bridges in mathematics

GRADE 2

Bridges & Number Corner Third Edition

CORRELATIONS

Ohio's Learning Standards for Mathematics

number corner

2 MP — Standards for Mathematical Practice

Standard	Descriptor	Citations	
Standards for Mathematical Practice			
MP1	Make sense of problems and persevere in solving them.	**Bridges in Mathematics** Unit 1: M4 S2; M4 S2 Unit 2: M3 S7 Unit 3: M1 S2; M2 S1; M3 S6 Unit 4: M1 S1; M3 S3; M4 S1 Unit 5: M1 S2; M2 S4 Unit 6: M1 S5; M3 S2; M4 S3 Unit 7: M2 S2; M3 S4; M4 S4 Unit 8: M1 S3; M2 S2; M3 S5	**Number Corner** October: Number Line February: Number Line March: Number Line
MP2	Reason abstractly and quantitatively.	**Bridges in Mathematics** Unit 1: M1 S4; M2 S1 Unit 2: M1 S4; M3 S5 Unit 3: M1 S3; M3 S2; M4 S3 Unit 4: M3 S1 Unit 5: M1 S4; M2 S2 Unit 6: M2 S5; M3 S4 Unit 7: M3 S1 Unit 8: M1 S4	**Number Corner** September: Calendar Grid October: Daily Rectangle November: Daily Rectangle December: Daily Rectangle January: Calendar Collector February: Computational Fluency March: Calendar Grid, Calendar Collector, Computational Fluency April: Calendar Grid, Daily Rectangle, Computational Fluency
MP3	Construct viable arguments and critique the reasoning of others.	**Bridges in Mathematics** Unit 1: M3 S5 Unit 2: M1 S3; M4 S2 Unit 3: M2 S2; M3 S4 Unit 4: M1 S1; M2 S2; M3 S4 Unit 5: M1 S3; M2 S2; M3 S4 Unit 6: M1 S2; M2 S1; M4 S3 Unit 7: M1 S2; M4 S2 Unit 8: M1 S5; M2 S3	**Number Corner** November: Calendar Grid, Calendar Collector December: Calendar Collector January: Calendar Collector February: Calendar Grid, Daily Rectangle March: Daily Rectangle

Standard	Descriptor	Citations	
Standards for Mathematical Practice			
MP4	Model with mathematics.	**Bridges in Mathematics** Unit 1: M1 S1; M4 S4 Unit 2: M1 S3; M3 S5 Unit 3: M1 S4; M4 S2 Unit 4: M3 S5; M4 S1 Unit 6: M2 S4 Unit 7: M2 S3; M3 S3 Unit 8: M2 S5; M3 S2; M3 S4	**Number Corner** September: Daily Rectangle December: Calendar Collector January: Calendar Collector April: Calendar Collector May: Calendar Collector
MP5	Use appropriate tools strategically.	**Bridges in Mathematics** Unit 1: M1 S1; M2 S1 Unit 2: M1 S5; M2 S2 Unit 3: M1 S2 Unit 4: M1 S4; M4 S2; M3 S3 Unit 6: M2 S4; M4 S4 Unit 7: M1 S2; M4 S1 Unit 8: M2 S5; M3 S2; M4 S2	**Number Corner** November: Calendar Collector
MP6	Attend to precision.	**Bridges in Mathematics** Unit 2: M1 S3; M2 S2 Unit 3: M3 S6 Unit 4: M1 S2; M2 S4 Unit 5: M1 S1; M2 S1 Unit 6: M1 S3; M3 S3 Unit 7: M1 S3 Unit 8: M1 S4; M2 S1	**Number Corner** September: Calendar Collector December: Calendar Grid

