First Grade Mathematics

Curriculum/Content Area: Mathematics	Course Length: School Year
Course Title: 1st Grade Mathematics	Date last reviewed: February 2nd, 2016 Previous First Grade UBD
Prerequisites: NA	Board approval date: TBD
Primary Resource: Bridges in Mathematics	

Desired Results

Course description and purpose: This framework for improving student learning focuses on high-quality math standards. It provides teachers with a clear set of math concepts and skills for students to understand and be able to do by the end of the school year.

Mathematical Practice Standards

The Standards for Mathematical Practice are central to the teaching and learning of mathematics. These practices describe the behaviors and habits of mind that are exhibited by students who are mathematically proficient. Mathematical understanding is the intersection of these practices and mathematics content. It is critical that the Standards for Mathematical Practice are embedded in daily mathematics instruction.

Mathema	atical Practice Standards	Grade Level/Course Explanation
Habits of Mind	MP.1 Make sense of problems and persevere in solving them	First grade students develop strategies and persevere in their efforts for solving problems. They begin to evaluate whether their answers make sense or not, troubleshooting, if necessary.
nabits of Milliu	MP.6 Attend to precision.	First grade students learn to attend to and begin to appreciate precision when taking measurements, performing calculations and when communicating their thinking both verbally and in written form.
Reasoning & Explaining	MP.2 Reason abstractly and quantitatively.	First grade students use pictures, objects, and manipulatives and begin writing equations to represent problems and their strategies for solving them. They can think about the problem in context (contextualize) and think about it out of context (decontextualize) when solving problems.
	MP.3 Construct viable arguments and critique the reasoning of others.	First grade students describe their understanding of a problem and their strategies for solving them using pictures, equations, and words. They listen to others

		and ask questions to learn and make connections between others' thinking and their own.
Modeling &	MP.4 Model with mathematics.	First grade students use objects, drawings, actions, numbers, tables, and graphs to model mathematical situations and draw connections between the different ways to model.
Modeling & Using Tools MP.5 Use appropriate tools strategically.	First grade students use a variety of tools such as measuring devices, manipulatives, computational strategies, and technological materials and become more proficient in selecting which tool is most helpful and appropriate for a given task.	
Seeing	MP.7 Look for and make use of structure.	First grade students look for patterns and structures which contributes to their mathematical learning and development of efficient strategies.
Structure & Generalizing	MP.8 Look for and express regularity in repeated reasoning.	First grade students notice repetition in mathematical concepts or tasks which helps them make generalizations and develop efficient strategies for counting, calculating, and more in-depth problem solving.

Priority Standard Clusters

1.0A.A Represent and solve problems involving addition and subtraction.

- 1.0A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- <u>1.0A.2</u> 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.

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

- <u>1.0A.3</u> Apply properties of operations as strategies to add and subtract. Examples: 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.)
- <u>1.0A.4</u> Understand subtraction as an unknown-addend problem. For example, subtract 10 8 by finding the number that makes 10 when added to 8.

1.OA.C Add and subtract within 20.

- 1.0A.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known

equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

- <u>1.0A.7</u> Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
- $\underline{1.0A.8}$ Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, $5 = _ 3$, $6 + 6 = _$.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

- <u>1.NBT.2</u> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- 1.NBT.2.a 10 can be thought of as a bundle of ten ones called a "ten."
- <u>1.NBT.2.b</u> The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- <u>1.NBT.2.c</u> 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).
- <u>1.NBT.3</u> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

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

- 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- <u>1.NBT.5</u> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- <u>1.NBT.6</u> Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 method and explain the reasoning used.

1.MD.A Measure lengths indirectly and by iterating length units.

- <u>1.MD.1</u> Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Supporting Standard Clusters

1.MD.B Tell and write time.

• <u>1.MD.3</u> Tell and write time in hours and half-hours using analog and digital clocks.

1.MD.C Represent and interpret Data.

• <u>1.MD.4</u> 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.

1.G.A Reason with shapes and their attributes.

- <u>1.G.1</u> Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
- 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.
- <u>1.G.3</u> 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.

Unit 1 - Numbers All Around Us

Unit Overview: First grade students focus on the development of number sense and number combinations to 10 using mathematical models, including the number rack, five- and ten-frames.

Unit Standards

Priority Standards

1.0A.B Understand and apply properties of operations and the relationship between addition and subtraction.

• <u>1.0A.4</u> Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8.

1.OA.C Add and subtract within 20.

- 1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

• <u>1.0A.8</u> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ - 3, 6 + 6 = _.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

• <u>1.NBT.2.b</u> The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

1.MD.A Measure lengths indirectly and by iterating length units.

• <u>1.MD.2</u> Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or

overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Supporting Standards

1.MD.C Represent and interpret Data.

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.

1.G.A Reason with shapes and their attributes.

• <u>1.G.2</u> 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.

Prior Grade/Course Priority Standards - Reviewed in Unit

K.CC.B Count to tell the number of objects.

 <u>K.CC.B.4a</u> When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

Learning Targets

1st Grade Priority:

1st Grade Friority.		
Mathematical Practice Standard Connections		
Habits of Mind	MP.1 ■ Module 1, Session 3	 MP.6 Module 1, Session 2 Module 2, Session 4 Module 3, Session 5 Module 4, Sessions 2, 3
Reasoning & Explaining	MP.2 • Module 4, Sessions 1, 5	MP.3
Modeling & Tools	 MP.4 Module 1, Session 2 Module 2, Sessions 2, 4 Module 3, All Sessions 1-5 Module 4, Sessions 3, 4 	 MP.5 Module 2, Sessions 1, 2, 3, 5 Module 3, Session 1 Module 4, Sessions 1, 2
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions, 1, 3, 4, 5 Module 2, Sessions 1, 3, 5 Module 3, Sessions 2, 4 Module 4, Sessions 4, 5 	MP.8 • Module 1, Sessions 1, 5

- I understand I can use addition to solve subtraction problems. (1.0A.4)
 - Module 4, Session 1 Number Rack Detectives
- I understand that counting on is adding and counting back is subtracting. (1.OA.5)
 - Module 3, Session 4 Quick! Look!
 - Module 4, Session 1 Number Rack Detectives

- Module 4. Session 4 Quick! Look! Plus One. Minus One.
- I fluently add and subtract facts to 10. (1.0A.6)
 - o Module 3, Session 2 Show Me the Numbers
- I use strategies to add and subtract fluently to 20. (1.0A.6)
 - Module 2, Session 2 Making Five & Ten
 - o Module 2, Session 3 Ten-Frame Flashes
 - o Module 2, Session 5 Quick Count Checkpoint
 - o Module 3, Session 1 Two Parts, One Whole
 - Module 4, Session 1 Number Rack Detectives
 - Module 4. Session 4 Quick! Look! Plus One. Minus One.
- I solve for the unknown number in addition and subtraction. (1.0A.8)
 - o Module 2, Session 2 Making Five & Ten
 - o Module 3, Session 1 Two Parts, One Whole
 - o Module 3, Session 2 Show Me the Numbers
 - Module 4, Session 1 Number Rack Detectives
- I count to 120 starting at any number. (1.NBT.1)
 - Module 1, Session 3 Popsicle Party
 - Module 1, Session 4 Tally-Ho!
- I read and write numerals up to 120. (1.NBT.1)
 - Module 1, Session 3 Popsicle Party
 - o Module 1, Session 4 Tally-Ho!
 - o Module 1, Session 5 Popsicle Pattern Chart, Part 2
 - o Module 2, Session 4 Introducing Work Place 1F Flip & Write
 - Module 4, Session 3 How Long Is the Jump Rope?
 - Module 4, Session 4 Quick! Look! Plus One, Minus One
- I write a numeral to tell how many objects. (1.NBT.1)
 - Module 3, Session 3 Introducing Work Place 1H Which Coin Will Win?
 - Module 3, Session 4 Quick! Look!
 - Module 3, Session 5 Measuring with Popsicle Sticks
 - Module 4, Session 3 How Long Is the Jump Rope?
 - Module 4, Session 4 Quick! Look! Plus One, Minus One
- I express the length of an object as a whole number of units. (1.MD.1)
 - Module 3, Session 5 Measuring with Popsicle Sticks
- I measure an object using a shorter object. (1.MD.2)
 - Module 3, Session 5 Measuring with Popsicle Sticks
 - Module 4, Session 2 Introducing Work Place 1I Measuring with Unifix Cubes
 - Module 4, Session 3 How Long Is the Jump Rope?
- I use same size objects to measure with no gaps or overlaps. (1.MD.2)
 - Module 3, Session 5 Measuring with Popsicle Sticks
 - Module 4, Session 2 Introducing Work Place 1I Measuring with Unifix Cubes
 - Module 4, Session 3 How Long Is the Jump Rope?
- I express the length of an object as a whole number of units. (1.MD.2)
 - Module 4, Session 2 Introducing Work Place 1I Measuring with Unifix Cubes
 - Module 4, Session 3 How Long is the Jump Rope

