bridges in mathematics

GRADE 3

Bridges in Mathematics & Number Corner Third Edition »

CORRELATIONS

» Oklahoma Standards for Mathematics

number corner

3 1. Mathematical Actions & Processes

Standard	Descriptor	Citations	
MAP Mathematical Actions & Processes			
MAP.1	Develop a deep and flexible conceptual understanding.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S2, M2–S3, M4–S2 Unit 2: M1–S3 Unit 3: M1–S2 Unit 4: M1–S3, M1–S5 Unit 6: M1–S5 Unit 8: M1–S1, M3–S3, M3–S6, M4–S3	**Number Corner** Teachers Guide: September: Solving Problems October: Number Line, Solving Problems November: Calendar Grid
MAP.2	Develop accurate and appropriate procedural fluency.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S4, M2–S2, M2–S3 Unit 3: M3–S1 Unit 4: M1–S3 Unit 8: M3–S5, M3–S6, M4–S2	**Number Corner** Teachers Guide: October: Calendar Collector, Computational Fluency November: Calendar Collector, Computational Fluency December: Calendar Collector
MAP.3	Develop strategies for problem-solving.	**Bridges in Mathematics** Teachers Guide: Unit 1: M4–S1 Unit 2: M1–S3 Unit 3: M1–S1 Unit 4: M1–S4, M1–S5 Unit 6: M1–S5 Unit 8: M2–S2, M4–S1	**Number Corner** Teachers Guide: November: Computational Fluency December: Solving Problems January: Solving Problems
MAP.4	Develop mathematical reasoning.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S3, M2–S4 Unit 2: M1–S4 Unit 4: M1–S2, M1–S3, M1–S4, M1–S5, M1–S6 Unit 6: M1–S1, M1–S5 Unit 8: M1–S1, M1–S3, M2–S5, M3–S6	**Number Corner** Teachers Guide: October: Calendar Grid, Solving Problems December: Number Line

Standard	Descriptor	Citations	
MAP Mathematical Actions and Processes			
MAP.5	Develop a productive mathematical disposition.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S1, M1–S2, M3–S1 Unit 4: M1–S1, M1–S2, M1–S3, M1–S6 Unit 8: M1–S1, M1–S3, M2–S2, M2–S5	**Number Corner** Teachers Guide: September: Solving Problems December: Calendar Collector April: Number Line
MAP.6	Develop the ability to make conjectures, model, and generalize.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S1, M1–S3, M1–S5 Unit 2: M2–S2, M4–S3 Unit 3: M2–S2 Unit 4: M2–S3 Unit 5: M1–S2 Unit 6: M3–S3 Unit 7: M3–S4 Unit 8: M3–S6, M4–S1, M4–S4	**Number Corner** Teachers Guide: September: Calendar Grid, Number Line January: Calendar Grid, Number Line April: Number Line
MAP.7	Develop the ability to communicate mathematically.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S2, M1–S4, M3–S5 Unit 2: M1–S3 Unit 3: M1–S1 Unit 4: M2–S3 Unit 8: M2–S5, M4–S1, M4–S2, M4–S4	**Number Corner** Teachers Guide: November: Computational Fluency December: Calendar Grid January: Solving Problems May: Number Line

3 2. Numbers & Operations

Standard	Descriptor	Citations	
3.N.1 Compare and represent whole numbers up to 100,000 with an emphasis on place value and equality.			
3.N.1.1	Read, write, discuss, and represent whole numbers up to 100,000. Representations should include but are not limited to numerals, words, pictures, number lines, and manipulatives (e.g., 350 = 3 hundreds, 5 tens = 35 tens = 3 hundreds, 4 tens, 10 ones).	*Students work with numbers up to the 1,000s in the Bridges grade 3 curriculum.*	
		Bridges in Mathematics Teachers Guide: Unit 1: M3–S4 Unit 3: M1–S2, M1–S4; M3–S2; M4–S2	**Number Corner** Teachers Guide: September: Number Line October: Number Line
3.N.1.2	Use place value to describe whole numbers between 1,000 and 100,000 in terms of ten thousands, thousands, hundreds, tens and ones, including written, standard, and expanded forms.	*Students work with numbers up to the 1,000s in the Bridges grade 3 curriculum.*	
		Bridges in Mathematics Teachers Guide: Unit 3: M3–S2	**Number Corner** Teachers Guide: September: Number Line
3.N.1.3	Applying knowledge of place values, use mental strategies (no written computations) to find 100 more or 100 less than a given number, 1,000 more or 1,000 less than a given number, and 10,000 more or 10,000 less than a given number, up to a five-digit number.	*This standard is beyond the scope of the grade 3 curriculum.*	