Standard	Descriptor	Citations	
Standards for Mathematical Practice			
MP7	Look for and make use of structure.	**Bridges in Mathematics** Unit 1: M1 S2; M2 S2; M4 S1 Unit 2: M1 S1; M2 S4; M3 S1 Unit 3: M1 S5; M3 S1 Unit 4: M2 S1; M4 S2 Unit 5: M2 S1; M3 S3 Unit 6: M2 S1; M3 S5 Unit 7: M2 S2; M3 S5 Unit 8: M1 S2; M4 S3	**Number Corner** September: Computational Fluency, Number Line October: Calendar Grid, Daily Rectangle, Number Line November: Computational Fluency December: Daily Rectangle, Computational Fluency, Number Line January: Daily Rectangle, Computational Fluency, Number Line February: Computational Fluency, Number Line March: Calendar Grid, Calendar Collector, Computational Fluency April: Calendar Grid, Computational Fluency, Number Line
MP8	Look for and express regularity in repeated reasoning.	**Bridges in Mathematics** Unit 1: M1 S2; M4 S1 Unit 2: M1 S1; M3 S3 Unit 3: M1 S4; M2 S5 Unit 4: M3 S4; M4 S4 Unit 5: M2 S5; M3 S3; M4 S2 Unit 6: M2 S3 Unit 7: M1 S1; M2 S1 Unit 8: M1 S1	**Number Corner** September: Computational Fluency October: Calendar Grid, Computational Fluency November: Computational Fluency, Number Line December: Computational Fluency, Number Line January: Computational Fluency, Number Line February: Calendar Collector, Daily Rectangle March: Number Line May: Daily Rectangle

2 OA — Operations and Algebraic Thinking

Standard	Descriptor	Citations	
Represent and solve problems involving addition and subtraction.			
2.OA.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	**Bridges in Mathematics** Unit 1: M4 S4 Unit 3: M2 S1; M2 S2; M3 S1; M3 S3; M3 S4; M3 S5; M3 S7; M4 S1 Unit 4: M3 S2; M3 S5; M3 S6; M4 S1; M4 S2 Unit 7: M4 S1	**Number Corner** September: Calendar Grid March: Number Line April: Number Line May: Calendar Grid, Calendar Collector
Add and subtract within 20.			
2.OA.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.	**Bridges in Mathematics** Unit 1: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M4 S3 Unit 2: M1 S2; M2 S1; M2 S3 Unit 4: M2 S4; M4 S2; M4 S3; M4 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	
Work with equal groups of objects to gain foundations for multiplication.			
2.OA.3	Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	**Bridges in Mathematics** Unit 1: M2 S1; M3 S2 Unit 2: M4 S3 Unit 5: M4 S1; M4 S2; M4 S3; M4 S4	**Number Corner** September: Daily Rectangle
2.OA.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	**Bridges in Mathematics** Unit 2: M4 S1; M4 S2 Unit 4: M4 S2; M4 S3; M4 S4 Unit 6: M3 S4	**Number Corner** October: Daily Rectangle November: Daily Rectangle December: Daily Rectangle January: Daily Rectangle April: Daily Rectangle May: Daily Rectangle

2 NBT — Number and Operations in Base Ten

Standard	Descriptor	Citations	
Understand place value.			
	2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:		
2.NBT.1a	100 can be thought of as a bundle of ten tens called a "hundred."	**Bridges in Mathematics** Unit 2: M1 S1; M1 S5; M1 S6; M2 S2 Unit 3: M3 S2 Unit 5: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M3 S1; M3 S2; M3 S3	**Number Corner** November: Number Line December: Number Line
2.NBT.1b	The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	**Bridges in Mathematics** Unit 5: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5 Unit 7: M3 S1 Unit 8: M1 S2	**Number Corner** December: Number Line
2.NBT.2	Count forward and backward within 1,000 by ones, tens, and hundreds starting at any number; skip-count by 5s starting at any multiple of 5.	**Bridges in Mathematics** Unit 1: M2 S3; M4 S3 Unit 2: M1 S4; M2 S1; M3 S2; M3 S4 Unit 5: M1 S2; M1 S3; M1 S4; M1 S5; M2 S1; M2 S2; M2 S4; M3 S3; M3 S5	**Number Corner** September: Calendar Collector October: Calendar Collector September: Number Line October: Number Line November: Number Line December: Number Line January: Number Line February: Number Line
2.NBT.3	Read and write numbers to 1,000 using base-ten numerals, number names, expanded form, and equivalent representations, e.g., 716 is 700 + 10 + 6, or 6 + 700 + 10, or 6 ones and 71 tens, etc.	**Bridges in Mathematics** Unit 2: M1 S1; M1 S4; M1 S5 Unit 3: M3 S2 Unit 5: M1 S4; M1 S5; M3 S1; M3 S2 Unit 8: M1 S1; M1 S2	**Number Corner** December: Number Line