1st Grade Supporting:

• I organize, represent, and interpret data. (1.MD.4)

- o Module 1, Session 2 Popsicle Graph
- Module 2, Session 4 Introducing Work Place 1F Flip & Write
- Module 3, Session 3 Introducing Work Place 1H Which Coin Will Win?
- I ask and answer questions about the data. (1.MD.4)
 - o Module 1, Session 2 Popsicle Graph
 - Module 3, Session 3 Introducing Work Place 1H Which Coin Will Win?
- I use two-dimensional shapes to create a new shape. (1.G.2)
 - Module .1 Session 1 Work Place 1B Pattern Blocks

Kindergarten Review:

- I count objects aloud, pairing each object with the numeral. (K.CC.B.4a)
 - Module 2, Session 1 Show Me on the Number Rack
- I count to answer "how many?" questions for up to 20 objects arranged in many ways (in a line, in a rectangular array, in a circle, in a scattered configuration). (K.CC.B.5)
 - o Module 2, Session 1 Show Me on the Number Rack

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention

Dreambox

Unit 2 - Developing Strategies with Dice and Dominoes

Unit Overview: Students develop confidence with efficient, effective, and sensible strategies for adding and subtracting single-digit numbers. Using ability to subitize, students explore strategies such as counting on, combining small groups of numbers within larger numbers, building from known facts, using doubles facts to solve other addition problems, counting by 5s and 10s, and using the commutative property.

Unit Standards

Priority Standards

- 1.OA.A Represent and solve problems involving addition and subtraction.
 - <u>1.OA.1</u> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- 1.OA.B Understand and apply properties of operations and the relationship between addition and

subtraction.

- 1.0A.3 Apply properties of operations as strategies to add and subtract. Examples: 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.)
- <u>1.0A.4</u> Understand subtraction as an unknown-addend problem. For example, subtract 10 8 by finding the number that makes 10 when added to 8.

1.OA.C Add and subtract within 20.

- 1.0A.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

- $\underline{1.0A.7}$ Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
- <u>1.OA.8</u> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ 3, 6 + 6 = _.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

• <u>1.NBT.3</u> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

Supporting Standards

1.G.A Reason with shapes and their attributes.

- <u>1.G.2</u> 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.
- <u>1.G.3</u> 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.MD.C Represent and interpret Data.

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.

Prior Grade/Course Priority Standards - Reviewed in Unit

K.CC.B Count to tell the number of objects.

• <u>K.CC.B.5</u> Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

K.CC.C Compare Numbers

• <u>K.CC.C.6</u> Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting

strategies.

Learning Targets

1st Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 • Module 3, Session 5 • Module 4, Session 1	MP.6 • Module 1, Session 5 • Module 4, Session 1
Reasoning & Explaining	 MP.2 Module 1, Sessions 3, 4, 5 Module 2, Sessions 1, 2, 4 Module 3, Session 2 	MP.3 • Module 1, Session 4
Modeling & Tools	 MP.4 Module 1, Session 5 Module 2, Session 1, 2, 4, 5 Module 3, Sessions 1, 2, 5 	MP.5 • Module 3, Session 1
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions 1, 2 Module 2, Session 3 Module 3, Sessions 2, 3, 4 Module 4, Sessions 2, 3, 4, 5 	 MP.8 Module 1, Session 2 Module 2, Session 3 Module 3, Sessions 3, 4 Module 4, Sessions 3, 4, 5

- I solve addition and subtraction word problems. (1.0A.1)
 - Module 2, Session 2 Double-Flap Picture Cards
- I group and reorder numbers when I add. (1.OA.3)
 - Module 1, Session 4 Our Addition Strategies Chart
 - Module 1, Session 5 Domino Magic Squares
 - Module 2, Session 1 Introducing Double-Flap Dot Cards
 - Module 2, Session 2 Double-Flap Picture Cards
 - Module 2, Session 4 Double-Flap Number Cards
- I understand I can use addition to solve subtraction problems. (1.0A.4)
 - Module 2 Session 1 Introducing Double-Flap Dot Cards
 - Module 2 Session 2 Double-Flap Picture Cards
 - Module 2 Session 4 Double-Flap Number Cards
- I understand that counting on is adding and counting back is subtracting. (1.0A.5)
 - o Module 1, Sessions 1-5
 - o Module 2, Session 3 Introducing Work Place 2C Sort the Sum
 - Module 2, Session 5 Domino Addition Checkpoint
 - o Module 3, Session 1 Domino Flash
 - Module 3, Session 3 Introducing Work Place 2E Spin & Add
 - o Module 3, Session 4 Introducing Work Place 2F Spin & Subtract
 - Module 4, Session 4 Who Has More Cents with Nickels & Pennies?
 - Module 4, Session 5 Who Has More Cents with Dimes, Nickels & Pennies?
- I fluently add and subtract facts to 10. (1.OA.6)
 - Module 2, Session 1 Introducing Double-Flap Dot Cards

- Module 2, Session 2 Double-Flap Picture Cards
- Module 2, Session 4 Double-Flap Number Cards
- Module 2, Session 5 Domino Addition Checkpoint
- Module 3, Session 1 Domino Flash
- I use strategies to add and subtract fluently to 20. (1.0A.6)
 - Module 1, Sessions 1-5
 - o Module 2, Session 3 Introducing Work Place 2C Sort the Sum
 - Module 2, Session 5 Domino Addition Checkpoint
 - o Module 3, Session 1 Domino Flash
 - Module 3. Session 2 Dot Doubles
 - o Module 3, Session 3 Introducing Work Place 2E Spin & Add
 - Module 3, Session 4 Introducing Work Place 2F Spin & Subtract
- I understand the meaning of the equal sign and can tell if an equation is true or false. (1.0A.7)
 - Module 1, Session 3 Domino Add & Compare
 - Module 2, Session #4 Double-Flap Number Cards
- I solve for the unknown number in addition and subtraction. (1.0A.8)
 - Module 2, Session 1 Introducing Double-Flap Dot Cards
 - Module 2, Session 2 Double-Flap Picture Cards
 - o Module 2, Session 4 Double-Flap Number Cards
 - Module 4. Sessions 1-5
- I count to 120 starting at any number. (1.NBT.1)
 - o Module 1, Session 2 Introducing Work Place 2A Domino Top Draw
- I read and write numerals up to 120. (1.NBT.1)
 - o Module 1, Session 2 Introducing Work Place 2A Domino Top Draw
 - Module 4, Session 3 Sea Star Counting by Fives
- I compare two two-digit numbers. (1.NBT.3)
 - Module 4, Session 4 Who Has More Cents with Nickels & Pennies?
 - o Module 4, Session 5 Who Has More Cents with Dimes, Nickels & Pennies?
- I use <, >, and = to compare numbers. (1.NBT.3)
 - Module 1. Session 3 Domino Add & Compare
 - o Module 2, Session 3 Introducing Work Place 2C Sort the Sum
 - o Module 2, Session 5 Domino Addition Checkpoint
 - o Module 4, Session 4 Who Has More Cents with Nickels & Pennies?
 - Module 4, Session 5 Who Has More Cents with Dimes, Nickels & Pennies?

