First Grade
Unit 1: Relating Addition and Subtraction

Skills and Standards

- **NY-1.OA.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. Note: Problems should be represented using objects, drawings, and equations with a symbol for the unknown number. Problems should be solved using objects or drawings, and equations
- **NY-1.OA.3** Apply properties of operations as strategies to add and subtract.
  e.g., • If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.)
  • To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)
  Note: Students need not use formal terms for these properties.
- **NY-1.OA.4** Understand subtraction as an unknown addend problem within 20. e.g., subtract 10 – 8 by finding the number that makes 10 when added to 8.
- **NY-1.OA.5** Relate counting to addition and subtraction. e.g., by counting on 2 to add 2
- **NY-1.OA.6a** Add and subtract within 20. Use strategies such as:
  - counting on
  - making ten
  - decomposing a number leading to a ten
  - using the relationship between addition and subtraction
  - creating equivalent but easier or known sums.
- **NY-1.OA.6b** Fluently add and subtract within 10. Note: Fluency involves a mixture of just knowing some answers, knowing some answers from patterns, and knowing some answers from the use of strategies.

Pacing Notes	Strategies and Models
• Includes: ○ 5 days for Lesson 0 **(Required)** ○ 30 days for Lessons 1, 2, 3, 4, 5 ○ 1 day Unit Assessment **(Required)** ○ 2 days for i-Ready Inform Assessment **(Required)**	**Resources to review prior to instruction:** **Found in Teacher Toolbox – Beginning of Unit** • Unit Flow and Progression • Math Background Unit 1
Assessments	**Educator Notes**
• Unit Assessment **(Required)** • I-Ready Inform Assessment **(Required)**	

First Grade
Unit 2: Addition and Subtraction Within 20

Skills and Standards

- **NY-1.OA.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. Note: Problems should be represented using objects, drawings, and equations with a symbol for the unknown number. Problems should be solved using objects or drawings, and equations.
- **NY-1.OA.2** Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem
- **NY-1.OA.3** Apply properties of operations as strategies to add and subtract.
  e.g., • If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.)
  • To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)
  Note: Students need not use formal terms for these properties.
- **NY-1.OA.6a** Add and subtract within 20. Use strategies such as:
  - counting on
  - making ten
  - decomposing a number leading to a ten
  - using the relationship between addition and subtraction
  - creating equivalent but easier or known sums.
- **NY-1.NBT.2a** Understand 10 can be thought of as a bundle of ten ones, called a "ten".
- **NY-1.NBT.2b** Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- **NY-1.NBT.2c** Understand that 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).

Pacing Notes	Strategies and Models
• Includes: ○ 25 days Lessons 6, 7, 8, 9, 10 ○ 1 day for Unit Assessment **(Required)**	**Resources to review prior to instruction:** **Found in Teacher Toolbox – Beginning of Unit** • Unit Flow and Progression • Math Background Unit 2
Assessments	**Educator Notes**
• Unit Assessment **(Required)**	

First Grade
Unit 3: Solving Word Problems and Making Comparisons

Skills and Standards

- **NY-1.OA.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. Note: Problems should be represented using objects, drawings, and equations with a symbol for the unknown number. Problems should be solved using objects or drawings, and equations.
- **NY-1.OA.4** Understand subtraction as an unknown addend problem within 20. e.g., subtract 10 – 8 by finding the number that makes 10 when added to 8
- **NY-1.OA.6a** Add and subtract within 20. Use strategies such as:
  - counting on
  - making ten
  - decomposing a number leading to a ten
  - using the relationship between addition and subtraction
  - creating equivalent but easier or known sums.
- **NY-1.OA.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. e.g., Which of the following equations are true and which are false? 6 = 6 7 = 8 – 1 5 + 2 = 2 + 5 4 + 1 = 5 + 2
- **NY-1.OA.8** Determine the unknown whole number in an addition or subtraction equation with the unknown in all positions. e.g., Determine the unknown number that makes the equation true in each of the equations 8 +? = 11 __ – 3 = 5 6 + 6 = □
- **NY-1.MD.4** 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