Standard	Descriptor	Citations	
Understand place value.			
2.NBT.4	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	**Bridges in Mathematics** Unit 2: M1 S1; M1 S5 Unit 3: M3 S2 Unit 5: M1 S1; M1 S4; M1 S5; M2 S6; M3 S2 Unit 8: M1 S1; M1 S4	**Number Corner** October: Number Line
Use place value understanding and properties of operations to add and subtract.			
2.NBT.5	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	**Bridges in Mathematics** Unit 2: M1 S3; M1 S4; M2 S3; M2 S4 Unit 3: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M3 S1; M3 S2; M3 S3; M3 S5; M3 S6 Unit 4: M1 S6; M3 S5 Unit 7: M2 S1	**Number Corner** March: Number Line April: Number Line
2.NBT.6	Add up to four two-digit numbers using strategies based on place value and properties of operations.	**Bridges in Mathematics** Unit 3: M3 S4; M4 S1 Unit 4: M2 S3; M3 S2; M3 S3; M3 S4 Unit 7: M1 S5; M3 S4	**Number Corner** December: Daily Rectangle January: Daily Rectangle March: Number Line

Standard	Descriptor	Citations	
Use place value understanding and properties of operations to add and subtract.			
2.NBT.7	Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; record the strategy with a written numerical method (drawings and, when appropriate, equations) and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, hundreds are added or subtracted from hundreds, tens are added or subtracted from tens, ones are added or subtracted from ones; and sometimes it is necessary to compose or decompose tens or hundreds.	**Bridges in Mathematics** Unit 4: M3 S4 Unit 5: M1 S3 Unit 7: M1 S1; M1 S4; M1 S5; M2 S2; M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M1 S3; M1 S4; M1 S5; M1 S6	**Number Corner** January: Number Line February: Daily Rectangle March: Daily Rectangle, Number Line May: Number Line
2.NBT.8	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	**Bridges in Mathematics** Unit 5: M3 S2; M3 S3; M3 S5	**Number Corner** November: Number Line January: Number Line May: Calendar Grid, Number Line
2.NBT.9	Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects.	**Bridges in Mathematics** Unit 3: M1 S4; M1 S5; M2 S5; M3 S1; M3 S2; M3 S6 Unit 4: M3 S5 Unit 7: M1 S1; M2 S2; M2 S4; M2 S5; M3 S2; M3 S4; M4 S5 Unit 8: M1 S3	**Number Corner** February: Daily Rectangle March: Number Line, Daily Rectangle

2 MD — Measurement and Data

Standard	Descriptor	Citations	
Measure and estimate lengths in standard units.			
2.MD.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	**Bridges in Mathematics** Unit 2: M3 S2 Unit 4: M1 S1; M1 S2; M1 S4; M1 S5; M2 S1; M2 S2; M3 S3 Unit 7: M1 S3; M1 S4 Unit 8: M2 S1; M2 S2; M3 S3; M3 S6	
2.MD.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	**Bridges in Mathematics** Unit 4: M1 S2; M2 S1; M3 S1; M3 S2	**Number Corner** November: Calendar Collector
2.MD.3	Estimate lengths using units of inches, feet, centimeters, and meters.	**Bridges in Mathematics** Unit 4: M1 S1; M1 S2; M1 S3; M1 S5; M2 S2; M3 S3 Unit 7: M1 S2; M1 S3; M1 S4 Unit 8: M3 S5	
2.MD.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard-length unit.	**Bridges in Mathematics** Unit 4: M2 S3 Unit 7: M1 S5 Unit 8: M2 S4; M2 S5; M3 S1; M3–M2, M3 S4; M4 S1	**Number Corner** April: Calendar Collector