1st Grade Supporting:

- I organize, represent, and interpret data. (1.MD.4)
 - Module 3, Session 3 Introducing Work Place 2E Spin & Add
 - Module 3, Session 4 Introducing Work Place 2F Spin & Subtract
- I use two-dimensional shapes to create a new shape. (1.G.2)
 - Module 4, Session 1 Many Sea Stars Have Five Arms
 - Module 4, Session 2 Assembling the Sea Star Quilt
- I describe equal shares using the words: halves, half of, fourths, fourth of, quarters and quarter of. (1.G.3)
 - Module 4, Session 1 Many Sea Stars Have Five Arms

Assessment Evidence

Performance Assessment Options

Other assessment options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention Dreambox

Unit 3 - Adding, Subtracting, Counting, and Comparing

Unit Overview: In this unit, students are encouraged to master number facts and fact strategies for single-digit addition and subtraction. There is a focus on developing place-value understanding and solving addition combinations to 20.

Unit Standards

Priority Standards

1.0A.A Represent and solve problems involving addition and subtraction.

 1.0A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.0A.B Understand and apply properties of operations and the relationship between addition and subtraction.

- 1.0A.3 Apply properties of operations as strategies to add and subtract. Examples: 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.)
- <u>1.OA.4</u> Understand subtraction as an unknown-addend problem. For example, subtract 10 8 by finding the number that makes 10 when added to 8.

1.OA.C Add and subtract within 20.

- 1.0A.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

- $\underline{1.0A.7}$ Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
- <u>1.0A.8</u> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11, 5 = _ 3, 6 + 6 = _$.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

- <u>1.NBT.2</u> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- 1.NBT.2.a 10 can be thought of as a bundle of ten ones called a "ten."
- <u>1.NBT.2.b</u> The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- <u>1.NBT.3</u> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

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

• 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Supporting Standards

1.MD.C Represent and interpret Data.

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.

Prior Grade/Course Priority Standards - Reviewed in Unit

K.OA Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

• <u>K.OA.3</u> Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).

Learning Targets

Mathematical Practice Standard Connections		
Habits of Mind	MP.1Module 1, Session 5Module 2, Session 4	MP.6Module 3, Session 2, 3, 4
Reasoning & Explaining	 MP.2 Module 1, Sessions 12, 3, 4 Module 2, Session 1 Module 3, Sessions 1, 5 Module 4, Sessions 1-5 	MP.3
Modeling & Tools	 MP.4 Module 1, Sessions 1, 5 Module 2, Session 5 Module 3, Session 1 	 MP.5 Module 2, Session 5 Module 3, Sessions 2, 3, ,4

	• Module 4, Sessions 1, 2, 4, 5	
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions 1, 2, 3, 4 Module 2, Session 1, 3, 4 	MP.8 • Module 2, Session 3

- I solve addition and subtraction word problems. (1.0A.1)
 - Module 1, Session 5 Number Rack Story Problems
 - Module 2. Session 3 Make 10
 - o Module 2, Session 4 Hot Air Balloons
 - Module 2, Session 5 Number Rack Subtraction
 - Module 4, Session 3 Comparing Cube Trains
 - Module 4, Session 4 Comparing Cube Towers
- I group and reorder numbers when I add. (1.0A.3)
 - Module 1, Session 1 Introducing Work Place 3A Drop the Beans
 - o Module 1, Session 2 Introducing Work Place 3B Make the Sum
 - Module 1, Session 3 Doubles, Even & Odds
 - o Module 2, Session 3 Make 10
 - Module 4, Session 1 Equivalent Names: Sixes & Sevens
 - o Module 4, Session 2 Equivalent Names: Nines & Tens
- I understand I can use addition to solve subtraction problems. (1.0A.4)
 - Module 1, Session 5 Number Rack Story Problems
- I understand that counting on is adding and counting back is subtracting. (1.0A.5)
 - Module 1, Session 2 Introducing Work Place 3B Make the Sum
 - Module 1, Session 4 Introducing Work Place 3C Doubles Plus or Minus One
- I fluently add and subtract facts to 10. (1.0A.6)
 - o Module 1, Session 1 Introducing Work Place 3A Drop the Beans
 - Module 2, Session 1 Introducing Work Place 3D Tower Race
 - o Module 2, Session 3 Make 10
 - o Module 2, Session 5 Number Rack Subtraction
 - o Module 3, Session 5 Assessment
 - Module 4, Session 1 Equivalent Names: Sixes & Sevens
 - Module 4, Session 2 Equivalent Names: Nines & Tens
- I use strategies to add and subtract fluently to 20. (1.0A.6)
 - Module 1, Session 2 Introducing Work Place 3B Make the Sum
 - o Module 1, Session 3 Doubles, Even & Odds
 - o Module 1, Session 4 Introducing Work Place 3C Doubles Plus or Minus One
 - Module 2, Session 2 Flash Attack
 - Module 2. Session 4 Hot Air Balloons
 - Module 3, Session 1 Ten & Some More
 - Module 3, Session 2 Fifty or Bust! Day 1
 - Module 3, Session 3 Fifty or Bust! Day 2
 - Module 3, Session 4 Introducing Work Place 3F Fifty or Bust!
 - Module 4, Session 5 Number Rack Detectives
- I understand the meaning of the equal sign and can tell if an equation is true or false. (1.0A.7)
 - Module 1, Session 5 Number Rack Story Problems

- Module 2. Session 4 Hot Air Balloons
- Module 4, Session 1 Equivalent Names: Sixes & Sevens
- Module 4, Session 2 Equivalent Names: Nines & Tens
- Module 4, Session 3 Comparing Cube Trains
- Module 4, Session 4 Comparing Cube Towers
- Module 4, Session 5 Number Rack Detectives
- I solve for the unknown number in addition and subtraction. (1.0A.8)
 - Module 1, Session 1 Introducing Work Place 3A Drop the Beans
 - Module 1, Session 5 Number Rack Story Problems
 - Module 2, Session 1 Introducing Work Place 3D Tower Race
 - Module 2. Session 3 Make 10
 - Module 2. Session 4 Hot Air Balloons
 - o Module 3, Session 5 Assessment
 - o Module 4, Session 3 Comparing Cube Trains
 - o Module 4, Session 4 Comparing Cube Towers
 - o Module 4, Session 5 Number Rack Detectives
- I read and write numerals up to 120. (1.NBT.1)
 - Module 3, Session 1 Ten & Some More
 - o Module 3, Session 2 Fifty or Bust! Day 1
 - Module 3, Session 3 Fifty or Bust! Day 2
 - Module 3, Session 4 Introducing Work Place 3F Fifty or Bust!
- I tell which digits show the number of ones and tens. (1.NBT.2)
 - Module 3, Sessions 1-5
- I understand that a bundle of ten ones is called one ten. (1.NBT.2)
 - o Module 3, Session 1-5
- I understand that the numbers 11-19 have one ten and some ones. (1.NBT.2)
 - o Module 3, Sessions 1-5
- I compare two two-digit numbers. (1.NBT.3)
 - o Module 3, Session 1 Ten & Some More
 - Module 3, Session 2 Fifty or Bust! Day 1
 - o Module 3, Session 3 Fifty or Bust! Day 2
- I use <, >, and = to compare numbers. (1.NBT.3)
 - Module 4, Session 3 Comparing Cube Trains
- I add a two-digit number and a one-digit number. (1.NBT.4)
 - o Module 3, Session 1 Ten & Some More
 - Module 3, Session 2 Fifty or Bust! Day 1
 - Module 3, Session 3 Fifty or Bust! Day 2
 - Module 3, Session 4 Introducing Work Place 3F Fifty or Bust!
- I use models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction to add within 100. (1.NBT.4)
 - o Module 2, Session 3 Make 10
 - o Module 3, Session 2 Fifty or Bust! Day 1
 - Module 3, Session 3 Fifty or Bust! Day 2
 - Module 3, Session 4 Introducing Work Place 3F Fifty or Bust!

