## Grade 1 | New York State Next Generation Mathematics Learning Standards Correlation to Eureka Math ${ }^{2 ®}$ New York Next Gen

When the original Eureka Math ${ }^{\circledR}$ curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds ${ }^{\circledR}$ teacher-writers have created Eureka Math ${ }^{2 ®}$ New York Next Gen, a groundbreaking new curriculum that helps teachers deliver exponentially better math instruction while still providing students with the same deep understanding of and fluency in math. Eureka Math ${ }^{2}$ New York Next Gen carefully sequences mathematical content to maximize vertical alignment-a principle tested and proven to be essential in students' mastery of math-from kindergarten through high school.

While this innovative new curriculum includes all the trademark Eureka Math aha moments that have been delighting students and teachers for years, it also boasts these exciting new features:

## Teachability

Eureka Math ${ }^{2}$ New York Next Gen employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built right into the teacher materials.

## Accessibility

Eureka Math ${ }^{2}$ New York Next Gen incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the Teach book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the Eureka Math² New York Next Gen teacher-writers have created one of the most readable mathematics curricula on the market. The curriculum's readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

## Digital Engagement

The digital elements of Eureka Math ${ }^{2}$ New York Next Gen add to students' engagement with the math. The curriculum provides teachers with digital slides for each lesson. In addition, each grade level includes wordless videos that spark students' interest and curiosity. Students at all levels work through mathematical explorations that help lead to their own mathematical discoveries. Digital lessons and videos provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

## Standards for Mathematical Practice

## Aligned Components

| MP. 1 <br> Make sense of problems and persevere in solving them. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| :---: | :---: |
| MP. 2 <br> Reason abstractly and quantitatively. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| MP. 3 <br> Construct viable arguments and critique the reasoning of others. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| MP. 4 <br> Model with mathematics. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| MP. 5 <br> Use appropriate tools strategically. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| MP. 6 <br> Attend to precision. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| MP. 7 <br> Look for and make use of structure. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |
| MP. 8 <br> Look for and express regularity in repeated reasoning. | Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson. |

## Operations and Algebraic Thinking

## Represent and solve problems involving addition and subtraction.

New York Next Generation
Mathematics Learning Standards

## NY-1.0A. 1

Use addition and subtraction within 20 to solve one step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.

## Aligned Components

1 M2 Lesson 1: Represent result unknown problems and record as addition or subtraction number sentences.

1 M2 Topic B: Relate and Distinguish Addition and Subtraction
1 M2 Lesson 8: Interpret and find an unknown change
1 M2 Lesson 9: Represent and solve add to with change unknown problems.
1 M2 Lesson 11: Represent and solve take from with change unknown problems.
1 M2 Lesson 13: Represent and solve add to and take from with change unknown problems.
1 M2 Lesson 14: Represent and solve put together/take apart with addend unknown problems.
1 M2 Lesson 23: Represent and solve compare with difference unknown problems, part 1.
1 M2 Lesson 24: Represent and solve compare with difference unknown problems, part 2.
1 M3 Lesson 11: Represent and compare related situation equations, part 1.
1 M3 Lesson 12: Represent and compare related situation equations, part 2.
1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.
1 M3 Lesson 26: Pose and solve varied word problems.
1 M4 Lesson 10: Compare to find how much longer.
1 M4 Lesson 11: Compare to find how much shorter.
1 M4 Lesson 12: Find the unknown longer length.
1 M4 Lesson 13: Find the unknown shorter length.
1 M6 Topic E: Deepening Problem Solving

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.OA. 2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.

> 1 M3 Lesson 2: Make ten with three addends.
> 1 M3 Lesson 3: Represent and solve three-addend word problems.
> 1 M3 Lesson 11: Represent and compare related situation equations, part 1.
> 1 M3 Lesson 12: Represent and compare related situation equations, part 2.
> 1 M3 Lesson 26: Pose and solve varied word problems.