Standard	Descriptor	Citations	
3.N.1 Compare and represent whole numbers up to 100,000 with an emphasis on place value and equality.			
3.N.1.4	Use place value to compare and order whole numbers, up to 100,000, using comparative language, numbers, and symbols.	*This standard is beyond the scope of the grade 3 curriculum.*	
3.N.1.5	Use place value understanding to round numbers to the nearest thousand, ten-thousand and hundred thousand.	*Students only round numbers to the nearest 10 and 100.*	
		Bridges in Mathematics Teachers Guide: Unit 3: M1–S2, M1–S3, M1–S4; M3–S1, M3–S2, M3–S3, M3–S4	**Number Corner** Teachers Guide: November: Number Line December: Number Line January: Solving Problems

Standard	Descriptor	Citations	
3.N.2 Solve real-world and mathematical problems using addition, subtraction, multiplication, and division.			
3.N.2.1	Represent multiplication facts by modeling a variety of approaches (e.g., manipulatives, repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, skip counting).	**Bridges in Mathematics** Teachers Guide: 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** Teachers Guide: September: Calendar Grid, Computational Fluency October: Computational Fluency November: Computational Fluency December: Computational Fluency
3.N.2.2	Demonstrate fluency with multiplication facts using factors up to 10.	**Bridges in Mathematics** Teachers Guide: Unit 2: M1–S4 Unit 5: M2–S4; M3–S3, M3–S4 Unit 7: M1–S2, M1–S3, M1–S4	**Number Corner** Teachers Guide: 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
3.N.2.3	Use strategies and algorithms based on knowledge of place value and equality to fluently add and subtract up to five-digit numbers (answer not to exceed 100,000).	*Students only add and subtract up to four-digit numbers.*	
		Bridges in Mathematics Teachers Guide: Unit 1: M2–S5, M3–S2, M3–S3, M4–S2, M4–S4 Unit 3: M1–S1, M1–S5, M2–S1, M2–S2, M2–S3, M2–S4, M2–S5, M3–S1, M3–S3, M4–S1, M4–S2, M4–S3, M4–S4 Unit 4: M2–S1, M2–S2	**Number Corner** Teachers Guide: September: Solving Problems October: Solving Problems

Standard	Descriptor	Citations	
3.N.2 Solve real-world and mathematical problems using addition, subtraction, multiplication, and division.			
3.N.2.4	Recognize when to round numbers and apply understanding to estimate sums and differences to the nearest ten thousand, thousand, hundred, and ten.	*Students work with numbers up to the 1,000s in the Bridges grade 3 curriculum.* **Bridges in Mathematics** Teachers Guide: Unit 3: M1–S2, M1–S5, M1–S6; M2–S1, M2–S2, M2–S3, M2–S4; M3–S1, M3–S3, M3–S4; M4–S1, M4–S2, M4–S3	
3.N.2.5	Use addition and subtraction to solve problems involving whole numbers. Use various strategies, including the relationship between addition and subtraction and the context of the problem to assess the reasonableness of results.	**Bridges in Mathematics** Teachers Guide: Unit 1: M2–S5, M3–S2, M3–S3, M4–S2, M4–S4 Unit 3: M1–S5, M2–S1, M2–S2, M2–S3, M2–S4, M2–S5, M3–S1, M3–S3, M4–S1, M4–S2, M4–S3, M4–S4 Unit 4: M2–S1, M2–S2	**Number Corner** Teachers Guide: September: Solving Problems October: Solving Problems
3.N.2.6	Represent division facts and divisibility by modeling a variety of approaches (e.g., repeated subtraction, equal sharing, forming equal groups) to show the relationship between multiplication and division.	**Bridges in Mathematics** Teachers Guide: Unit 5: M1–S2, M1–S3, M1–S4, M1–S5, M1–S6; M2–S1, M2–S2, M2–S3, M2–S4; M3–S1, M3–S2, M3–S4	**Number Corner** Teachers Guide: April: Computational Fluency