1st Grade Supporting:

• I ask and answer questions about the data. (1.MD.4)

Module 2, Session 5 Number Rack Subtraction

Kindergarten Review:

- I decompose numbers less than or equal to 10 into pairs in more than one way. (K.OA.3)
 - Module 2, Session 1 Introducing Work Place 3D Tower Race
- I decompose numbers less than or equal to 10 and record each decomposition by a drawing or equation. (K.OA.3)
 - Module 2, Session 1 Introducing Work Place 3D Tower Race

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention Dreambox

Unit 4 - Leapfrogs on the Number Line

Unit Overview: Students will use reasoning skills and number sense to determine unknown values using a number line. Closed and open number lines are used both as models of our number systems, as well as models for beginning operations with addition and subtraction.

Unit Standards

Priority Standards

1.OA.A Represent and solve problems involving addition and subtraction.

• <u>1.0A.1</u> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.C Add and subtract within 20.

- <u>1.0A.5</u> Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

• 1.0A.8 Determine the unknown whole number in an addition or subtraction equation relating

three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11, 5 = _ - 3, 6 + 6 = _$.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

- <u>1.NBT.2</u> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- <u>1.NBT.2.c</u> 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).
- <u>1.NBT.3</u> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

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

- 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- <u>1.NBT.5</u> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- <u>1.NBT.6</u> Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 method and explain the reasoning used.

1.MD.A Measure lengths indirectly and by iterating length units.

• 1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Supporting Standards

1.MD.C Represent and interpret Data.

• <u>1.MD.4</u> 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.

Learning Targets

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 • Module 4, Sessions 4, 5	MP.6 ■ Module 4, Sessions 1, 2, 3
Reasoning & Explaining	 MP.2 Module 1, Sessions 1, 2, 3, 4 Module 2, Sessions 1, 2, 4, 5 Module 3, Sessions 1, 2, 4, 5 	MP.3

Modeling & Tools	MP.4 • Module 1, Sessions 1-5	 MP.5 Module 1, Session 5 Module 4, Sessions 1-5
Seeing Structure & Generalizing	MP.7Module 2, Sessions 3, 4, 5Module 3, Sessions 1-5	MP.8Module 2, Sessions 1, 2, 3Module 3, Session 3

- I solve addition and subtraction word problems. (1.0A.1)
 - Module 1, Session 3 Hopping Along the Number Line to Ten
 - o Module 1, Session 4 Introducing Work Place 4A The Frog Jump Game
 - Module 4, Session 4 Comparing Rockhopper & King Penguins
 - o Module 4, Session 5 Me & the Penguins
- I understand that counting on is adding and counting back is subtracting. (1.0A.5)
 - Module 1, Session 3 Hopping Along the Number Line to Ten
 - Module 1, Session 4 Introducing Work Place 4A The Frog Jump Game
 - o Module 1, Session 5 Add & Subtract on the Number Line
 - Module 3, Session 3 Frog Races
- I use strategies to add and subtract fluently to 20. (1.0A.6)
 - o Module 1, Session 2 What's in the Box?
 - Module 1, Session 3 Hopping Along the Number Line to Ten
 - o Module 1, Session 4 Introducing Work Place 4A The Frog Jump Game
 - Module 1, Session 4 Introducing Work Place 4A The Frog Jump Game
- I solve for the unknown number in addition and subtraction. (1.0A.8)
 - Module 1. Session 2 What's in the Box?
 - Module 4, Session 2 Rockhopper Penguins
 - Module 4, Session 3 King Penguins
 - Module 4, Session 4 Comparing Rockhopper & King Penguins
 - Module 4, Session 5 Me & the Penguins
- I count to 120 starting at any number. (1.NBT.1)
 - o Module 1, Session 1 The Life-Sized Number Line
 - o Module 2, Session 1 The Number Line to 120
 - Module 2, Session 2 Find the Value
- I read and write numerals up to 120. (1.NBT.1)
 - o Module 1, Session 1 The Life-Sized Number Line
 - o Module 2. Session 1 The Number Line to 120
 - o Module 2, Session 2 Find the Value
 - Module 2, Session 3 Hopping Along the Number Line to 100
 - o Module 2, Session 4 Introducing Work Place 4B Super Frogs
 - o Module 3, Session 1 Lily Pads
 - Module 3, Session 2 Chase the Fly
 - Module 4, Sessions 1-5
- I understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 have some tens and 0 ones. (1.NBT.2)
 - Module 2, Session 4 Introducing Work Place 4B Super Frogs
 - o Module 2, Session 5 Add & Subtract on the Number Line to One Hundred
 - Module 3, Session 1 Lily Pads

- Module 3, Session 2 Chase the Fly
- Module 4, Session 2 Rockhopper Penguins
- Module 4, Session 3 King Penguins
- Module 4, Session 4 Comparing Rockhopper & King Penguins
- I compare two two-digit numbers. (1.NBT.3)
 - Module 3, Session 2 Chase the Fly
 - o Module 4, Session 1 Going to Antarctica
 - Module 4, Session 2 Rockhopper Penguins
 - Module 4, Session 3 King Penguins
- I use <, >, and = to compare numbers. (1.NBT.3)
 - Module 4, Session 4 Comparing Rockhopper & King Penguins
 - Module 4, Session 5 Me & the Penguins
- I add a two-digit number and a one-digit number. (1.NBT.4)
 - Module 3, Session 3 Frog Races
 - o Module 3, Session 4 Hit the Pad
- I add a two-digit number and a multiple of ten. (1.NBT.4)
 - Module 2, Session 3 Hopping Along the Number Line to 100
 - Module 2, Session 4 Introducing Work Place 4B Super Frogs
 - o Module 2, Session 5 Add & Subtract on the Number Line to One Hundred
 - Module 3, Session 3 Frog Races
 - o Module 3, Session 4 Hit the Pad
 - Module 4, Session 2 Rockhopper Penguins
 - o Module 4, Session 3 King Penguins
 - Module 4, Session 4 Comparing Rockhopper & King Penguins
 - Module 4, Session 5 Me & the Penguins
- I use models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction to add within 100. (1.NBT.4)
 - Module 2, Session 3 Hopping Along the Number Line to 100
 - Module 2, Session 4 Introducing Work Place 4B Super Frogs
- I use number models to show my math thinking/reasoning. (1.NBT.4)
 - o Module 2, Session 3 Hopping Along the Number Line to 100
 - o Module 2, Session 5 Add & Subtract on the Number Line to One Hundred
- I can add with sums to 100 (1.NBT.4)
 - Module 4, Session 2 Rockhopper Penguins
 - Module 4, Session 3 King Penguins
 - Module 4, Session 4 Comparing Rockhopper & King Penguins
 - Module 4, Session 5 Me & the Penguins
- I can mentally find 10 more or 10 less than a given number and explain the reasoning used. (1.NBT.5)
 - o Module 2, Session 1 The Number Line to 120
 - o Module 2, Session 2 Find the Value
 - o Module 3, Session 1 Lily Pads
 - o Module 3, Session 2 Chase the Fly
 - Module 3, Session 3 Frog Races
 - Module 3. Session 4 Hit the Pad
- I use models or drawings to subtract groups of ten. (1.NBT.6)
 - Module 2, Session 3 Hopping Along the Number Line to 100

