bridges in mathematics

GRADE 2

Bridges & Number Corner Third Edition

CORRELATIONS

New York State Next Generation Mathematics Learning Standards

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 NY-2.OA — Operations and Algebraic Thinking

Standard	Descriptor	Citations	
Represent and solve problems involving addition and subtraction.			
NY-2.OA.1.a	Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	**Bridges in Mathematics** Unit 1: M4 S4 Unit 3: M2 S1; M2 S2; M3 S1; M3 S3; M3 S7, M4 S1 Unit 4: 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
NY-2.OA.1.b	Use addition and subtraction within 100 to develop an understanding of solving two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.	**Bridges in Mathematics** Unit 3: M3 S4, M3 S5 Unit 4: M3 S2 Unit 7: M3 S4, M3 S5	
Add and subtract within 20.			
NY-2.OA.2.a	Fluently add and subtract within 20. Strategies could include: counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.	**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	
Add and subtract within 20.			
NY-2.OA.2.b	Know from memory all sums within 20 of two one-digit numbers.	**Bridges in Mathematics** Unit 2: M3 S7 Unit 4: M3 S6 Unit 6: M4 S5	**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
Work with equal groups of objects to gain foundations for multiplication.			
NY-2.OA.3.a	Determine whether a group of objects (up to 20) has an odd or even number of members.	**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
NY-2.OA.3.b	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
NY-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 NY-2.NBT — Number and Operations in Base Ten

Standard	Descriptor	Citations	
Understand place value.			
	NY-2.NBT.1 Understand that the digits of a three-digit number represent amounts of hundreds, tens, and ones.		
NY-2.NBT.1.a	Understand 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
NY-2.NBT.1.b	Understand 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
NY-2.NBT.2	Count within 1000; skip-count by 5s, 10s, and 100s.	**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
NY-2.NBT.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	**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.			
NY-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.			
NY-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
NY-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
NY-2.NBT.7.a	Add and subtract within 1000, using concrete models or drawings, and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written representation. **Note:** A written representation is any way of showing a strategy using words, pictures, or numbers.	**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

Standard	Descriptor	Citations	
Use place value understanding and properties of operations to add and subtract.			
NY-2.NBT.7.b	Understand that in adding or subtracting up to three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and 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
NY-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
NY-2.NBT.9	Explain why addition and subtraction strategies work, using place value and the properties of operations. **Note:** 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 NY-2.MD — Measurement and Data

Standard	Descriptor	Citations	
Measure and estimate lengths in standard units.			
NY-2.MD.1	Measure the length of an object to the nearest whole 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	
NY-2.MD.2	Measure the length of an object twice, using different "length units" 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
NY-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	
NY-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.			
NY-2.MD.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units.	**Bridges in Mathematics** Unit 3: M2 S3 Unit 4: M1 S6; M3 S4, M3 S5 Unit 7: M1 S5	
NY-2.MD.6	Represent whole numbers as lengths from 0 on a number line with equally spaced points corresponding to the numbers 0, 1; 2; ..., and represent whole-number sums and differences within 100 on a number line.	**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.			
NY-2.MD.7	Tell and write time from analog and digital clocks in five minute increments, using a.m. and p.m. Develop an understanding of common terms, such as, but not limited to, quarter past, half past, and quarter to.	**Number Corner** September: Calendar Collector October: Calendar Collector November: Calendar Grid February: Calendar Collector	
NY-2.MD.8.a	Count a mixed collection of coins whose sum is less than or equal to one dollar.	**Bridges in Mathematics** Unit 5: M2 S1; M2 S2; M2 S3; M2 S4, M2 S5; M2 S6; M3 S1 Unit 7: M2 S3	**Number Corner** March: Calendar Collector, Number Line

Standard	Descriptor	Citations	
Work with time and money.			
NY-2.MD.8.b	Solve real world and mathematical problems within one dollar involving quarters, dimes, nickels, and pennies, using the ¢ (cent) symbol appropriately.	**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
Represent and interpret data.			
NY-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. Present the measurement data in 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
NY-2.MD.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a picture graph or a bar 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 NY-2.G — Geometry

Standard	Descriptor	Citations	
Reason with shapes and their attributes.			
NY-2.G.1	Classify two-dimensional figures as polygons or non-polygons.	*This standard is beyond the scope of the grade 2 program, but the following lessons could give teachers opportunities to have learners classify shapes as polygons as non-polygons:* **Bridges in Mathematics** Unit 1: M1 S2 Unit 6: M1 S4, M2 S1; M2 S2; M2 S3; M2 S4, M2 S5 M3 S1	
NY-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
NY-2.G.3	Partition circles and rectangles into two, three, or four equal shares. Describe the shares using the words halves, thirds, half of, a third of, etc. Describe the whole as two halves, three thirds, four fourths. 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