

3rd Grade Mathematics

Curriculum/Content Area: Mathematics	Course Length: School Year
Course Title: 3rd Grade Mathematics Number Corner	Date last reviewed: February 2nd, 2016 Previous 3rd 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		
<p>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.</p>		
Mathematical Practice Standards	Grade Level/Course Explanation	
Habits of Mind	MP.1 Make sense of problems and persevere in solving them	Third graders consider the meaning of a problem and look for appropriate, efficient ways to solve it. They use concrete and visual models as well as expressions and equations to represent, understand, and solve problems. They try different approaches when necessary, evaluate whether their solutions make sense in the context of the problem, and use alternative methods to check their answers.
	MP.6 Attend to precision.	Third graders are increasingly able to be clear and precise in communicating mathematically, both in writing and in discussion. They specify units of measure and are careful to use the correct language to describe operations and symbols. They also take care to measure, draw, and label with precision.
Reasoning & Explaining	MP.2 Reason abstractly and quantitatively.	Third graders connect the specific quantity represented by a number to written symbols. They make abstract representations of problems as they

		solve them, for example by writing equations. They can also think about those symbols in relation to the problem to make sense of the quantities in context.
	MP.3 Construct viable arguments and critique the reasoning of others.	Third graders refine their mathematical communication skills by using words (written and spoken) and symbols (equations and expressions) to clarify their thinking. They support the representations they have made with sketches or objects, and they explain and justify their own strategies and solutions. They also ask specific questions to better understand and evaluate other students' reasoning
Modeling & Using Tools	MP.4 Model with mathematics.	Third graders represent mathematical situations with numbers, words, sketches, actions, charts, graphs, expressions, arrays, and ratio tables. They learn to connect these models and explain the connections among them. They use models not only as a way to represent problems, but also as tools for solving them and developing a deeper understanding of the mathematics
	MP.5 Use appropriate tools strategically.	Third graders learn to consider the tools, both concrete and abstract, at their disposal and select the ones that will be most useful to them in solving a particular mathematical problem or performing a particular task. For example, they learn to use estimation as a tool for solving problems and checking their answers. When faced with problems requiring a finite, exhaustive number of solutions, they generate organized lists or tables to ensure that they've found them all. If they are measuring the length of an object, they select a measuring device with appropriate units and an appropriate degree of precision. To use tools strategically, students must understand the requirements of the task, their own needs and strengths, and the capabilities of the tools available to them
Seeing Structure & Generalizing	MP.7 Look for and make use of structure.	When considering mathematical situations and solving problems, third graders seek out patterns and notice structure. They use what they notice to solve problems and develop deeper conceptual understandings
	#8 Look for and express regularity in repeated reasoning.	Third graders notice repetition when solving problems and use that repetition to develop more efficient strategies for solving similar problems.

		They also learn to pause regularly while solving problem strings or multi-part problems in order to evaluate their work and be sure their answers so far make sense.
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Priority Standard Clusters

3.OA.A Represent and solve problems involving multiplication and division.

- 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .
- 3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.
- 3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- 3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ? \div 3$, $6 \times 6 = ?$.

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)
- 3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

3.OA.C Multiply and divide within 100.

- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.

- (a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- (b) Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
- **3.NF.3** Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (a) Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.
 - (b) Recognize and generate simple equivalent fractions eg. $\frac{1}{2}$ equals $\frac{2}{4}$, $\frac{4}{6}$ equals $\frac{2}{3}$. Explain why the fractions are equivalent eg. by using a visual fraction model.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.
 - (d) Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $<$, $>$, $=$ and justify the conclusions, eg. by using a visual fraction model.

3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- **3.MD.1** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
- **3.MD.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).⁶ Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- **3.MD.5** Recognize area as an attribute of plane figures and understand concepts of area measurement.
 - (a) A square with side lengths 1 unit, called “a unit square”, is said to have “1 square unit” of area and can be used to measure area.
 - (b) A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- **3.MD.6** Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvise units).
- **3.MD.7** Relate area to the operations of multiplication and division.
 - (a) Find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.
 - (b) Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.
 - (c) Use tiling to show in a concrete case that the area of a rectangle with whole number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
 - (d) Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Supporting Standard Clusters

3.MD.B Represent and interpret data.