Standard	Descriptor	Citations	
3.N.2 Solve real-world and mathematical problems using addition, subtraction, multiplication, and division.			
3.N.2.7	Apply the relationship between multiplication and division to represent and solve problems.	**Bridges in Mathematics** Teachers Guide: Unit 5: M1–S2, M1–S3, M1–S5, M1–S6; M2–S1, M2–S2, M2–S3, M3–S2	**Number Corner** Teachers Guide: 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.N.2.8	Use various strategies (e.g., base ten blocks, area models, arrays, repeated addition, algorithms) based on knowledge of place value, equality, and properties of addition and multiplication to multiply a two-digit factor by a one-digit factor.	**Bridges in Mathematics** Teachers Guide: Unit 7: M1–S1, M1–S3, M1–S4, M1–S5, M2–S1, M2–S2, M2–S3, M2–S4, M2–S5	

Standard	Descriptor	Citations	
3.N.3 Use and justify fractional representations in real-world and mathematical problems.			
3.N.3.1	Read and write fractions with words and symbols using appropriate terminology (i.e., numerator and denominator).	**Bridges in Mathematics** Teachers Guide: Unit 4: M3–S1, M3–S2, M3–S5 Unit 6: M4–S2 Unit 7: M3–S3; M4–S1	**Number Corner** Teachers Guide: November: Calendar Collector December: Calendar Grid January: Calendar Grid, Number Line February: Number Line March: Number Line April: Calendar Grid
3.N.3.2	Model fractions using length, set, and area for halves, thirds, fourths, sixths, and eighths.	**Bridges in Mathematics** Teachers Guide: Unit 4: M3–S1, M3–S2, M3–S3, M3–S4, M3–S5 Unit 6: M4–S2, M4–S3 Unit 7: M3–S1, M3–S2, M3–S3, M3–S4; M4–S1, M4–S2, M4–S3	**Number Corner** Teachers Guide: October: Calendar Collector November: Calendar Collector December: Calendar Grid January: Number Line April: Calendar Grid
3.N.3.3	Apply understanding of unit fractions and use this understanding to compose and decompose fractions related to the same whole.	**Bridges in Mathematics** Teachers Guide: Unit 4: M3–S1, M3–S2, M3–S3, M3–S4, M3–S5 Unit 6: M4–S1, M4–S2 Unit 7: M3–S1, M3–S3, M3–S4, M3–S5, M3–S6; M4–S1, M4–S3	**Number Corner** Teachers Guide: October: Calendar Collector November: Calendar Collector December: Calendar Grid February: Calendar Collector April: Calendar Collector
3.N.3.4	Use models and number lines to order and compare fractions that are related to the same whole.	**Bridges in Mathematics** Teachers Guide: Unit 4: M3–S2, M3–S3, M3–S4, M3–S5 Unit 6: M4–S2 Unit 7: M3–S1, M3–S2, M3–S3, M3–S4, M3–S5, M3–S6; M4–S1, M4–S2, M4–S3	**Number Corner** Teachers Guide: November: Calendar Collector January: Calendar Grid, Number Line February: Number Line March: Number Line

Standard	Descriptor	Citations	
3.N.4 Determine the value of a set of coins and determine the value of a set of bills in monetary transactions.			
3.N.4.1	Use addition and subtraction to determine the value of a collection of coins up to one dollar using the cent symbol and in monetary transactions.	*Students only find the value of a collection of dimes.* **Number Corner** Teachers Guide: February: Calendar Collector	
3.N.4.2	Add and subtract a collection of bills up to twenty dollars using whole dollars in monetary transactions.	*This standard is beyond the scope of the grade 3 curriculum.*	
3.A.1.1	Use models and number lines to order and compare fractions that are related to the same whole.	**Bridges in Mathematics** Teachers Guide: Unit 4: M3–S2, M3–S3, M3–S4, M3–S5 Unit 6: M4–S2 Unit 7: M3–S1, M3–S2, M3–S3, M3–S4, M3–S5, M3–S6; M4–S1, M4–S2, M4–S3	**Number Corner** Teachers Guide: November: Calendar Collector January: Calendar Grid, Number Line February: Number Line March: Number Line

