bridges in mathematics

GRADE 5

Bridges & Number Corner Third Edition

CORRELATIONS

Indiana Academic Standards for Mathematics

number corner

5 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 1: M1 S2; M3 S2 Unit 2: M1 S2; M2 S6; M3 S1 Unit 3: M1 S2; M4 S2 Unit 4: M1 S1; M2 S1; M3 S7 Unit 5: M1 S3; M2 S1; M3 S4 Unit 6: M1 S1; M2 S4; M4 S1 Unit 7: M1 S2; M2 S1 Unit 8: M2 S4; M4 S2	**Number Corner** October: Solving Problems November: Solving Problems December: Solving Problems January: Solving Problems March: Number Strings April: Solving Problems May: Solving Problems
PS.2	Reason abstractly and quantitatively.	**Bridges in Mathematics** Unit 1: M1 S1; M3 S3; M4 S4 Unit 2: M1 S4; M3 S5 Unit 3: M1 S1; M2 S4; M4 S1 Unit 4: M2 S4; M3 S7; M4 S1 Unit 5: M1 S2; M2 S1; M3 S4 Unit 6: M1 S5; M3 S1 Unit 7: M1 S5; M2 S2 Unit 8: M2 S1; M4 S1	**Number Corner** September: Calendar Grid October: Computational Fluency November: Computational Fluency December: Solving Problems January Solving Problems February: Calendar Collector March: Computational Fluency April: Computational Fluency May: Calendar Collector, Solving Problems
PS.3	Construct viable arguments and critique the reasoning of others.	**Bridges in Mathematics** Unit 1: M1 S1; M2 S4 Unit 2: M2 S2; M3 S5 Unit 3: M2 S6; M3 S4; M4 S2 Unit 4: M2 S1; M3 S5 Unit 5: M3 S1 Unit 6: M1 S5; M2 S2; M3 S2 Unit 7: M1 S3; M2 S2 Unit 8: M3 S3; M4 S3	**Number Corner** September: Calendar Grid, Solving Problems October: Computational Fluency November: Calendar Grid

Standard	Descriptor	Citations	
Mathematics Process Standards			
PS.4	Model with mathematics.	**Bridges in Mathematics** Unit 1: M4 S5 Unit 2: M3 S1; M3 S3 Unit 3: M1 S4; M3 S4 Unit 4: M2 S2 Unit 5: M2 S5; M4 S1 Unit 6: M1 S2; M1 S3; M2 S1 Unit 7: M2 S3; M3 S4 Unit 8: M3 S1	**Number Corner** September: Solving Problems December: Calendar Collector March: Calendar Collector April: Calendar Collector, Solving Problems
PS.5	Use appropriate tools strategically.	**Bridges in Mathematics** Unit 2: M1 S1; M2 S1; M3 S3 Unit 3: M4 S1 Unit 4: M2 S3 Unit 5: M2 S2; M4 S4 Unit 6: M1 S2; M2 S3 Unit 7: M2 S3; M4 S2 Unit 8: M1 S1; M4 S2	**Number Corner** October: Solving Problems, Number Strings November: Number Strings January: Number Strings February: Calendar Grid, Number Strings March: Number Strings April: Number Strings May: Calendar Grid
PS.6	Attend to precision.	**Bridges in Mathematics** Unit 1: M1 S3; M3 S5 Unit 2: M2 S5; M4 S4 Unit 3: M1 S1; M2 S1; M3 S1 Unit 4: M1 S3; M3 S1 Unit 6: M1 S1; M3 S3 Unit 7: M2 S1 Unit 8: M1 S1 M4 S2	**Number Corner** September: Computational Fluency October: Computational Fluency November: Computational Fluency December: Calendar Collector January: Calendar Collector February: Computational Fluency, Solving Problems March: Calendar Collector April: Calendar Collector, Computational Fluency May: Computational Fluency