Pacing Notes	Strategies and Models
• Includes: ○ 20 days for Lessons 11, 12, 13, 14 ○ 1 day for Unit Assessment **(Required)** ○ 2 days for i-Ready Inform Assessment **(Required)**	**Resources to review prior to instruction:** **Found in Teacher Toolbox – Beginning of Unit** • Unit Flow and Progression • Math Background Unit 3
Assessments	**Educator Notes**
• Unit Assessment **(Required)** • I-Ready Inform Assessment **(Required)**	

First Grade
Unit 4: Using Tens and Ones to Organize and Count

Skills and Standards

- **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.
- **NY-1.NBT.2** Understand that the two digits of a two-digit number represent amounts of tens and ones
- **NY-1.NBT.2a** Understand 10 can be thought of as a bundle of ten ones, called a "ten"
- **NY-1.NBT.2c** Understand that 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).
- **NY-1.NBT.3** Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <
- **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

Pacing Notes	Strategies and Models

• Includes:
  ○ 15 days for Lessons 15, 16, 17
  ○ 1 day for Unit Assessment **(Required)**
	Resources to review prior to instruction:
	Found in Teacher Toolbox – Beginning of Unit
	• Unit Flow and Progression
	• Math Background Unit 4

Assessments	**Educator Notes**
• Unit Assessment **(Required)**	

First Grade
Unit 5: Operations with Tens and Ones

Skills and Standards

- **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.

  Notes: Students should be taught to use strategies based on place value, properties of operations, and the relationship between addition and subtraction; however, when solving any problem, students can choose any strategy. A written representation is any way of representing a strategy using words, pictures, or numbers
- **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.

  Notes: Students should be taught to use concrete models and drawings; as well as strategies based on place value, properties of operations, and the relationship between addition and subtraction. When solving any problem, students can choose to use a concrete model or a drawing. Their strategy must be based on place value, properties of operations, or the relationship between addition and subtraction.

  A ***written representation*** is any way of representing a strategy using words, pictures, or numbers

Pacing Notes	Strategies and Models
• Includes: ○ 20 days for Lessons 18, 19, 20, 21 ○ 1 day for Unit Assessment **(Required)**	**Resources to review prior to instruction:** **Found in Teacher Toolbox – Beginning of Unit** • Unit Flow and Progression • Math Background Unit 5
Assessments	**Educator Notes**
• Unit Assessment **(Required)**	

First Grade
Unit 6: Geometry and Measurement

Skills and Standards

- **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.
  e.g., • A defining attribute may include, but is not limited to: triangles are closed and three-sided.
  • Non-defining attributes include, but are not limited to: color, orientation, and overall size.
  Note on and/or: Students should be taught to build and draw shapes to possess defining attributes; however, when answering questions, students can choose to build or draw the shape.
- **NY-1.G.2** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or threedimensional 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. Note: Students do not need to learn formal names such as "right rectangular prism.
- **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
- **NY-1.MD**.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- **NY-1.MD.2** Measure the length of an object using samesize "length units" placed end to end with no gaps or overlaps. Express the length of an object as a whole number of "length units." Note: "Length units" could include cubes, paper clips, etc.
- **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).
  e.g. 3 dimes and 4 pennies is the same as 3 tens and 4 ones, which is 34 cents (34 ¢)

Pacing Notes	Strategies and Models
• Includes: ○ 30 days for Lessons 22, 23, 24, 25, 26, 27 ○ 1 day for Unit Assessment **(Required)** ○ 2 days for i-Ready Inform Assessment **(Required)**	**Resources to review prior to instruction:** **Found in Teacher Toolbox – Beginning of Unit** • Unit Flow and Progression • Math Background Unit 6
Assessments	**Educator Notes**
• Unit Assessment **(Required)** • I-Ready Inform Assessment **(Required)**	Consider modifying the unit materials to include the following content provided in the Enhanced Activities: • Building a shape when given its defining attributes or name • Counting and determining the value of a mixed collection of only dimes and pennies