3 3. Algebraic Reasoning & Algebra

Standard	Descriptor	Citations	
3.A.1 Describe and create representations of numerical and geometric patterns.			
3.A.1.1	Create, describe, and extend patterns involving addition, subtraction, or multiplication to solve problems in a variety of contexts.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S4, M1–S5; M2–S2 Unit 2: M2–S2, M3–S3, M3–S4 Unit 5: M1–S2; M3–S4 Unit 7: M1–S1, M1–S3, M1–S4, M1–S5 Unit 8: M2–S1	**Number Corner** Teachers Guide: September: Number Line December: Computational Fluency January: Computational Fluency February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Calendar Collector
3.A.1.2	Describe the rule (limited to a single operation) for a pattern from an input/output table or function machine involving addition, subtraction, or multiplication.	**Bridges in Mathematics** Teachers Guide: Unit 2: M3–S1, M3–S2, M3–S4, M3–S5; M4–S1	**Number Corner** Teachers Guide: September: Calendar Grid December: Solving Problems
3.A.1.3	Explore and develop visual representations of increasing and decreasing geometric patterns and construct the next steps.	**Number Corner** Teachers Guide: October: Calendar Grid February: Calendar Grid	

Standard	Descriptor	Citations	
3.A.2 Use number sentences involving multiplication and unknowns to represent and solve real-world and mathematical problems.			
3.A.2.1	Use number sense with the properties of addition, subtraction, and multiplication, to find unknowns (represented by symbols) in one-step equations. Generate real-world situations to represent number sentences.	**Bridges in Mathematics** Teachers Guide: Unit 1: M2–S5, M4–S1, M4–S3 Unit 2: M1–S5, M4–S3 Unit 3: M4–S1, M4–S2, M4–S3 Unit 5: M1–S2, M1–S4; M2–S1 Unit 7: M1–S2	**Number Corner** Teachers Guide: November: Solving Problems January: Solving Problems
3.A.2.2	Identify, represent, and apply the number properties (commutative, identity, and associative properties of addition and multiplication) using models and manipulatives to solve problems.	**Bridges in Mathematics** Teachers Guide: Unit 1: M1–S5, M2–S1, M3–S3, M3–S5 Unit 2: M2–S1, M2–S2, M2–S3, M2–S4, M2–S5 Unit 5: M1–S3, M1–S4, M2–S1, M3–S1, M3–S3, M4–S5 Unit 7: M1–S3, M1–S4, M2–S1, M2–S2, M2–S3, M2–S4, M2–S5	**Number Corner** Teachers Guide: November: Computational Fluency December: Solving Problems April: Computational Fluency, Solving Problems May: Computational Fluency

3 4. Geometry & Measurement

Standard	Descriptor	Citations	
3.GM.1 Analyze and use geometric attributes to describe and create polygons and three-dimensional figures in various contexts.			
3.GM.1.1	Sort three-dimensional shapes based on attributes.	*This standard is beyond the scope of the grade 3 curriculum.*	
3.GM.1.2	Build a three-dimensional figure using unit cubes when shown a picture of a three-dimensional shape.	*This standard is beyond the scope of the grade 3 curriculum.*	
3.GM.1.3	Classify angles within a polygon as acute, right, obtuse, and straight.	**Bridges in Mathematics** Teachers Guide: Unit 6: M1–S2, M1–S3, M1–S4; M2–S1, M2–S2, M2–S3, M2–S4, M2–S5, M2–S6	**Number Corner** Teachers Guide: October: Calendar Grid

