bridges® in mathematics
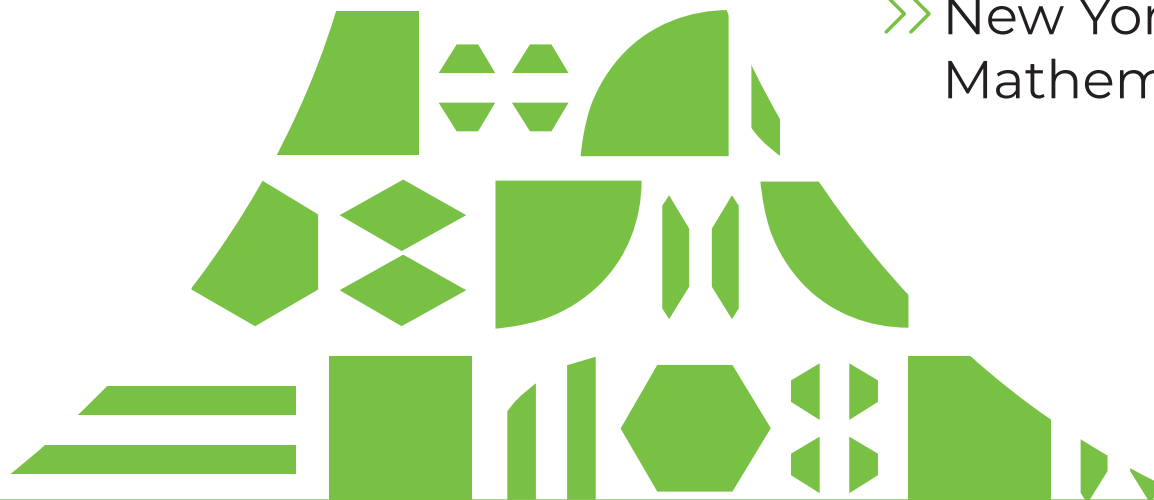
GRADE **3**

Bridges & Number Corner Third Edition >>

CORRELATIONS

>> New York State Next Generation Mathematics Learning Standards

number corner®

③ 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 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
MP2	Reason abstractly and quantitatively.	**Bridges in Mathematics** 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
MP3	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
MP4	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	
Standards for Mathematical Practice			
MP5	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
MP6	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
MP7	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
MP8	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 NY-3.OA — Operations and Algebraic Thinking

Standard	Descriptor	Citations	
Represent and solve problems involving multiplication and division.			
NY-3.OA.1	Interpret products of whole numbers.	**Bridges in Mathematics** Unit 2: M1 S1; M1 S2; M1 S3; M1 S5; M2 S1; M2 S3; M2 S4; M2 S5; M3 S2; M3 S3; M3 S4; M4 S3 Unit 5: M1 S1; M1 S2; M1 S6	**Number Corner** September: Calendar Grid October: Computational Fluency November: Computational Fluency
NY-3.OA.2	Interpret whole-number quotients of whole numbers.	**Bridges in Mathematics** Unit 5: M1 S2; M1 S3; M1 S4; M1 S6; M2 S1; M2 S2; M3 S1; M3 S2	**Number Corner** May: Solving Problems
NY-3.OA.3	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.	**Bridges in Mathematics** Unit 2: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M1 S6; M3 S1; M3 S2 Unit 5: M1 S3; M1 S4; M2 S1; M2 S2 Unit 7: M2 S1; M2 S2	**Number Corner** September: Calendar Grid November: Solving Problems
NY-3.OA.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	**Bridges in Mathematics** Unit 5: M2 S1; M2 S3; M3 S1	**Number Corner** November: Solving Problems April: Solving Problems May: Solving Problems

Standard	Descriptor	Citations	
Represent and solve problems involving multiplication and division.			
NY-3.OA.5	Apply properties of operations as strategies to multiply and divide. **Note:** Students need not use formal terms for these properties.	**Bridges in Mathematics** Unit 7: M1 S3; M1 S4; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5	**Number Corner** November: Computational Fluency December: Solving Problems April: Computational Fluency, Solving Problems May: Computational Fluency
NY-3.OA.6	Understand division as an unknown-factor problem.	**Bridges in Mathematics** Unit 5: M1 S5; M1 S6; M2 S1; M2 S2; M2 S3; M3 S4	**Number Corner** February: Computational Fluency April: Computational Fluency, Solving Problems May: Computational Fluency
Multiply and divide within 100.			
NY-3.OA.7.a	Fluently solve single-digit multiplication and related divisions, using strategies such as the relationship between multiplication and division or properties of operations.	**Bridges in Mathematics** Unit 2: M2 S3; M2 S4; M2 S5; M3 S3; M3 S4; M4 S2; M4 S3 Unit 5: M2 S4; M3 S1; M3 S2; M3 S3; M3 S4	**Number Corner** February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Calendar Collector, Computational Fluency
NY-3.OA.7.b	Know from memory all products of two one-digit numbers.	**Number Corner** February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Calendar Collector, Computational Fluency	

Standard	Descriptor	Citations

Multiply and divide within 100.