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

5 5.NS — Number Sense

Standard	Descriptor	Citations	
Number Sense			
5.NS.1	Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using > , = , and < symbols. (E)	*Students do not use a number line to compare and order fractions.*	
		Bridges in Mathematics Unit 2: M4 S1 Unit 3: M2 S2	**Number Corner** March: Computational Fluency
5.NS.2	Explain different interpretations of fractions, including as parts of a whole, parts of a set, and division of whole numbers by whole numbers.	**Bridges in Mathematics** Unit 2: M1 S1; M2 S1; M2 S2; M4 S1 Unit 4: M2 S2 Unit 5: M1 S2; M1 S3; M1 S4; M2 S2; M2 S3; M2 S5 Unit 6: M4 S1	**Number Corner** September: Calendar Grid November: Number Strings May: Number Strings
5.NS.3	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. Use whole-number exponents to denote powers of 10.	**Bridges in Mathematics** Unit 3: M1 S3; M1 S4; M1 S5; M2 S1; M3 S1 Unit 6: M1 S2 Unit 7: M1 S4; M3 S1; M3 S2; M3 S3	**Number Corner** November: Calendar Collector December: Number Strings January: Number Strings February: Calendar Collector, Solving Problems
5.NS.4	Model percents as parts of 100 using pictures or diagrams and identify the equivalent fraction.	**Number Corner** February: Calendar Grid	

5 5.CA — Computation and Algebraic Thinking

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
5.CA.1	Find whole-number quotients and remainders 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. Describe the strategy and explain the reasoning used. (E)	**Bridges in Mathematics** Unit 1: M3 S5; M4 S3; M4 S4; Unit 3: M4 S2; M4 S3 Unit 4: M1 S1; M4 S2; M4 S3; M4 S4 Unit 7: M2 S2; M2 S3; M2 S4; M2 S5; M2 S6	**Number Corner** February: Computational Fluency March: Solving Problems
5.CA.2	Solve real-world problems involving multiplication and division of whole numbers (e.g., by using equations to represent the problem). In division problems that involve a remainder, explain how the remainder affects the solution to the problem. (E)	**Bridges in Mathematics** Unit 1: M4 S1; M4 S2; M4 S3 Unit 2: M2 S5; M3 S1 Unit 3: M4 S2 Unit 4: M1 S1; M4 S2; M4 S3 Unit 7: M2 S2; M2 S5; M2 S6	**Number Corner** September: Calendar Collector, Solving December: Number Strings March: Solving Problems
5.CA.3	Add and subtract fractions and mixed numbers with unlike denominators using strategies or the standard algorithm.	**Bridges in Mathematics** Unit 2: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M2 S2; M2 S3; M2 S4; M2 S5; M3 S2; M3 S4; M3 S5; M4 S1; M4 S2 Unit 3: M1 S2	**Number Corner** October: Computational Fluency, Number Strings November: Number Strings December: Computational Fluency January: Computational Fluency March: Number Strings April: Computational Fluency May: Computational Fluency

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
5.CA.4	Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable. (E)	**Bridges in Mathematics** Unit 2: M1 S5; M2 S2; M2 S3; M2 M4, M2 S5; M3 S3; M3 S4 Unit 3: M1 S2	**Number Corner** December: Computational Fluency March: Calendar Collector April: Solving Problems
5.CA.5	Use visual fraction models to multiply a fraction by a fraction or a whole number. (E)	**Bridges in Mathematics** Unit 2: M2 S1; M4 S1 Unit 4: M2 S2 Unit 5: M1 S2; M1 S3; M1 S4; M1 S5; M2 S2; M2 S3; M2 S4; M2 S5; M3 S1; M3 S2; M3 S3 Unit 6: M4 S1; M4 S2; M4 S3	**Number Corner** November: Solving Problems February: Calendar Grid May: Number Strings
5.CA.6	Use visual fraction models and numbers to divide a fraction by a fraction or a whole number. (E)	**Bridges in Mathematics** Unit 5: M4 S2; M4 S3; M4 S4; M4 S5 Unit 7: M1 S3; M1 S7; M2 S1; M2 S2; M2 S3; M2 S5	**Number Corner** April: Number Strings

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
5.CA.7	Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem). (E)	**Bridges in Mathematics** Unit 2: M2 S4; M4 S1 Unit 5: M1 S2; M1 S3; M1 S5; M2 S3; M2 S4; M2 S5; M3 S2; M3 S3 Unit 6: M4 S1; M4 S2; M4 S3	**Number Corner** November: Solving Problems April: Calendar Collector
5.CA.8	Solve real-world problems involving division of fractions and mixed numbers (e.g., by using visual fraction models and equations to represent the problem). (E)	**Bridges in Mathematics** Unit 1: M4 S3 Unit 5: M4 S2; M4 S3; M4 S4; M4 S5 Unit 7: M1 S3; M1 S7; M2 S1; M2 S2; M2 S3; M2 S5	**Number Corner** March: Computational Fluency
5.CA.9	Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning.	**Bridges in Mathematics** Unit 3: M1 S1; M1 S2; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6; M2 S7; M3 S2; M3 S3; M3 S4 Unit 4: M1 S4; M2 S1; M2 S3 Unit 7: M3 S4; M4 S1; M4 S2; M4 S3 Unit 8: M2 S3; M2 S5; M3 S2; M3 S3; M3 S4; M3 S5	**Number Corner** September: Calendar Grid, Number Strings October: Solving Problems, Number Strings November: Number Strings December: Solving Problems, Number Strings January: Calendar Collector February: Computational Fluency March: Calendar Grid