## Operations and Algebraic Thinking

Understand and apply properties of operations and the relationship between addition and subtraction.

| New York Next Generation Mathematics Learning Standards | Aligned Components |
| :---: | :---: |
| NY-1.OA. 3 <br> Apply properties of operations as strategies to add and subtract. | 1 M1 Lesson 9: Count on from both parts and record part-total relationships. <br> 1 M1 Lesson 15: Use the commutative property to count on from the larger addend. <br> 1 M1 Lesson 16: Use the commutative property to find larger totals. <br> 1 M3 Topic A: Make Easier Problems with Three Addends <br> 1 M3 Topic B: Make Easier Problems to Add <br> 1 M3 Topic C: Make Easier Addition Problems with a Linear Model <br> 1 M3 Lesson 26: Pose and solve varied word problems. |
| NY-1.OA. 4 <br> Understand subtraction as an unknown-addend problem within 20. | 1 M2 Lesson 17: Use related addition facts to subtract from 10. <br> 1 M2 Lesson 18: Use related addition facts to subtract. <br> 1 M2 Lesson 19: Determine the value of the unknown in various positions. |

## Operations and Algebraic Thinking

## Add and subtract within 20.

New York Next Generation
Mathematics Learning Standards

## Aligned Components

| NY-1.OA. 5 | 1 M1 Topic B: Count On from a Visible Part |
| :---: | :---: |
| Relate counting to addition and subtraction. | 1 M1 Lesson 13: Count on from an addend in add to with result unknown situations. |
|  | 1 M1 Lesson 14: Count on to find the total of an addition expression. |
|  | 1 M1 Lesson 17: Add 0 and 1 to any number. |
|  | 1 M1 Lesson 23: Find the totals of doubles +1 facts. |
|  | 1 M1 Lesson 24: Use known facts to make easier problems. |
|  | 1 M2 Lesson 2: Subtract all or subtract 0 . |
|  | 1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total. |
|  | 1 M 2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently. |
|  | 1 M 2 Lesson 7: Count on or count back to solve related addition and subtraction problems. |
|  | 1 M 2 Lesson 16: Compare the efficiency of counting on and counting back to subtract. |
| NY-1.0A.6a | 1 M1 Lesson 14: Count on to find the total of an addition expression. |
| Add and subtract within 20. Use strategies such as: | 1 M1 Lesson 17: Add 0 and 1 to any number. |
|  | 1 M1 Lesson 23: Find the totals of doubles +1 facts. |
|  | 1 M1 Lesson 24: Use known facts to make easier problems. |
|  | 1 M 2 Lesson 2: Subtract all or subtract 0 . |
|  | 1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total. |
|  | 1 M 2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently. |
|  | 1 M 2 Lesson 7: Count on or count back to solve related addition and subtraction problems. |
|  | 1 M 2 Lesson 16: Compare the efficiency of counting on and counting back to subtract. |
|  | 1 M3 Lesson 1: Group to make ten when there are three parts. |


| New York Next Generation Mathematics Learning Standards | Aligned Components |
| :---: | :---: |
| NY-1.0A.6a continued | 1 M3 Lesson 4: Use properties of addition to make three-addend expressions easier. <br> 1 M3 Topic B: Make Easier Problems to Add <br> 1 M3 Lesson 13: Count on to make ten within 20. <br> 1 M3 Lesson 14: Count on to make the next ten within 100 . <br> 1 M3 Lesson 17: Add a two-digit number and a one-digit number. <br> 1 M3 Lesson 18: Subtract a one-digit number from a two-digit number. <br> 1 M3 Lesson 20: Use strategies to subtract from a teen number. <br> 1 M3 Lesson 21: Take from ten to subtract from a teen number, part 1. <br> 1 M3 Lesson 22: Take from ten to subtract from a teen number, part 2. <br> 1 M3 Lesson 23: Subtract by counting on. <br> 1 M3 Lesson 24: Decompose the subtrahend to count back. <br> 1 M3 Lesson 25: Choose a strategy to make an easier problem. |
| NY-1.OA.6a.i <br> counting on; | Supplemental material is necessary to address this standard. |
| NY-1.OA.6a.ii making ten; | Supplemental material is necessary to address this standard. |
| NY-1.OA.6a.iii decomposing a number leading to a ten; | Supplemental material is necessary to address this standard. |
| NY-1.OA.6a.iv <br> using the relationship between addition and subtraction; and | Supplemental material is necessary to address this standard. |

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.0A.6a.v

creating equivalent but easier or known sums.

NY-1.OA.6b
Fluently add and subtract within 10.

Supplemental material is necessary to address this standard.

1 M1 Lesson 17: Add 0 and 1 to any number.
1 M1 Lesson 20: Find all two-part expressions equal to 6 .
1 M1 Lesson 21: Find all two-part expressions equal to 7 and 8 .
1 M1 Lesson 22: Find all two-part expressions equal to 9 and 10 .
1 M2 Lesson 2: Subtract all or subtract 0 .
1 M2 Lesson 3: Subtract 1 or subtract 1 less than the total.
1 M2 Lesson 4: Use fingers to subtract 4, 5, and 6 efficiently.