	NY-3.OA.8 Solve two-step word problems posed with whole numbers and having whole-number answers using the four operations.	
NY-3.OA.8.a	Represent these problems using equations or expressions with a letter standing for the unknown quantity.	**Bridges in Mathematics** Unit 1: M4 S1; M4 S2 Unit 2: M4 S2 Unit 3: M4 S3 Unit 4: M2 S2; M2 S3 Unit 7: M1 S1; M1 S2 Unit 8: M4 S2	**Number Corner** October: Number Line November: Number Line January: Solving Problems
NY-3.OA.8.b	Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	**Bridges in Mathematics** Unit 1: M4 S1 Unit 3: M1 S5 Unit 7: M1 S2; M2 S1	**Number Corner** January: Solving Problems
NY-3.OA.9	Identify and extend arithmetic patterns (including patterns in the addition table or multiplication table).	**Bridges in Mathematics** Unit 1: M1 S3; M1 S4; M1 S5; M2 S2; M3 S3; M3 S4 Unit 2: M2 S2; M3 S3; M3 S4 Unit 7: M1 S5 Unit 8: M2 S1	**Number Corner** September: Number Line December: Computational Fluency January: Computational Fluency February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Calendar Collector

3 NY-3.NBT — Number and Operations in Base Ten

Standard	Descriptor	Citations	
Use place value understanding and properties of operations to perform multidigit arithmetic.			
NY-3.NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100.	**Bridges in Mathematics** Unit 3: M3 S3; M3 S4	**Number Corner** November: Number Line December: Number Line
NY-3.NBT.2	Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. **Note:** A range of algorithms may be used.	**Bridges in Mathematics** 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** September: Solving Problems October: Solving Problems
NY-3.NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 using strategies based on place value and properties of operations.	**Bridges in Mathematics** Unit 7: M1 S1; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5	
NY-3.NBT.4.a	Understand that the digits of a four-digit number represent amounts of thousands, hundreds, tens, and ones.	**Bridges in Mathematics** Unit 3: M1 S4; M4 S3	
NY-3.NBT.4.b	Read and write four-digit numbers using base-ten numerals, number names, and expanded form.	**Bridges in Mathematics** Unit 3: M3 S2	

3 **NY-3.NF** — Number and Operations: Fractions

Standard	Descriptor	Citations
— Develop understanding of fractions as numbers. Note: Fractions are limited to those with denominators 2; 3; 4; 6; and 8.		
NY-3.NF.1	Understand a unit fraction, $\frac{1}{b}$, is the quantity formed by 1 part when a whole is partitioned into b equal parts. Understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.	**Bridges in Mathematics** Unit 4: M3 S1; M3 S2; M3 S3; M3 S4; M4 S2 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M3 S6; M4 S1 · · · **Number Corner** October: Calendar Collector November: Calendar Collector December: Calendar Grid February: Calendar Collector April: Calendar Collector

NY-3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line.

Standard	Descriptor	Citations
NY-3.NF.2.a	Represent a fraction $\frac{1}{b}$ on a number line by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part starting at 0 locates the number $\frac{1}{b}$ on the number line.	**Bridges in Mathematics** Unit 4: M3 S4; M4 S1; M4 S2 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M4 S1 · · · **Number Corner** January: Number Line February: Number Line March: Number Line April: Calendar Grid, Number Line May: Number Line
NY-3.NF.2.b	Represent a fraction $\frac{a}{b}$ on a number line by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.	**Bridges in Mathematics** Unit 4: M3 S5 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M4 S1 · · · **Number Corner** November: Calendar Collector January: Number Line February: Number Line March: Number Line May: Number Line

Standard	Descriptor	Citations	
Develop understanding of fractions as numbers. Note: Fractions are limited to those with denominators 2; 3; 4; 6; and 8.			
NY-3.NF.3 Explain equivalence of fractions and compare fractions by reasoning about their size.			
NY-3.NF.3.a	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**Bridges in Mathematics** Unit 7: M3 S1; M3 S2; M3 S3; M3 S5; M4 S1	**Number Corner** December: Calendar Grid January: Calendar Grid, Number Line April: Calendar Grid May: Number Line
NY-3.NF.3.b	Recognize and generate equivalent fractions. Explain why the fractions are equivalent.	**Bridges in Mathematics** Unit 6: M4 S2; M4 S3 Unit 7: M3 S1; M3 S5; M3 S6; M4 S1; M4 S3	**Number Corner** December: Calendar Grid January: Calendar Grid April: Calendar Grid, Calendar Collector May: Calendar Grid, Number Line
NY-3.NF.3.c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	**Bridges in Mathematics** Unit 4: M3 S3	**Number Corner** December: Calendar Grid February: Number Line March: Number Line April: Calendar Collector May: Calendar Grid, Number Line
NY-3.NF.3.d	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons rely on the two fractions referring to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions.	**Bridges in Mathematics** Unit 4: M3 S2; M3 S5 Unit 7: M3 S1	**Number Corner** January: Calendar Grid February: Number Line March: Number Line