- 3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.
- 3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

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

- 3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
- 3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

3.MD.D Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- 3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

September

Unit Overview: The workouts in the first month of school introduce key multiplication concepts and give students opportunities to use surveys to learn about their new classmates. September workouts also provide a review of place value through 1,000 and strategies for adding 2- and 3- digit numbers.

Unit Standards

Priority Standards:

3.OA.A Represent and solve problems involving multiplication and division.

- 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .
- 3.OA.3 Use multiplication and division within 100 to solve word problems in situations

involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

Supporting Standards:

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

3.MD.B Represent and interpret data.

- 3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

2nd Grade Priority Standards - Reviewed

2.NBT.A Understand Place Value.

- 2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
- 2.NBT.1a 100 can be thought of as a bundle of ten tens – called a “hundred.”
- 2.NBT.1b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- 2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.
- 2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

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

- 2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none"> • Solving Problems 	MP.6
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> • Calendar Collector • Computational Fluency • Number Line • Solving Problems 	MP.3 <ul style="list-style-type: none"> • Solving Problems
Modeling & Tools	MP.4 <ul style="list-style-type: none"> • Calendar Grid • Calendar Collector • Computational Fluency 	MP.5

Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none"> ● Calendar Grid ● Number Line 	MP.8
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3rd Grade Priority:

- I understand multiplication by thinking about groups of objects. (3.OA.1)
 - Calendar Grid: Multiplication Models
 - Computational Fluency: Loops & Groups
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Number Line: Up to One Thousand

3rd Grade/Course Supporting:

- I use data to create a bar graph or pictograph, including those with scales greater than 1. (3.MD.3)
 - Calendar Collector: Class Data
- I use data from a graph to answer one- and two- step problems. (3.MD.3)
 - Calendar Collector: Class Data
- I quickly and easily solve addition problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Solving Problems: Adding Two- & Three-Digit Numbers
- I quickly and easily solve subtraction problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Solving Problems: Adding Two- & Three-Digit Numbers

2nd Grade Review:

- I add up to four two-digit numbers using strategies based on place value and properties of operations. (2.NBT.6)
 - Computational Fluency: Loops & Groups
- I understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. (2.NBT.1)
 - Number Line: Up to One Thousand
- I count within 1000; skip-count by 5s, 10s, and 100s. (2.NBT.2)
 - Number Line: Up to One Thousand
- I read and write numbers to 1000 using base-ten numerals, number names, and expanded form. (2.NBT.3)
 - Number Line: Up to One Thousand

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Number Corner
- Baseline Assessment

Other assessment options

May include, but are not limited to the following:

- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox

October

Unit Overview: This month students revisit concepts of multiplication in a new context during the Computation Fluency workouts, and they continue to review efficient strategies for adding and subtracting 2- and 3-digit numbers during the Number Line and Solving Problems workouts.

Unit Standards

Priority Standards

3.OA.A Represent and solve problems involving multiplication and division.

- 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (b) Recognize and generate simple equivalent fractions eg. $\frac{1}{2}$ equals $\frac{2}{4}$, $\frac{4}{6}$ equals $\frac{2}{3}$. Explain why the fractions are equivalent eg. by using a visual fraction model.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.

3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- 3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).⁶ Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Supporting Standards:

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

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

- 3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none">Solving Problems	MP.6 <ul style="list-style-type: none">Calendar Collector
Reasoning & Explaining	MP.2 <ul style="list-style-type: none">Computational FluencyNumber LineSolving Problems	MP.3 <ul style="list-style-type: none">Solving Problems
Modeling & Tools	MP.4 <ul style="list-style-type: none">Computational FluencyNumber Line	MP.5 <ul style="list-style-type: none">Calendar Grid
Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none">Calendar GridNumber Line	MP.8 <ul style="list-style-type: none">Calendar Collector

3rd Grade Priority:

- I understand multiplication by thinking about groups of objects. (3.OA.1)
 - Computational Fluency: Frog Jump Multiplication
- I solve two-step word problems using addition, subtraction, multiplication, and/or division. (3.OA.8)
 - Number Line: Changing Endpoints
- I show and understand that fractions represent equal parts of a whole, where the numerator is a quantity and the denominator is the total number of parts in the whole. (3.NF.1)
 - Calendar Collector: Collecting Liters & Milliliters
- I recognize, write/show, and explain simple equivalent fractions. (3.NF.3b)
 - Calendar Collector: Collecting Liters & Milliliters
- I show whole numbers as fractions. (3.NF.3c)
 - Calendar Collector: Collecting Liters & Milliliters
- I use four operations to solve one-step word problems involving masses or volumes given the same units (3.MD.2)
 - Calendar Collector: Collecting Liters & Milliliters
 - Number Line: Changing Endpoints

3rd Grade/Course Supporting:

- I explain how quadrilaterals (shapes with 4 sides) are similar and different. (3.G.1)
 - Calendar Grid: Two-Dimensional Shapes
- I quickly and easily solve addition problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Calendar Collector: Collecting Liters & Milliliters
 - Number Line: Changing Endpoints
 - Solving Problems: Subtracting Two- & Three-Digit Numbers
- I quickly and easily solve subtraction problems within 1,000 using strategies and algorithms.

(3.NBT.2)

- Number Line: Changing Endpoints

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Number Corner
Checkup #1

Other assessment options

May include, but are not limited to the following:

- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox

November

Unit Overview: Calendar Grid and Computational Fluency workouts focus on multiplication. Students explore area and arrays as they look for patterns and relationships on the Calendar Grid markers and play a game called Array Race in the Computational Fluency workout. Students learn about and practice rounding with a game on the Number Line and they begin exploring fractions as they collect halves, fourths, and eights in the Calendar Collector's Unit Fraction Race. The Problem Strings workout switches from string work to problem solving this month, as students work on strategies and skills including writing equations with letters standing for unknown quantities.

Unit Standards

Priority Standards

3.OA.A Represent and solve problems involving multiplication and division.

- 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .
- 3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- 3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ? \div 3$, $6 \times 6 = ?$.

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)

3.OA.C Multiply and divide within 100.

- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship

between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - (b) Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
- 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.

3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- 3.MD.7 Relate area to the operations of multiplication and division.
 - (a) Find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.
 - (b) Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.
 - (c) Use tiling to show in a concrete case that the area of a rectangle with whole number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
 - (d) Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Supporting Standards

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none"> • Solving Problems 	MP.6 <ul style="list-style-type: none"> • Calendar Grid • Computational Fluency
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> • Calendar Grid • 	MP.3 <ul style="list-style-type: none"> • Solving Problems
Modeling & Tools	MP.4	MP.5

	<ul style="list-style-type: none"> • Computational Fluency • Number Line • Solving Problems 	<ul style="list-style-type: none"> • Computational Fluency • Solving Problems
Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none"> • Calendar Grid • Calendar Collector • Number Line 	MP.8 <ul style="list-style-type: none"> • Calendar Grid

- I understand multiplication by thinking about groups of objects. (3.OA.1)
 - Computational Fluency
- I solve multiplication and/or division number stories and write the matching number sentence (3.OA.3)
 - Solving Problems
- I find the missing number in a multiplication and/or division number sentence (3.OA.4)
 - Solving Problems
- I multiply using the Commutative Property (turn-around facts). (3.OA.5)
 - Calendar Grid
 - Computational Fluency
- I multiply three 1-digit numbers using the Associative Property. (3.OA.5)
 - Calendar Grid
 - Computational Fluency
- I multiply a 2-digit by 1-digit number using the Distributive Property. (3.OA.5)
 - Calendar Grid
 - Computational Fluency
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Calendar Grid
 - Computational Fluency
- I show and understand that fractions represent equal parts of a whole, where the numerator is a quantity and the denominator is the total number of parts in the whole. (3.NF.1)
 - Calendar Collector
- I show fractions on a number line by marking off equal parts between two whole numbers. (3.NF.2b)
 - Calendar Collector
- I show whole numbers as fractions. (3.NF.3c)
 - Calendar Collector
- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Calendar Collector
- I multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning. (3.MD.7b)
 - Calendar Grid
- I use tiling to show in a concrete case that the area of a rectangle with whole number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. (3.MD.7c)
 - Calendar Grid
- I recognize area as additive. Find areas of rectilinear figures by decomposing them into

non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (3.MD.7d)

- Calendar Grid

3rd Grade/Course Supporting:

- I can use place value to help me round whole numbers to the nearest 10. (3.NBT.1)
 - Number Line
- I quickly and easily solve addition problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Solving Problems
- I quickly and easily solve subtraction problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Solving Problems
 - Number Line

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

Other assessment options

May include, but are not limited to the following:

- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox

December

Unit Overview: From fractions to measuring mass to rounding to multiplication problems, this short month explores a variety of strands, skills, and strategies. In all the workouts, students look for patterns, develop mathematical reasoning, and solve problems.