- Module 2, Session 4 Introducing Work Place 4B Super Frogs
- o Module 2, Session 5 Add & Subtract on the Number Line to One Hundred
- o Module 3. Session 4 Hit the Pad
- Module 4, Session 2 Rockhopper Penguins
- Module 4, Session 3 King Penguins
- I use number models to show my math thinking/reasoning. (1.NBT.6)
 - Module 2, Session 3 Hopping Along the Number Line to 100
 - Module 2, Session 5 Add & Subtract on the Number Line to One Hundred
 - Module 3, Session 3 Frog Races
- I order 3 objects by length (1.MD.1)
 - o Module 4, Session 5 Me & the Penguins
- I express the length of an object as a whole number of units. (1.MD.2)
 - Module 4, Sessions 1-5

First Grade Supporting:

- I organize, represent, and interpret data. (1.MD.4)
 - Module 4, Session 1 Going to Antarctica

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention

Dreambox

Unit 5 - Geometry

Unit Overview: Students use a variety of tools and models to explore two- and three-dimensional shapes and fractions.

Unit Standards

Priority Standards

1.OA.C Add and subtract within 20.

1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 - 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

Supporting Standards

1.G.A Reason with shapes and their attributes.

- <u>1.G.1</u> Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
- 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.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.MD.C Represent and interpret Data.

• <u>1.MD.4</u> 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.

Learning Targets

1st Grade Priority:

	1st Grade Friority.		
	Mathematical Practice Standard Connections		
Habits of Mind	 MP.1 Module 1, Sessions 1, 3, 5 Module 3, Session 7 Module 4, Sessions 1, 2, 3 	MP.6Module 3, Sessions 2, 3	
Reasoning & Explaining	MP.2 • Module 3, Sessions 1, 5	MP.3	
Modeling & Tools	 MP.4 Module 1, Session 2 Module 2, Sessions 3, 4, 5 Module 3, Session 4 	MP.5	
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions 1-5 Module 2, Sessions 1-5 Module 3, Sessions 1-5 and 7 Module 4, Sessions 1, 2, 3 	MP.8 • Module 2, Session 2	

1st Grade Priority:

- I fluently add and subtract facts to 10. (1.OA.6)
 - o Module 3, Session 1 Nine-Patch Inventions

1st Grade Supporting:

- I organize, represent, and interpret data. (1.MD.4)
 - Module 1, Session 1 What's in the Box?
 - Module 1, Session 2 Shape Sorting with Attribute Cards

- Module 2, Session 2 Mystery Bag Sorting
- Module 4, Session 1 Shape Riddles
- Module 4, Session 2 Shape Sorting & Graphing
- I ask and answer questions about the data. (1.MD.4)
 - Module 4, Session 1 Shape Riddles
 - Module 4, Session 2 Shape Sorting & Graphing
- I tell the difference between defining and non-defining attributes of a shape. (1.G.1)
 - o Module 1, Sessions 1-5
 - Module 2, Session 1 Shape Detectives
 - Module 2, Session 2 Mystery Bag Sorting
 - o Module 2, Session 3 Shape Walk
 - Module 2, Session 4 Cube Studies
 - o Module 3, Session 1 Nine-Patch Inventions
 - o Module 3, Session 3 Sandwich Fractions
 - o Module 3, Session 4 Paper Pizzas
 - Module 4, Session 1 Shape Riddles
 - Module 4, Session 2 Shape Sorting & Graphing
 - Module 4, Session 3 More Shape Riddles
- I build and draw shapes to possess defining attributes. (1.G.1)
 - o Module 1, Sessions 1-5
 - Module 2, Session 1 Shape Detectives
 - Module 2, Session 4 Cube Studies
 - o Module 2, Session 5 Four Triangles & One Square
 - Module 4, Session 1 Shape Riddles
 - Module 4, Session 3 More Shape Riddles
- I use two-dimensional shapes to create a new shape. (1.G.2)
 - o Module 1, Session 5 There's a Shape in My Pocket
 - o Module 3, Session 2 Nine-Patch Mini-Quilts
- I divide circles and rectangles into two and four equal shares. (1.G.3)
 - Module 3, Session 3 Sandwich Fractions
 - Module 3, Session 4 Paper Pizzas
 - Module 3, Session 5 Fraction Bingo
- I describe the whole as all of the equal shares. (1.G.3)
 - Module 3, Session 3 Sandwich Fractions
 - Module 3, Session 4 Paper Pizzas
 - Module 3, Session 5 Fraction Bingo
- I describe equal shares using the words: halves, half of, fourths, fourth of, quarters and quarter of. (1.G.3)
 - Module 3, Session 3 Sandwich Fractions
 - Module 3, Session 4 Paper Pizzas
 - Module 3, Session 5 Fraction Bingo
- I understand that when a shape is divided into more pieces, the size of the pieces gets smaller. (1.G.3)
 - o Module 3, Session 3 Sandwich Fractions
 - Module 3. Session 4 Paper Pizzas
 - Module 3, Session 5 Fraction Bingo

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention Dreambox

Unit 6 - Figure the Facts with Penguins

Unit Overview: Students continue to develop fluency with addition and subtraction facts to 10 and strategies for working with facts to 20. They learn how to write and solve equations that involve unknowns in all positions and determine whether addition and subtraction equations are true or false.

Unit Standards

Priority Standards

1.0A.A Represent and solve problems involving addition and subtraction.

- <u>1.OA.1</u> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- <u>1.0A.2</u> 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.

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

- 1.0A.3 Apply properties of operations as strategies to add and subtract. Examples: 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.)
- <u>1.OA.4</u> Understand subtraction as an unknown-addend problem. For example, subtract 10 8 by finding the number that makes 10 when added to 8.

1.OA.C Add and subtract within 20.

- 1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

- $\underline{1.0A.7}$ Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
- <u>1.0A.8</u> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11, 5 = _ 3, 6 + 6 = _$.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

• <u>1.NBT.2.c</u> 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.NBT.C Use place value understanding and properties of operations to add and subtract.

• 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

1.MD.A Measure lengths indirectly and by iterating length units.

- <u>1.MD.1</u> Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Learning Targets

ist Grade Priority.		
Mathematical Practice Standard Connections		
Habits of Mind	MP.1 • Module 2, Session 5	MP.6
Reasoning & Explaining	MP.2 ■ Module 1, Sessions 1, 2, 3, 5	 MP.3 Module 2, Session 5 Module 3, Sessions 1, 2, 3, 4 Module 4, Session 1
Modeling & Tools	 MP.4 Module 1, Session 4 Module 2, Session 4 Module 4, Sessions 1, 2 	MP.5 • Module 1, Sessions 4, 5
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions 1, 2, 3, 4 Module 2, Sessions 1, 2, 3, 4, Module 3, Sessions 1, 2 Module 4, Sessions 4, 5 	 MP.8 Module 1, Sessions 3, 5 Module 2, Sessions 1, 2, 3 Module 4, Sessions 4, 5