Standard	Descriptor	Citations	
Relate addition and subtraction to length.			
2.MD.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same whole number units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Drawings need not show details but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)	**Bridges in Mathematics** Unit 3: M2 S3 Unit 4: M1 S6; M3 S4; M3 S5 Unit 7: M1 S5	
2.MD.6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ... and represent whole number sums and differences within 100 on a number line diagram.	**Bridges in Mathematics** Unit 2: M3 S1; M3 S3; M3 S4; M3 S5; M3 S6 Unit 3: M1 S2; M2 S1; M2 S2; M2 S4 Unit 5: M3 S4	**Number Corner** September: Computational Fluency October: Number Line January: Number Line April: Number Line
Work with time and money.			
2.MD.7	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	**Number Corner** September: Calendar Collector October: Calendar Collector November: Calendar Grid February: Calendar Collector	

Standard	Descriptor	Citations	
Work with time and money.			
	2.MD.8 Solve problems with money.		
2.MD.8a	Identify nickels and quarters by name and value.	**Bridges in Mathematics** Unit 5: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6 Unit 7: M2 S3	**Number Corner** March: Calendar Collector, Number Line
2.MD.8b	Find the value of a collection of quarters, dimes, nickels, and pennies.	**Bridges in Mathematics** Unit 5: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6 Unit 7: M2 S3	**Number Corner** March: Calendar Collector, Number Line
2.MD.8c	Solve word problems by adding and subtracting within 100, dollars with dollars and cents with cents (not using dollars and cents simultaneously) using the $ and ¢ symbols appropriately (not including decimal notation).	**Bridges in Mathematics** Unit 5: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6 Unit 7: M2 S3	**Number Corner** March: Calendar Collector, Number Line

Standard	Descriptor	Citations	
Represent and interpret data.			
2.MD.9	Generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object. Show the measurements by creating a line plot, where the horizontal scale is marked off in whole number units.	**Bridges in Mathematics** Unit 8: M2 S4; M2 S5; M3 S1; M3 S2; M3 S3; M3 S4	**Number Corner** April: Calendar Collector
2.MD.10	Organize, represent, and interpret data with up to four categories; complete picture graphs when single-unit scales are provided; complete bar graphs when single-unit scales are provided; solve simple put-together, take-apart, and compare problems in a graph.	**Bridges in Mathematics** Unit 1: M1 S4; M4 S1; M4 S2 Unit 3: M4 S2; M4 S3 Unit 8: M4 S3	**Number Corner** December: Calendar Collector January: Calendar Grid, Calendar Collector

2 G — Geometry

Standard	Descriptor	Citations	
Reason with shapes and their attributes.			
2.G.1	Recognize and identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides or vertices. Recognize and identify cubes, rectangular prisms, cones, and cylinders.	**Bridges in Mathematics** Unit 1: M1 S2; M1 S3 Unit 6: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M2 S2; M3 S1; M3 S1	**Number Corner** December: Calendar Grid March: Calendar Grid
2.G.2	Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	**Bridges in Mathematics** Unit 6: M2 S5; M3 S2; M3 S3; M3 S4	**Number Corner** April: Daily Rectangle May: Daily Rectangle
2.G.3	Partition circles and rectangles into two, three, or four equal shares; describe the shares using the words *halves*, *thirds*, or *fourths* and *quarters*, and use the phrases *half of*, *third of*, or *fourth of* and *quarter of*. Describe the whole as two halves, three thirds, or four fourths in real-world contexts. Recognize that equal shares of identical wholes need not have the same shape.	**Bridges in Mathematics** Unit 6: M4 S1; M4 S2; M4 S3; M4 S4; M4 S5 Unit 7: M4 S2; M4 S3; M4 S4	**Number Corner** December: Calendar Grid January: Calendar Grid February: Calendar Grid March: Calendar Grid April: Calendar Grid