## Operations and Algebraic Thinking

## Work with addition and subtraction equations.

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.OA. 7

Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

1 M1 Lesson 18: Determine whether number sentences are true or false.
1 M1 Lesson 19: Reason about the meaning of the equal sign.
1 M1 Lesson 24: Use known facts to make easier problems.
1 M2 Lesson 20: Add or subtract to make groups equal.
1 M5 Lesson 18: Determine if number sentences involving addition and subtraction are true or false.
1 M5 Lesson 22: Decompose both addends and add like units.
1 M5 Lesson 23: Decompose an addend and add tens first.
1 M5 Lesson 24: Decompose an addend to make the next ten.
1 M5 Lesson 25: Compare equivalent expressions used to solve two-digit addition equations.

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.0A. 8

Determine the unknown whole number in an addition or subtraction equation with the unknown in all positions.

> 1 M2 Lesson 10: Represent and find an unknown addend in equations.
> 1 M2 Lesson 12: Represent and find an unknown subtrahend in equations.
> 1 M2 Lesson 13: Represent and solve add to and take from with change unknown problems.
> 1 M2 Lesson 15: Relate counting on and counting back to find an unknown part.
> 1 M2 Lesson 19: Determine the value of the unknown in various positions.

## Number and Operations in Base Ten

## Extend the counting sequence.

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.NBT. 1

Count to 120 , starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

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## Number and Operations in Base Ten <br> Understand place value.

New York Next Generation
Mathematics Learning Standards
NY-1.NBT. 2
Understand that the two digits of a two-digit number represent amounts of tens and ones.

## Aligned Components

1 M1 Lesson 12: Count on from 10 to find an unknown total.
1 M3 Topic D: Reason about Ten as a Unit to Add or Subtract
1 M4 Lesson 8: Draw to represent a length measurement.
1 M4 Lesson 9: Represent a total length as units of tens and ones.
1 M5 Lesson 2: Count a collection and record the total in units of tens and ones.
1 M5 Lesson 3: Recognize the place value of digits in a two-digit number.
1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.
1 M5 Lesson 5: Reason about equivalent representations of a number.
1 M5 Lesson 8: Use place value reasoning to write and compare 2 two-digit numbers.
1 M3 Lesson 15: Count and record a collection of objects.
1 M3 Lesson 16: Identify ten as a unit.
1 M4 Lesson 8: Draw to represent a length measurement.
1 M4 Lesson 9: Represent a total length as units of tens and ones.
1 M5 Lesson 2: Count a collection and record the total in units of tens and ones.
1 M5 Lesson 3: Recognize the place value of digits in a two-digit number.
1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.
1 M5 Lesson 5: Reason about equivalent representations of a number.

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.NBT.2b

Understand the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

1 M1 Lesson 12: Count on from 10 to find an unknown total.
1 M3 Lesson 16: Identify ten as a unit.
1 M3 Lesson 17: Add a two-digit number and a one-digit number.
1 M3 Lesson 18: Subtract a one-digit number from a two-digit number.
1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.
1 M4 Lesson 8: Draw to represent a length measurement.
1 M4 Lesson 9: Represent a total length as units of tens and ones.
1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.
1 M5 Lesson 5: Reason about equivalent representations of a number.

## NY-1.NBT.2c

Understand the numbers $10,20,30,40$, $50,60,70,80,90$ refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

1 M3 Lesson 16: Identify ten as a unit.
1 M3 Lesson 17: Add a two-digit number and a one-digit number.
1 M3 Lesson 18: Subtract a one-digit number from a two-digit number.
1 M3 Lesson 19: Solve take from with change unknown problems with totals in the teens.
1 M5 Lesson 5: Reason about equivalent representations of a number.

1 M1 Lesson 2: Organize and represent data to compare two categories.
1 M1 Lesson 3: Sort to represent and compare data with three categories.
1 M1 Lesson 4: Find the total number of data points and compare categories in a picture graph.
1 M1 Lesson 6: Use tally marks to represent and compare data.
1 M4 Lesson 5: Measure and compare lengths.
1 M5 Topic B: Use Place Value to Compare

## Number and Operations in Base Ten

Use place value understanding and properties of operations to add and subtract.

## New York Next Generation

## Mathematics Learning Standards

Aligned Components

## NY-1.NBT. 4

Add within 100 , including a two-digit number and a one-digit number; a two-digit number and a multiple of 10 . Use concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten. Relate the strategy to a written representation and explain the reasoning used.