Unit Standards

Priority Standards:

3.OA.A Represent and solve problems involving multiplication and division.

- 3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 +$

$2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)

3.OA.C Multiply and divide within 100.

- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (a) Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.
 - (b) Recognize and generate simple equivalent fractions eg. $\frac{1}{2}$ equals $\frac{2}{4}$, $\frac{4}{6}$ equals $\frac{2}{3}$. Explain why the fractions are equivalent eg. by using a visual fraction model.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.
 - (d) Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $<$, $>$, $=$ and justify the conclusions, eg. by using a visual fraction model.

3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- 3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Supporting Standards:

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

3.MD.D Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- 3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none"> Calendar Collector 	MP.6 <ul style="list-style-type: none"> Computational Fluency
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> Computational Fluency 	MP.3 <ul style="list-style-type: none"> Calendar Grid
Modeling & Tools	MP.4 <ul style="list-style-type: none"> Number Line Solving Problems 	MP.5 <ul style="list-style-type: none"> Calendar Collector
Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none"> Calendar Grid Number Line 	MP.8 <ul style="list-style-type: none"> Calendar Grid Solving Problems

3rd Grade Priority:

- I understand multiplication by thinking about groups of objects. (3.OA.1)
 - Solving Problems
- I multiply using the Commutative, Associate, & Distributive Property. (3.OA.5)
 - Solving Problems
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Solving Problems
 - Computational Fluency
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Solving Problems
 - Computational Fluency
- I show and understand that fractions represent equal parts of a whole, where the numerator is a quantity and the denominator is the total number of parts in the whole. (3.NF.1)
 - Calendar Grid
- I understand two fractions are equal if they are the same size or one the same point on a number line. (3.NF.3a)
 - Calendar Grid
- I recognize, write/show, and explain simple equivalent fractions. (3.NF.3b)
 - Calendar Grid
- I show whole numbers as fractions. (3.NF.3c)
 - Calendar Grid
- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Calendar Grid
- I compare two fractions with the same numerator or denominator. (3.NF.3d)
 - Calendar Grid
- I compare fractions using symbols $>$, $<$, $=$ and prove my comparison by using models. (3.NF.3d)
 - Calendar Grid
- I estimate and measure weight (grams and kilograms) and capacity (milliliters and liters) using standard units. (3.MD.2)
 - Calendar Collector
- I use four operations to solve one-step word problems involving masses or volumes given the same units (3.MD.2)

- Calendar Collector

3rd Grade Supporting:

- I can use place value to help me round whole numbers to the nearest 10. (3.NBT.1)
 - Number Line
- I can use place value to help me round whole numbers to the nearest 100. (3.NBT.1)
 - Number Line
- I can make reasonable estimates. (3.NBT.1)
 - Number Line
- I quickly and easily solve addition problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Number Line
- I quickly and easily solve subtraction problems within 1,000 using strategies and algorithms. (3.NBT.2)
 - Number Line

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Pre Assessment
- Bridges Unit Checkpoints
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Unit Observational Assessments
- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox

January

Unit Overview:

Students continue to develop their understanding of fractions in both the Calendar Grid and the Number Line workouts. They think about time as they collect minutes and hours in the Calendar Collector. The Computational Fluency workout is very similar to last month's, but this month students think about multiplying by 5 and 10. The Solving Problems workout offers new challenges with solving multi-step story problems.

Unit Standards

Priority Standards:

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

3.OA.C Multiply and divide within 100.

- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - (a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
 - (b) Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
- 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (a) Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.
 - (b) Recognize and generate simple equivalent fractions eg. $\frac{1}{2}$ equals $\frac{2}{4}$, $\frac{4}{6}$ equals $\frac{2}{3}$. Explain why the fractions are equivalent eg. by using a visual fraction model.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.
 - (d) Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $<$, $>$, $=$ and justify the conclusions, eg. by using a visual fraction model.