Standard	Descriptor	Citations	
3.GM.2 Analyze and use geometric attributes to describe and create polygons and three-dimensional figures in various contexts.			
3.GM.2.1	Find the perimeter of a polygon, given whole number lengths of the sides, using a variety of models.	**Bridges in Mathematics** Teachers Guide: Unit 6: M3–S1, M3–S2, M3–S3, M3–S4, M3–S5 Unit 8: M2–S1, M3–S4, M4–S3	**Number Corner** Teachers Guide: February: Calendar Grid March: Calendar Collector, Solving Problems
3.GM.2.2	Analyze why length and width are multiplied to find the area of a rectangle by decomposing the rectangle into one unit by one unit squares and viewing these as rows and columns to determine the area.	**Bridges in Mathematics** Teachers Guide: Unit 5: M4–S4 Unit 6: M3–S1, M3–S5 Unit 7: M2–S2, M2–S5	**Number Corner** Teachers Guide: November: Calendar Grid February: Calendar Grid May: Calendar Grid
3.GM.2.3	Count cubes systematically to identify the number of cubes needed to pack the whole or half of a three-dimensional structure.	*This standard is beyond the scope of the grade 3 curriculum.*	
3.GM.2.4	Find the area of two-dimensional figures by counting the total number of same-size unit squares that fill the shape without gaps or overlaps.	**Bridges in Mathematics** Teachers Guide: Unit 5: M4–S1, M4–S2, M4–S3, M4–S5 Unit 6: M3–S1, M3–S2, M3–S3, M3–S4, M3–S5, M4–S1 Unit 8: M1–S2	**Number Corner** Teachers Guide: February: Calendar Grid March: Calendar Collector May: Calendar Grid

Standard	Descriptor	Citations	
3.GM.2 Analyze and use geometric attributes to describe and create polygons and three-dimensional figures in various contexts.			
3.GM.2.5	Choose an appropriate measurement instrument and measure the length of objects to the nearest whole centimeter or whole meter.	**Bridges in Mathematics** Teachers Guide: Unit 1: M3–S1, M3–S2	**Number Corner** Teachers Guide: February: Calendar Grid
3.GM.2.6	Choose an appropriate measurement instrument and measure the length of objects to the nearest whole yard, whole foot, or half inch.	**Bridges in Mathematics** Teachers Guide: Unit 4: M4–S1, M4–S2 Unit 5: M4–S4 Unit 7: M3–S1 Unit 8: M1–S2, M1–S3, M1–S4, M2–S1, M3–S1, M3–S2, M3–S3, M3–S4	
3.GM.2.7	Use an analog thermometer to determine temperature to the nearest degree in Fahrenheit and Celsius.	*This standard is beyond the scope of the grade 3 curriculum.*	

Standard	Descriptor	Citations	
3.GM.3 Solve problems by telling time to the nearest five-minute interval.			
3.GM.3.1	Read and write time to the nearest five-minute interval (analog and digital).	**Bridges in Mathematics** Teachers Guide: Unit 4: M2–S4 Unit 8: M2–S1, M3–S2	**Number Corner** Teachers Guide: January: Calendar Collector March: Calendar Grid
3.GM.3.2	Determine the solutions to problems involving addition and subtraction of time in intervals of five minutes, up to one hour, using pictorial models, number line diagrams, or other tools.	**Bridges in Mathematics** Teachers Guide: Unit 4: M2–S5 Unit 8: M2–S1, M3–S1, M3–S2, M3–S5, M4–S2	**Number Corner** Teachers Guide: January: Calendar Collector March: Calendar Grid

3 5. Data & Probability

Standard	Descriptor	Citations	
3.D.1 Collect, organize, and analyze data.			
3.D.1.1	Collect and organize a data set with multiple categories using a frequency table, line plot, pictograph, or bar graph with scaled intervals.	**Bridges in Mathematics** Teachers Guide: Unit 2: M3–S5, M4–S1, M4–S2 Unit 4: M4–S1, M4–S2, M4–S3, M4–S4 Unit 8: M1–S3, M1–S5, M2–S3, M2–S4, M3–S3, M3–S5, M3–S6, M4–S4	**Number Corner** Teachers Guide: September: Calendar Collector February: Solving Problems May: Calendar Collector
3.D.1.2	Solve one- and two-step problems using categorical data represented with a frequency table, pictograph, or bar graph with scaled intervals.	**Bridges in Mathematics** Teachers Guide: Unit 2: M3–S5 Unit 4: M4–S2	**Number Corner** Teachers Guide: September: Calendar Collector February: Solving Problems March: Calendar Grid