Standard	Descriptor	Citations	
Computation and Algebraic Thinking			
5.CA.10	Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths including problems that involve money in decimal notation (e.g., by using equations, models or drawings, and strategies based on place value or properties of operations to represent the problem). (E)	**Bridges in Mathematics** Unit 3: M3 S2; M3 S3; M3 S4 Unit 4: M1 S4; M2 S2; M2 S3 Unit 7: M4 S1; M4 S2; M4 S3 Unit 8: M2 S3; M2 S5; M3 S2; M3 S3; M3 S4; M3 S5	**Number Corner** September: Calendar Grid October: Solving Problems December: Solving Problems January: Calendar Collector March: Solving Problems
5.CA.11	Represent real-world problems and equations by graphing ordered pairs in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	**Bridges in Mathematics** Unit 6: M1 S3; M1 S4; M1 S5; M1 S6; M1 S7 Unit 8: M1 S2; M1 S3; M1 S4; M2 S1; M2 S2; M2 S4; M2 S6; M3 S1; M4 S1	**Number Corner** October: Calendar Collector November: Calendar Grid December: Calendar Collector April: Calendar Grid

5 5.G — Geometry

Standard	Descriptor	Citations	
Geometry			
5.G.1	Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass, and technology). Define and model the relationship between radius and diameter.	*Students do not work with circles or model the relationship between radius and diameter of circles.*	
		Bridges in Mathematics Unit 6: M2 S1; M2 S3; M2 S4	**Number Corner** November: Calendar Grid

5 5.M — Measurement

Standard	Descriptor	Citations	
Measurement			
5.M.1	Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multistep, real-world problems.	**Bridges in Mathematics** Unit 3: M2 S7; M3 S1; M3 S2; M3 S3; M3 S4 Unit 4: M4 S3 Unit 6: M4 S3 Unit 8: M2 S3; M2 S5; M3 S3; M3 S4; M3 S5; M4 S1	**Number Corner** February: Calendar Collector, Solving Problems April: Calendar Collector
5.M.2	Find the area of a rectangle with fractional side lengths by modeling 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.	**Bridges in Mathematics** Unit 5: M2 S1; M2 S2; M2 S5; M3 S1; M3 S2 Unit 6: M4 S1; M4 S2; M4 S3 Unit 8: M2 S4; M2 S5; M3 S2; M3 S3; M3 S4; M3 S5; M4 S1	**Number Corner** February: Calendar Grid
5.M.3	Develop and use formulas for the area of triangles, parallelograms, and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms, and trapezoids, using appropriate units for measures. (E)	*This standard is beyond the scope of this program.*	

Standard	Descriptor	Citations	
Measurement			
5.M.4	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 or multiplying the height by the area of the base. (E)	**Bridges in Mathematics** Unit 1: M1 S4; M1 S5; M2 S1; M2 S2 Unit 6: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5	**Number Corner** September: Calendar Collector October: Calendar Grid January: Solving Problems April: Calendar Grid
5.M.5	Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for right rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths to solve real-world problems and other mathematical problems. (E)	**Bridges in Mathematics** Unit 4: M3 S7 Unit 6: M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M1 S4; M1 S5; M1 S6; M2 S2	**Number Corner** September: Calendar Collector October: Calendar Grid January: Solving Problems April: Calendar Grid

5 5.DA — Data Analysis

Standard	Descriptor	Citations	
Data Analysis			
5.DA.1	Formulate questions that can be addressed with categorical and numerical data and make predictions about the data. Collect, organize, and graph data from observations, surveys, and experiments using line plots with fractional intervals, histograms, or other graphical representations that appropriately represent the data set. (E)	**Bridges in Mathematics** Unit: 4: M3 S7 Unit 6: M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M1 S3; M2 S1; M2 S2; M2 S6; M3 S1	**Number Corner** December: Calendar Collector
5.DA.2	Calculate measures of central tendency (mean, median, and mode) to describe a data set. Analyze data sets to determine which measure of central tendency appropriately describes the distribution of data. (E)	**Bridges in Mathematics** Unit 8: M1 S5	**Number Corner** December: Calendar Collector