Supporting Standards:

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections

Habits of Mind

MP.1

MP.6

	<ul style="list-style-type: none"> • Calendar Collector 	<ul style="list-style-type: none"> • Computational Fluency
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> • Calendar Grid • Computational Fluency • Solving Problems 	MP.3 <ul style="list-style-type: none"> • Solving Problems
Modeling & Tools	MP.4 <ul style="list-style-type: none"> • Number Line 	MP.5 <ul style="list-style-type: none"> • Calendar Collector
Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none"> • Calendar Grid • Number Line 	MP.8 <ul style="list-style-type: none"> • Calendar Grid

3rd Grade Priority:

- I find the answer to a division problem by thinking of the missing factor in a multiplication problem. (3.OA.6)
 - Computational Fluency
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Computational Fluency
- I solve two-step word problems using addition, subtraction, multiplication, and/or division. (3.OA.8)
 - Solving Problems
- I solve two-step word problems by writing a number model with a variable (letter) in place of the number I don't know. (3.OA.8)
 - Solving Problems
- I use mental math to figure out if the answers to two-step word problems make sense. (3.OA.8)
 - Solving Problems
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Computational Fluency
- I show and understand that fractions represent equal parts of a whole, where the numerator is a quantity and the denominator is the total number of parts in the whole. (3.NF.1)
 - Calendar Grid
- I label fractions on a number line because I know the space between any two whole numbers on the number line can be thought of as a whole. (3.NF.2a)
 - Computational Fluency
- I show fractions on a number line by marking off equal parts between two whole numbers. (3.NF.2b)
 - Computational Fluency
- I understand two fractions are equal if they are the same size or one the same point on a number line. (3.NF.3a)
 - Calendar Grid
- I recognize, write/show, and explain simple equivalent fractions. (3.NF.3b)
 - Calendar Grid
- I show whole numbers as fractions. (3.NF.3c)
 - Calendar Grid
 - Computational Fluency

- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Calendar Grid
 - Computational Fluency
- I compare two fractions with the same numerator or denominator. (3.NF.3d)
 - Calendar Grid
 - Computational Fluency
- I compare fractions using symbols $>$, $<$, $=$ and prove my comparison by using models. (3.NF.3d)
 - Calendar Grid
 - Computational Fluency

3rd Grade/Course Supporting:

- I can multiply any one-digit whole number by a multiple of 10 (6×20 , 4×70) to solve extended multiplication fact problems and number stories. (3.NBT.3)
 - Calendar Collector

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Pre Assessment
- Bridges Unit Checkpoints
- Bridges Unit Post Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Unit Observational Assessments
- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox

February

Unit Overview:

This month's workouts offer a rich exploration of geometry and measurement, fractions, multiplication fact fluency, and problem solving with data and graphing. The Calendar Grid features a growing pattern focused on area and perimeter. The Calendar Collector and the Number Line focus on fractions. Computational Fluency follows the same sequence of activities as in previous months with students now exploring strategies for multiplying by 3, 4, and 8. In Solving Problems workout, students explore graphs and data.

Unit Standards

Priority Standards:

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

3.OA.C Multiply and divide within 100.

- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - (a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.
 - (d) Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $<$, $>$, $=$ and justify the conclusions, eg. by using a visual fraction model.

3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- 3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- 3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.
 - (a) A square with side lengths 1 unit, called "a unit square", is said to have "1 square unit" of area and can be used to measure area.
 - (b) A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- 3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvise units).
- 3.MD.7 Relate area to the operations of multiplication and division.
 - (a) Find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.
 - (b) Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.

Supporting Standards:

3.MD.B Represent and interpret data.