- I solve addition and subtraction word problems. (1.0A.1)
 - Module 1, Session 1 Penguins on Ledges
 - o Module 1, Session 2 Penguin Huddles & Penguin Pals
 - Module 1, Session 4 Nine Fish, Ten Fish
 - Module 1, Session 5 Fishing for Subtraction Strategies
 - Module 2, Session 3 Penguins Marching Two by Two
 - Module 2, Session 5 Pick Two to Make Twenty
 - Module 3, Session 1 Penguin Problems: Joining
 - Module 3, Session 2 Penguin Problems: Separating
 - Module 3, Session 3 Counting Penguin Feathers
 - Module 3, Session 4 Comparing Penguins
- I solve addition word problems with three numbers. (1.0A.2)
 - o Module 2, Session 3 Penguins Marching Two by Two
- I group and reorder numbers when I add. (1.0A.3)
 - o Module 2, Session 1 Double-Flap Dot Cards Ten to Twenty
- I understand I can use addition to solve subtraction problems. (1.0A.4)
 - o Module 1, Session 5 Fishing for Subtraction Strategies
 - o Module 2, Session 1 Double-Flap Dot Cards Ten to Twenty
 - Module 3, Session 2 Penguin Problems: Separating
- I understand that counting on is adding and counting back is subtracting. (1.0A.5)
 - Module 1, Session 1 Penguins on Ledges
 - o Module 1, Session 2 Penguin Huddles & Penguin Pals
- I fluently add and subtract facts to 10. (1.0A.6)
 - Module 2, Session 5 Pick Two to Make Twenty
- I use strategies to add and subtract fluently to 20. (1.0A.6)
 - o Module 1, Sessions 1-5
 - Module 2, Session 1 Double-Flap Dot Cards Ten to Twenty
 - o Module 2, Session 4 Addition Facts Flash
 - Module 2, Session 5 Pick Two to Make Twenty
 - o Module 3, Session 1 Penguin Problems: Joining
 - Module 3, Session 2 Penguin Problems: Separating
 - Module 3, Session 3 Counting Penguin Feathers
 - Module 3, Session 4 Comparing Penguins
- I understand I can use addition to solve subtraction problems. (1.0A.4)
 - Module 1, Session 5 Fishing for Subtraction Strategies
 - Module 2, Session 1 Double-Flap Dot Cards Ten to Twenty
 - o Module 3, Session 2 Penguin Problems: Separating
 - Module 3, Session 4 Comparing Penguins
- I understand the meaning of the equal sign and can tell if an equation is true or false. (1.0A.7)
 - o Module 1, Session 2 Penguin Huddles & Penguin Pals
 - o Module 3, Session 3 Counting Penguin Feathers
- I solve for the unknown number in addition and subtraction. (1.0A.8)
 - o Module 1, Session 2 Penguin Huddles & Penguin Pals
 - Module 2, Session 1 Double-Flap Dot Cards Ten to Twenty
 - Module 3, Session 1 Penguin Problems: Joining
 - Module 3, Session 2 Penguin Problems: Separating

- o Module 3, Session 3 Counting Penguin Feathers
- Module 3, Session 4 Comparing Penguins
- I read and write numerals up to 120. (1.NBT.1)
 - o Module 4, Session 1 Emperor Penguins
 - o Module 4, Session 2 Little Blue Penguin
 - o Module 4, Session 3 Me & the Penguins Again
 - o Module 4, Session 5 Counting by Twos with Penguin Pairs
- I write a numeral to tell how many objects. (1.NBT.1)
 - Module 1, Session 3 Penguin Egg Doubles
- I understand that the numbers 11-19 have one ten and some ones. (1.NBT.2)
 - Module 1, Session 1 Penguins on Ledges
 - o Module 1, Session 2 Penguin Huddles & Penguin Pals
 - o Module 2, Session 4 Addition Facts Flash
- I compare two two-digit numbers. (1.NBT.3)
 - Module 4, Session 1 Emperor Penguins
- I use <, >, and = to compare numbers. (1.NBT.3)
 - Module 4, Session 2 Little Blue Penguin
 - o Module 4, Session 3 Me & the Penguins Again
- I add a two-digit number and a one-digit number. (1.NBT.4)
 - Module 4, Session 1 Emperor Penguins
- I add a two-digit number and a multiple of ten. (1.NBT.4)
 - o Module 4, Session 3 Me & the Penguins Again
- I use models or drawings to subtract groups of ten. (1.NBT.6)
 - Module 4, Session 1 Emperor Penguins
- I use number models to show my math thinking/reasoning. (1.NBT.4)
 - Module 4, Session 1 Emperor Penguins
- I order three objects by length. (1.MD.1)
 - o Module 4, Session 2 Little Blue Penguin
 - o Module 4, Session 3 Me & the Penguins Again
- I compare the lengths of two objects using a third object. (1.MD.1)
 - Module 4, Session 2 Little Blue Penguin
- I express the length of an object as a whole number of units. (1.MD.1)
 - o Module 4, Session 2 Little Blue Penguin
 - o Module 4, Session 3 Me & the Penguins Again

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention

Unit 7 - One Hundred and Beyond

Unit Overview: Students will develop a deeper understanding of place value by estimating, counting, comparing, adding and subtracting two-digit quantities using familiar models: sticks & buncles; dimes, nickels and pennies; and the number line.

Unit Standards

Priority Standards

1.0A.A Represent and solve problems involving addition and subtraction.

- <u>1.0A.1</u> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- <u>1.0A.2</u> 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.

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

• 1.0A.3 Apply properties of operations as strategies to add and subtract. Examples: 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.)

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

- <u>1.NBT.2</u> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- 1.NBT.2.a 10 can be thought of as a bundle of ten ones called a "ten."
- <u>1.NBT.2.c</u> 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.NBT.C Use place value understanding and properties of operations to add and subtract.

- 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- <u>1.NBT.5</u> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- 1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 method and explain the reasoning used.

1.MD.A Measure lengths indirectly and by iterating length units.

• <u>1.MD.2</u> Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length

measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Supporting Standards

1.G.A Reason with shapes and their attributes.

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.

Learning Targets

1st Grade Priority:

	Mathematical Practice Standard Connections		
Habits of Mind	MP.1 • Module 2, Sessions 2, 5 • Module 4, Session 4	MP.6	
Reasoning & Explaining	 MP.2 Module 1, Sessions 2, 3, 4, 5 Module 2, Session 4 Module 3, Sessions 1-5 Module 4, Session 2 	 MP.3 Module 2, Sessions 1, 3, 5 Module 3, Sessions 3, 4, 5 Module 4, Session 4 	
Modeling & Tools	 MP.4 Module 1, Session 1 Module 3, Sessions 1, 2 Module 4, Session 3 	MP.5	
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions 1, 2, 3 Module 2, Sessions 1, 2, 3, 4 Module 3, Sessions 1, 2 Module 4, Sessions 1, 2, 5 	 MP.8 Module 1, Sessions 4, 5 Module 4, Sessions 1, 3, 5 	

- I solve addition and subtraction word problems. (1.OA.1)
 - Module 3, Session 1 Ten Steps on the Path
 - Module 2, Session 2 Twenty Steps on the Path
- I solve addition word problems with three numbers. (1.0A.2)
 - o Module 2, Session 2 Twenty Steps on the Path
- I group and reorder numbers when I add. (1.0A.3)
 - Module 3, Session 1 Ten Steps on the Path
 - o Module 2, Session 2 Twenty Steps on the Path
- I use strategies to add and subtract fluently to 20. (1.OA.6)
 - o Module 2, Session 2 Twenty Steps on the Path
- I count to 120 starting at any number. (1.NBT.1)
 - o Module 2, Sessions 1-5
 - o Module 4, Session 1 How Many Pennies in the Jar?

