 S3; M4 S4 Unit 4: M2 S2; M2 S3 Unit 8: M3 S6	**Number Corner** September: Solving Problems October: Solving Problems
3.CA.2	Solve real-world problems involving addition and subtraction of multidigit whole numbers (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). (E)	**Bridges in Mathematics** Unit 1: M4 S1 Unit 3: M1 S5; M2 S1; M3 S4 Unit 4: M2 S2	**Number Corner** October: Number Line January: Solving Problems
3.CA.3	Model the concept of multiplication of whole numbers using equal-sized groups, arrays, area models, and equal intervals on a number line. Model the properties of 0 and 1 in multiplication using objects or drawings. (E)	**Bridges in Mathematics** Unit 2: M1 S1; M1 S2; M1 S5; M1 S6; M2 S1; M2 S2; M2 S3; M2 S4; M3 S1; M3 S2; M3 S3 Unit 5: M1 S1; M1 S3 Unit 7: M1 S3; M1 S4; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5	**Number Corner** September: Calendar Grid, Computational Fluency October: Computational Fluency November: Computational Fluency December: Computational Fluency

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
3.CA.4	Model the concept of division of whole numbers with the following models: partitioning, sharing, and an inverse of multiplication. Model the properties of 0 and 1 in division using objects or drawings. (E)	**Bridges in Mathematics** Unit 5: M1 S2; M1 S3; M1 S4; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M3 S1; M3 S2	**Number Corner** April: Computational Fluency
3.CA.5	Multiply and divide within 100 using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. (E)	**Bridges in Mathematics** Unit 2: M2 S3 Unit 5: M1 S2; M1 S3; M1 S6; M2 S1; M2 S3	**Number Corner** November: Computational Fluency December: Solving Problems January: Computational Fluency February: Computational Fluency April: Computational Fluency, Solving Problems May: Calendar Collector, Computational Fluency, Solving Problems
3.CA.6	Demonstrate fluency with mastery of multiplication facts and corresponding division facts of 0 to 10.	**Bridges in Mathematics** Unit 2: M1 S4 Unit 5: M2 S4; M3 S3; M3 S4 Unit 7: M1 S2; M1 S3; M1 S4	**Number Corner** September: Computational Fluency October: Computational Fluency November: Computational Fluency December: Computational Fluency January: Computational Fluency February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Computational Fluency

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
3.CA.7	Solve real-world problems involving whole number multiplication and division within 100 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). (E)	**Bridges in Mathematics** Unit 2: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M2 S3; M2 S4; M2 S5; M3 S1; M3 S2; M3 S4; M3 S5; M4 S3 Unit 5: M1 S4; M2 S1; M2 S2; M3 S1; M4 S5 Unit 6: M3 S5 Unit 7: M1 S2; M2 S1	**Number Corner** September: Calendar Grid November: Solving Problems
3.CA.8	Create, extend, and give an appropriate rule for number patterns within 100 (including patterns in the addition table or multiplication table).	**Bridges in Mathematics** Unit 1: M1 S4; M1 S5; M2 S2 Unit 2: M2 S2 Unit 5: M1 S2; M3 S4 Unit 7: M1 S1; M1 S3; M1 S4 Unit 8: M2 S1	

3 3.G — Geometry

Standard	Descriptor	Citations	
Geometry			
3.G.1	Define, identify, and classify four-sided shapes such as rhombuses, rectangles, and squares as quadrilaterals. Identify and draw examples and non-examples of quadrilaterals.	**Bridges in Mathematics** Unit 6: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6; M3 S2 Unit 8: M2 S2; M2 S5	**Number Corner** October: Calendar Grid
3.G.2	Identify, describe, and draw points, lines, and line segments using appropriate tools (e.g., ruler, straightedge, and technology), and use these terms when describing two-dimensional shapes.	**Bridges in Mathematics** Unit 6: M2 S2; M2 S3; M2 S5	**Number Corner** October: Calendar Grid
3.G.3	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole (i.e., 1/2, 1/3, 1/4, 1/6, 1/8).	**Bridges in Mathematics** Unit 4: M3 S1; M3 S2 Unit 6: M4 S1; M4 S3 Unit 7: M4 S2; M4 S3 Unit 8: M2 S1; M2 S5	**Number Corner** May: Calendar Grid

3 3.M — Measurement

Standard	Descriptor	Citations	
Measurement			
3.M.1	Estimate and measure the mass of objects in grams (g) and kilograms (kg) and the volume of objects in quarts (qt), gallons (gal), and liters (l). Add, subtract, multiply, or divide to solve one-step, real-world problems involving masses or volumes that are given in the same units or obtained through investigation. (E)	**Bridges in Mathematics** Unit 4: M1 S2; M1 S3; M1 S4; M1 S5; M1 S6; M2 S1; M2 S2; M2 S3 Unit 8: M1 S2; M1 S4; M1 S5; M2 S2	**Number Corner** October: Calendar Collector December: Calendar Collector
3.M.2	Choose and use appropriate units and tools to estimate and measure length, weight, and temperature. Estimate and measure length to a quarter-inch, weight in pounds, and temperature in degrees Celsius and Fahrenheit.	**Bridges in Mathematics** Unit 1: M3 S1 Unit 4: M4 S1; M4 S2 Unit 8: M1 S4; M2 S3; M3 S5	
3.M.3	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes (e.g., by representing problems on a number line diagram). (E)	**Bridges in Mathematics** Unit 4: M2 S4; M2 S5 Unit 8: M2 S1; M3 S1; M3 S2; M3 S4; M4 S2	**Number Corner** January: Calendar Collector March: Calendar Grid

Standard	Descriptor	Citations	
Measurement			
3.M.4	Find the value of any collection of coins and bills. Write amounts less than a dollar using the ¢ symbol and write larger amounts using the $ symbol in the form of dollars and cents (e.g., $4.59). Solve real-world problems to determine whether there is enough money to make a purchase. (E)	*Students only find the value of a collection of dimes. They also do not solve real-world problems to determine whether there is enough money to make a purchase.*	
		Number Corner February: Calendar Collector	
		The grade 2 curriculum addresses 3.M.4 in the following sections:	
		Bridges in Mathematics Unit 5: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6	**Number Corner** March: Calendar Collector
3.M.5	Find the area of a rectangle with whole-number side lengths by modeling with unit squares, and show that the area is the same as would be found by multiplying the side lengths. Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters. (E)	**Bridges in Mathematics** Unit 5: M4 S1; M4 S2; M4 S3; M4 S4; M4 S5 Unit 6: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M1 S2; M2 S1; M4 S3	**Number Corner** February: Calendar Grid March: Calendar Collector, Solving Problems
3.M.6	Find perimeters of polygons given the side lengths or given an unknown side length.	**Bridges in Mathematics** Unit 6: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M2 S1	**Number Corner** February: Calendar Grid March: Solving Problems

3 3.DA — Data Analysis

Standard	Descriptor	Citations	
Data Analysis			
3.DA.1	Collect, organize, and graph data from observations, surveys, and experiments using scaled bar graphs and pictographs. Solve real-world problems by analyzing and interpreting the data using grade-level computation and comparison strategies. (E)	**Bridges in Mathematics** Unit 2: M3 S5; M4 S1; M4 S2 Unit 4: M4 S2; M4 S3 Unit 8: M1 S5; M2 S3; M2 S4; M3 S3; M3 S5; M3 S6; M4 S4	**Number Corner** September: Calendar Collector February: Solving Problems March: Calendar Grid