## NY-1.NBT. 5

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

1 M5 Topic C: Addition of One-Digit and Two-Digit Numbers
1 M5 Topic D: Addition and Subtraction of Tens
1 M5 Topic E: Addition of Two-Digit Numbers
1 M6 Topic F: Extending Addition to 100

1 M5 Lesson 6: Add 10 or take 10 from a two-digit number.

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.NBT. 6

Subtract multiples of 10 from multiples of 10 in the range 10-90 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 used to a written representation and explain the reasoning.

## 1 M5 Lesson 15: Count on and back by tens to add and subtract.

1 M5 Lesson 16: Use related single-digit facts to add and subtract multiples of ten.
1 M5 Lesson 17: Use tens to find an unknown part.
1 M5 Lesson 18: Determine if number sentences involving addition and subtraction are true or false.

## Measurement and Data

## Measure lengths indirectly and by iterating length units.

## New York Next Generation Mathematics Learning Standards

## Aligned Components

| NY-1.MD. 1 | 1 M4 Topic A: Direct and Indirect Length Comparison |
| :--- | :--- |

Order three objects by length; compare the lengths of two objects indirectly by using a third object.

1 M4 Lesson 5: Measure and compare lengths.
1 M4 Lesson 6: Measure and order lengths.

1 M4 Topic B: Length Measurement and Comparison
1 M4 Lesson 10: Compare to find how much longer.
1 M4 Lesson 11: Compare to find how much shorter.
1 M4 Lesson 14: Measure to find patterns.

## Measurement and Data

## Tell and write time and money.

New York Next Generation
Mathematics Learning Standards

## Aligned Components

## NY-1.MD.3a

Tell and write time in hours and half-hours using analog and digital clocks. Develop an understanding of common terms, such as, but not limited to, o'clock and half past.

## NY-1.MD.3b

Recognize and identify coins (penny, nickel, dime, and quarter) and their value and use the cent symbol (\$) appropriately.

## NY-1.MD.3c

Count a mixed collection of dimes and pennies and determine the cent value (total not to exceed 100 cents).

1 M5 Lesson 1: Tell time to the hour and half hour by using digital and analog clocks.
1 M6 Lesson 14: Tell time to the half hour with the term half past.
1 M6 Lesson 15: Reason about the location of the hour hand to tell time.

1 M2 Lesson 21: Identify coins and compare groups of like coins.
1 M2 Lesson 22: Identify the value of each coin and begin to compare their values

1 M5 Lesson 4: Represent a number in multiple ways by trading 10 ones for a ten.
1 M5 Lesson 5: Reason about equivalent representations of a number.
1 M5 Lesson 6: Add 10 or take 10 from a two-digit number.
1 M5 Lesson 9: Compare two quantities and make them equal.

## Measurement and Data

## Represent and interpret data.

New York Next Generation Mathematics Learning Standards

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

## Aligned Components

1 M1 Lesson 3: Sort to represent and compare data with three categories.
1 M1 Lesson 4: Find the total number of data points and compare categories in a picture graph.
1 M1 Lesson 5: Organize and represent categorical data.
1 M1 Lesson 6: Use tally marks to represent and compare data.
1 M2 Lesson 25: Compare categories in a graph to figure out how many more.

## Geometry

## Reason with shapes and their attributes.

New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.G. 1

Distinguish between defining attributes versus non-defining attributes for a wide variety of shapes. Build and/or draw shapes to possess defining attributes.

## NY-1.G. 2

Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

1 M6 Topic A: Attributes of Shapes

1 M6 Topic B: Composition of Shapes

## New York Next Generation Mathematics Learning Standards

## Aligned Components

## NY-1.G. 3

Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

1 M6 Lesson 10: Reason about equal and not equal shares.
1 M6 Lesson 11: Name equal shares as halves or fourths.
1 M6 Lesson 12: Partition shapes into halves, fourths, and quarters.
1 M6 Lesson 13: Relate the number of equal shares to the size of the shares.


[^0]:    1 M3 Lesson 15: Count and record a collection of objects.
    1 M3 Lesson 16: Identify ten as a unit.
    1 M5 Lesson 2: Count a collection and record the total in units of tens and ones.
    1 M5 Lesson 3: Recognize the place value of digits in a two-digit number.
    1 M5 Lesson 5: Reason about equivalent representations of a number.
    1 M6 Topic D: Count and Represent Numbers Beyond 100