- I read and write numerals up to 120. (1.NBT.1)
 - Module 1, Session 2 Two Turns to Build, Day 1
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - Module 2, Session 2 Counting Pebbles Along the Path
 - Module 2, Session 3 A Fork in the Path
 - Module 2, Session 4 Observations Along the Path
 - Module 2, session 5 Problems Along the Path
 - Module 3, Session 3 The Path Game, Part 1
 - Module 3, Session 4 The Path Game, Part 2
 - Module 4, Session 1 How Many Pennies in the Jar?
 - Module 4, Session 2 Two Turns to Win
- I write a numeral to tell how many objects. (1.NBT.1)
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - o Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - Module 2, Session 2 Counting Pebbles Along the Path
 - Module 2, Session 4 Observations Along the Path
- I tell which digits show the number of ones and tens. (1.NBT.2)
 - Module 1, Session 1 Estimating & Counting Popsicle Sticks
 - Module 1, Session 2 Two Turns to Build, Day 1
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - o Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - o Module 2, Session 1 Introducing Hansel & Gretel's Path
 - Module 4, Session 2 Two Turns to Win
 - Module 4, Session 4 Coins on Board, Day 1
 - Module 4, Session 5 Coins on Board, Day 2
- I understand that a bundle of ten ones is called one ten. (1.NBT.2)
 - Module 1, Session 1 Estimating & Counting Popsicle Sticks
 - I understand that the numbers 11-19 have one ten and some ones. (1.NBT.2)
 - Module 4, Session 1 How Many Pennies in the Jar?
- I understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 have some tens and 0 ones. (1.NBT.2)
 - Module 1, Session 1 Estimating & Counting Popsicle Sticks
- I use <, >, and = to compare numbers. (1.NBT.3)
 - Module 1, Session 2 Two Turns to Build, Day 1
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - o Module 4, Session 2 Two Turns to Win
 - Module 4, Session 3 Pull, Count & Compare
 - Module 4, Session 5 Coins on Board, Day 2
- I compare pairs of 2-digit numbers, based on an understanding of what the digits in their tens and ones places represent (1.NBT.3)
 - Module 4, Session 4 Coins on Board, Day 1
 - Module 4, Session 5 Coins on Board, Day 2
- I add a two-digit number and a one-digit number. (1.NBT.4)
 - o Module 2, Sessions 1-5
 - Module 3, Session 3 The Path Game, Part 1

- o Module 3, Session 4 The Path Game, Part 2
- Module 4, Sessions 1-5
- I add a two-digit number and a multiple of ten. (1.NBT.4)
 - o Module 2, Session 1 Introducing Hansel & Gretel's Path
 - o Module 2, session 5 Problems Along the Path
 - o Module 3, Session 3 The Path Game, Part 1
 - Module 4, Session 1 How Many Pennies in the Jar?
 - o Module 4, Session 3 Pull, Count & Compare
 - Module 4, Session 4 Coins on Board, Day 1
 - Module 4, Session 5 Coins on Board, Day 2
- I use models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction to add within 100. (1.NBT.4)
 - Module 1, Session 2 Two Turns to Build, Day 1
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - o Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - o Module 3, Session 3 The Path Game, Part 1
 - Module 3, Session 4 The Path Game, Part 2
 - Module 4, Session 3 Pull, Count & Compare
 - Module 4, Session 4 Coins on Board, Day 1
 - Module 4, Session 5 Coins on Board, Day 2
- I add two-digit numbers by adding tens and tens and ones and ones. (1.NBT.4)
 - o Module 1, Session 2 Two Turns to Build, Day 1
 - Module 1, Session 3 Two Turns to Build, Day 2
 - Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - o Module 3, Session 3 The Path Game, Part 1
 - o Module 3, Session 4 The Path Game, Part 2
 - Module 4, Session 4 Coins on Board, Day 1
- I explain the reasoning behind a strategy used to add with sums to 100 (1.NBT.4)
 - o Module 1, Session 2 Two Turns to Build, Day 1
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - o Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - Module 3, Session 4 The Path Game, Part 2
 - Module 4, Session 4 Coins on Board, Day 1
- I relate strategies for adding with sums to 100 to written methods, and use written methods to represent those strategies (1.NBT.4)
 - o Module 1, Session 3 Two Turns to Build, Day 2
 - Module 1, Session 4 Introducing Work Place 7A Two Turns to Build
 - o Module 3, Session 3 The Path Game, Part 1
 - Module 3, Session 4 The Path Game, Part 2
 - Module 4, Session 4 Coins on Board, Day 1
- I can mentally find 10 more or 10 less than a given number and explain the reasoning used. (1.NBT.5)
 - o Module 2, Session 3 A Fork in the Path
 - o Module 3, Session 3 The Path Game, Part 1
 - Module 3. Session 4 The Path Game. Part 2
 - Module 4, Session 3 Pull, Count & Compare
- I use models or drawings to subtract groups of ten. (1.NBT.6)

- Module 1, Session 5 Introducing Work Place 7B Race to Zero
- I use number models to show my math thinking/reasoning. (1.NBT.6)
 - o Module 3, Session 4 The Path Game, Part 2
- I relate strategies for subtracting a 2-digit multiple of 10 from an equal or greater 2-digit multiple of 10 to written methods (1.NBT.6)
 - o Module 1, Session 5 Introducing Work Place 7B Race to Zero
 - o Module 3, Session 3 The Path Game, Part 1
- I explain the reasoning behind a strategy used to subtract a 2-digit multiple of 10 from an equal or greater 2-digit multiple of 10. (1.NBT.6)
 - Module 1, Session 5 Introducing Work Place 7B Race to Zero
- I subtract a 2-digit multiple of 10 from an equal or greater 2-digit multiple of 10 (1.NBT.6)
 - o Module 2, session 5 Problems Along the Path
- I use same size objects to measure with no gaps or overlaps. (1.MD.2)
 - o Module 3, Session 1 Ten Steps on the Path
 - o Module 2, Session 2 Twenty Steps on the Path

1st Grade Supporting:

- I divide circles and rectangles into two and four equal shares. (1.G.3)
 - o Module 3, Session 3 The Path Game, Part 1

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention

Dreambox

Unit 8 - Changes, Changes

Unit Overview: Students consider the concept of change blending math and science. They make the link between time and change, explore predictable changes in numbers, and consider changes in location.

Unit Standards

Priority Standards

- 1.0A.A Represent and solve problems involving addition and subtraction.
 - 1.0A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown

number to represent the problem.

1.0A.B Understand and apply properties of operations and the relationship between addition and subtraction.

• <u>1.0A.3</u> Apply properties of operations as strategies to add and subtract. Examples: 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.)

1.OA.C Add and subtract within 20.

- 1.0A.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.0A.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.D Work with addition and subtraction equations.

• 1.0A.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, $5 = _ - 3$, $6 + 6 = _$.

1.NBT.A Extend the counting sequence.

• <u>1.NBT.1</u> 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.

1.NBT.B Understand place value.

- <u>1.NBT.2</u> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- 1.NBT.2.a 10 can be thought of as a bundle of ten ones called a "ten."
- <u>1.NBT.2.b</u> The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- <u>1.NBT.2.c</u> 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).
- <u>1.NBT.3</u> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

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

- 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- <u>1.NBT.5</u> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- <u>1.NBT.6</u> Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 method and explain the reasoning used.

1.MD.A Measure lengths indirectly and by iterating length units.

- <u>1.MD.1</u> Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Supporting Standards

1.MD.B Tell and write time.

• 1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.

1.MD.C Represent and interpret Data.

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.

1.G.A Reason with shapes and their attributes.

• <u>1.G.3</u> 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.