3 NY-3.MD — Measurement and Data

Standard	Descriptor	Citations
	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	
NY-3.MD.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve one-step word problems involving addition and subtraction of time intervals in minutes.	**Bridges in Mathematics** Unit 4: M2 S4; M2 S5 Unit 8: M2 S1; M3 S1; M3 S2; M3 S5; M4 S2 **Number Corner** January: Calendar Collector March: Calendar Grid
NY-3.MD.2.a	Measure and estimate liquid volumes and masses of objects using grams (g), kilograms (kg), and liters (l). **Note:** Does not include compound units such as cm3 and finding the geometric volume of a container.	**Bridges in Mathematics** Unit 4: M1 S3; M1 S4; M1 S5; M1 S6 Unit 8: M1 S2; M1 S4; M1 S5; M3 S2; M3 S3; M3 S4; M3 S5 **Number Corner** October: Calendar Collector December: Calendar Collector
NY-3.MD.2.b	Add, subtract, multiply, or divide to solve one-step word problems involving masses or liquid volumes that are given in the same units. **Note:** Does not include multiplicative comparison problems involving notions of "times as much."	**Bridges in Mathematics** Unit 4: M2 S1; M2 S2; M2 S3 Unit 8: M1 S2 **Number Corner** October: Calendar Collector December: Calendar Collector

Standard	Descriptor	Citations	
Represent and interpret data.			
NY-3.MD.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in a scaled picture graph or a scaled bar graph.	**Bridges in Mathematics** Unit 2: M3 S5; M4 S1; M4 S2 Unit 8: M1 S5; M2 S4; M3 S3	**Number Corner** September: Calendar Collector February: Solving Problems March: Calendar Grid May: Calendar Collector
NY-3.MD.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	**Bridges in Mathematics** Unit 4: M4 S1; M4 S2; M4 S3 Unit 8: M1 S4; M2 S3; M3 S5	
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.			
NY-3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.			
NY-3.MD.5.a	Recognize a square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.	**Bridges in Mathematics** Unit 5: M4 S1 Unit 6: M4 S1	**Number Corner** February: Calendar Grid
NY-3.MD.5.b	Recognize a plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.	**Bridges in Mathematics** Unit 5: M4 S1; M4 S2; M4 S3	

Standard	Descriptor	Citations	
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.		
NY-3.MD.6	Measure areas by counting unit squares.	**Bridges in Mathematics** Unit 5: M4 S1; M4 S2; M4 S3; M4 S4 Unit 6: M3 S5 Unit 8: M1 S2	**Number Corner** February: Calendar Grid March: Calendar Collector
NY-3.MD.7 Relate area to the operations of multiplication and addition.		
NY-3.MD.7.a	Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	**Bridges in Mathematics** Unit 5: M4 S1; M4 S4 Unit 6: M3 S1; M3 S5 Unit 7: M2 S2; M2 S5	**Number Corner** November: Calendar Grid February: Calendar Grid May: Calendar Grid
NY-3.MD.7.b	Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**Bridges in Mathematics** Unit 5: M3 S3; M4 S4; M4 S5 Unit 6: M3 S1; M3 S3; M3 S4 Unit 7: M1 S5; M2 S2; M2 S4 Unit 8: M1 S2; M1 S4; M4 S3	

Standard	Descriptor	Citations	
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.		
NY-3.MD.7 Relate area to the operations of multiplication and addition.		
NY-3.MD.7.c	Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	**Bridges in Mathematics** Unit 5: M4 S5 Unit 7: M2 S1; M2 S2; M2 S3; M2 S4; M2 S5	
NY-3.MD.7.d	Recognize area as additive. Find areas of figures composed of non-overlapping rectangles, and apply this technique to solve real world problems.	**Bridges in Mathematics** Unit 5: M4 S5 Unit 6: M3 S4 Unit 8: M4 S3	**Number Corner** March: Calendar Collector, Solving Problems May: Calendar Grid
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.		
NY-3.MD.8.a	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths or finding one unknown side length given the perimeter and other side lengths.	**Bridges in Mathematics** Unit 6: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M2 S1; M4 S3	**Number Corner** February: Calendar Grid March: Calendar Collector, Solving Problems
NY-3.MD.8.b	Identify rectangles with the same perimeter and different areas or with the same area and different perimeters.	**Bridges in Mathematics** Unit 6: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5	**Number Corner** March: Calendar Collector, Solving Problems

3 **NY-3.G** — Geometry

Standard	Descriptor	Citations	
	Reason with shapes and their attributes.		
NY-3.G.1	Recognize and classify polygons based on the number of sides and vertices (triangles, quadrilaterals, pentagons, and hexagons). Identify shapes that do not belong to one of the given subcategories.	**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 Unit 8: M2 S2; M2 S5; M4 S3	**Number Corner** October: Calendar Grid
NY-3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	**Bridges in Mathematics** Unit 4: M3 S1; M3 S2; M3 S3 Unit 6: M4 S1; M4 S3 Unit 7: M4 S2; M4 S3 Unit 8: M2 S1	**Number Corner** May: Calendar Grid