Learning Targets

1st Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	 MP.1 Module 3, Sessions 1-6 Module 4, Sessions 2, 4 	 MP.6 Module 3, Session 1 Module 4, Sessions 1, 3
Reasoning & Explaining	 MP.2 Module 1, Sessions 4, 5 Module 2, Sessions 1, 2, 3, 4 Module 3, Sessions 3, 5 	MP.3 • Module 1, Sessions 4, 5
Modeling & Tools	 MP.4 Module 1, Sessions 1, 2, 3 Module 2, Session 1 Module 4, Sessions 3, 5 	MP.5 • Module 1, Session 2 • Module 4, Sessions 2, 4
Seeing Structure & Generalizing	 MP.7 Module 1, Sessions 1, 2, 3 Module 2, Sessions 2, 3, 4 Module 3, Session 2 	MP.8

- I solve addition and subtraction word problems. (1.OA.1)
 - Module 2, Session 1 Grandma's Picnic Basket
- I group and reorder numbers when I add. (1.OA.3)
 - Module 4, Session 2 How We Have Grown
 - o Module 4, Session 4 That Baby & Me
- I understand that counting on is adding and counting back is subtracting. (1.0A.5)
 - Module 2, Session 2 The Change Box, Day 1
- I use strategies to add and subtract fluently to 20. (1.0A.6)
 - o Module 2, Session 1 Grandma's Picnic Basket
 - Module 2, Session 2 The Change Box, Day 1
 - o Module 2, Session 3 The Change Box, Day 2
- I understand I can use addition to solve subtraction problems. (1.OA.4)

- o Module 2, Session 2 The Change Box, Day 1
- Module 2, Session 3 The Change Box, Day 2
- I solve for the unknown number in addition and subtraction. (1.0A.8)
 - Module 1, Session 4 An Hour or Bust!
 - o Module 1, Session 5 Introducing Work Place 8A An Hour or Bust!
- I count to 120 starting at any number. (1.NBT.1)
 - Module 1, Session 1 Time Tests
 - o Module 1, Session 2 A Second, A Minute, or An Hour
 - o Module 1, Session 4 An Hour or Bust!
 - Module 1, Session 5 Introducing Work Place 8A An Hour or Bust!
- I read and write numerals up to 120. (1.NBT.1)
 - Module 1, Session 1 Time Tests
 - o Module 1, Session 2 A Second, A Minute, or An Hour
 - o Module 1, Session 4 An Hour or Bust!
 - o Module 1, Session 5 Introducing Work Place 8A An Hour or Bust!
 - o Module 3, Session 3 Gliders in Flight
 - Module 3, Session 4 Analyzing the Flight Data
 - Module 3, Session 5 More Glider Flights
 - Module 3, Session 6 Analyzing the Second Round of Flight Data
- I write a numeral to tell how many objects. (1.NBT.1)
 - o Module 3, Session 3 Gliders in Flight
 - o Module 3, Session 4 Analyzing the Flight Data
 - o Module 3, Session 5 More Glider Flights
 - Module 3, Session 6 Analyzing the Second Round of Flight Data
 - Module 4, Session 1 Baby Lengths
 - o Module 4, Session 2 How We Have Grown
 - o Module 4, Session 4 That Baby & Me
- I tell which digits show the number of ones and tens. (1.NBT.2)
 - Module 4, Session 3 How Big Is This Baby?
- I understand that a bundle of ten ones is called one ten. (1.NBT.2)
 - Module 3, Session 2 Constructing Runways
- I understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 have some tens and 0 ones. (1.NBT.2)
 - Module 3, Session 2 Constructing Runways
- I compare two two-digit numbers. (1.NBT.3)
 - Module 1, Session 4 An Hour or Bust!
 - Module 1, Session 5 Introducing Work Place 8A An Hour or Bust!
 - Module 3, Session 4 Analyzing the Flight Data
 - Module 3, Session 6 Analyzing the Second Round of Flight Data
 - o Module 4, Session 1 Baby Lengths
 - o Module 4, Session 2 How We Have Grown
 - o Module 4, Session 3 How Big Is This Baby?
- I use <, >, and = to compare numbers. (1.NBT.3)
 - Module 3, Session 3 Gliders in Flight
 - Module 3, Session 5 More Glider Flights
- I add a two-digit number and a multiple of ten. (1.NBT.4)
 - Module 4, Session 2 How We Have Grown

- I use models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction to add within 100. (1.NBT.4)
 - Module 1, Session 4 An Hour or Bust!
 - Module 1, Session 5 Introducing Work Place 8A An Hour or Bust!
 - o Module 2, Session 3 The Change Box, Day 2
 - o Module 3, Session 3 Gliders in Flight
 - o Module 3, Session 4 Analyzing the Flight Data
 - Module 3, Session 5 More Glider Flights
 - Module 3, Session 6 Analyzing the Second Round of Flight Data
 - Module 4. Session 2 How We Have Grown
 - Module 4, Session 3 How Big Is This Baby?
 - Module 4, Session 4 That Baby & Me
- I add with sums to 100 (1.NBT.4)
 - Module 2, Session 1 Grandma's Picnic Basket
- I can mentally find 10 more or 10 less than a given number and explain the reasoning used. (1.NBT.5)
 - Module 2, Session 3 The Change Box, Day 2
 - Module 3, Session 2 Constructing Runways
 - o Module 4, Session 2 How We Have Grown
 - Module 4, Session 4 That Baby & Me
- I use models or drawings to subtract groups of ten. (1.NBT.6)
 - Module 2, Session 3 The Change Box, Day 2
- I order three objects by length. (1.MD.1)
 - Module 3, Session 3 Gliders in Flight
 - o Module 3, Session 5 More Glider Flights
 - Module 4, Session 1 Baby Lengths
- I compare the lengths of two objects using a third object. (1.MD.1)
 - Module 4, Session 3 How Big Is This Baby?
- I measure an object using a shorter object. (1.MD.2)
 - Module 3, Session 5 More Glider Flights
 - o Module 4, Session 1 Baby Lengths
 - Module 4, Session 3 How Big Is This Baby?
 - Module 4, Session 4 That Baby & Me
- I use same size objects to measure with no gaps or overlaps. (1.MD.2)
 - Module 3, Session 2 Constructing Runways
 - Module 3, Session 3 Gliders in Flight
 - Module 3, Session 5 More Glider Flights
 - Module 4, Session 1 Baby Lengths
 - Module 4, Session 3 How Big Is This Baby?
 - o Module 4, Session 4 That Baby & Me
- I express the length of an object as a whole number of units. (1.MD.2)
 - Module 3, Session 2 Constructing Runways
 - o Module 3, Session 3 Gliders in Flight
 - Module 3, Session 5 More Glider Flights
 - Module 4, Session 3 How Big Is This Baby?
 - Module 4, Session 4 That Baby & Me

1st Grade Supporting:

- I tell and write time to the hour using analog and digital clocks. (1.MD.3)
 - o Module 1, Session 2 A Second, A Minute, or An Hour
- I organize, represent, and interpret data. (1.MD.4)
 - Module 1, Session 3 How Long Does It Take?
 - o Module 3, Session 4 Analyzing the Flight Data
 - o Module 3, Session 6 Analyzing the Second Round of Flight Data
 - Module 4, Session 3 How Big Is This Baby?
- I ask and answer questions about the data. (1.MD.4)
 - o Module 3, Session 4 Analyzing the Flight Data
 - o Module 3, Session 6 Analyzing the Second Round of Flight Data
 - Module 4, Session 3 How Big Is This Baby?
- I divide circles and rectangles into two and four equal shares. (1.G.3)
 - o Module 2, Session 1 Grandma's Picnic Basket
 - Module 3, Session 1 Folding & Flying Paper Gliders
- I describe equal shares using the words: halves, half of, fourths, fourth of, quarters and quarter of. (1.G.3)
 - o Module 1, Session 4 An Hour or Bust!
 - o Module 1, Session 5 Introducing Work Place 8A An Hour or Bust!
 - o Module 2, Session 1 Grandma's Picnic Basket
 - Module 3, Session 1 Folding & Flying Paper Gliders

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Checkpoint
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Observational Assessment
- Student Work Samples
- Quick Checks (exit slips)

Digital Tools & Supplementary Resources

Bridges Intervention

Dreambox