- 3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using

information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

3.MD.D Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- 3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none"> • Calendar Grid • Calendar Collector 	MP.6 <ul style="list-style-type: none"> • Computational Fluency
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> • Computational Fluency 	MP.3 <ul style="list-style-type: none"> • Solving Problems
Modeling & Tools	MP.4 <ul style="list-style-type: none"> • Number Line 	MP.5 <ul style="list-style-type: none"> • Calendar Grid • Calendar Collector
Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none"> • Calendar Grid • Number Line 	MP.8 <ul style="list-style-type: none"> • Solving Problems

3rd Grade Priority:

- I find the answer to a division problem by thinking of the missing factor in a multiplication problem. (3.OA.6)
 - Computational Fluency
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Computational Fluency
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Computational Fluency
- I show and understand that fractions represent equal parts of a whole, where the numerator is a quantity and the denominator is the total number of parts in the whole. (3.NF.1)
 - Calendar Collector
- I label fractions on a number line because I know the space between any two whole numbers on the number line can be thought of as a whole. (3.NF.2a)
 - Number Line
- I show whole numbers as fractions. (3.NF.3c)
 - Number Line

- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Number Line
- I compare two fractions with the same numerator or denominator. (3.NF.3d)
 - Number Line
- I compare fractions using symbols $>$, $<$, $=$ and prove my comparison by using models. (3.NF.3d)
 - Number Line
- I estimate and measure weight (grams and kilograms) and capacity (milliliters and liters) using standard units. (3.MD.2)
 - Solving Problems
- I use four operations to solve one-step word problems involving masses or volumes given the same units (3.MD.2)
 - Solving Problems
- I recognize area as an attribute of plane figures and understand concepts of area measurement. (3.MD.5)
 - Calendar Grid
- I measure areas by counting unit squares (square cm, square m, square in, square ft, and improvise units). (3.MD.6)
 - Calendar Grid
- I find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. (3.MD.7a)
 - Calendar Grid
- I multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning. (3.MD.7b)
 - Calendar Grid

3rd Grade Supporting:

- I use data to create a bar graph or pictograph, including those with scales greater than 1. (3.MD.3)
 - Solving Problems
- I use data from a graph to answer one- and two- step problems. (3.MD.3)
 - Solving Problems
- I can multiply any one-digit whole number by a multiple of 10 (6×20 , 4×70) to solve extended multiplication fact problems and number stories. (3.NBT.3)
 - Calendar Collector
 - Solving Problems
- I solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeter. (3.MD.8)
 - Calendar Grid

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Bridges Unit Pre Assessment

Other assessment options

May include, but are not limited to the following:

- Bridges Unit Observational

<ul style="list-style-type: none"> • Bridges Unit Checkpoints • Bridges Unit Post Assessment 	<p>Assessments</p> <ul style="list-style-type: none"> • Student Work Samples • Classroom Exit Tickets
Digital Tools & Supplementary Resources	
Bridges Intervention ALEKS and Dreambox	

March
Unit Overview: This month, students deepen their understanding of time and data; measurement, area and perimeter; multiplication facts; and fractions mixed numbers, and improper fractions.
Unit Standards
<p>Priority Standards</p> <p>3.OA.B Understand properties of multiplication and the relationship between multiplication and division.</p> <ul style="list-style-type: none"> • 3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) • 3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8. <p>3.OA.C Multiply and divide within 100.</p> <ul style="list-style-type: none"> • 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. <p>3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p> <ul style="list-style-type: none"> • 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations. <p>3.NF.A Develop understanding of fractions as numbers.</p> <ul style="list-style-type: none"> • 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. <ul style="list-style-type: none"> ○ (a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. • 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. <ul style="list-style-type: none"> ○ (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.

- (d) Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $<$, $>$, $=$ and justify the conclusions, eg. by using a visual fraction model.

3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- 3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- 3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.
 - (a) A square with side lengths 1 unit, called “a unit square”, is said to have “1 square unit” of area and can be used to measure area.
 - (b) A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- 3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvise units).
- 3.MD.7 Relate area to the operations of multiplication and division.
 - (a) Find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.
 - (b) Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.
 - (c) Use tiling to show in a concrete case that the area of a rectangle with whole number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
 - (d) Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Supporting Standards

3.MD.B Represent and interpret data.

- 3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

3.MD.D Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- 3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections

Habits of Mind	MP.1 • Solving Problems	MP.6 • Calendar Collector
Reasoning & Explaining	MP.2 • Computational Fluency	MP.3 • Solving Problems
Modeling & Tools	MP.4 • Number Line	MP.5 • Computational Fluency
Seeing Structure & Generalizing	MP.7 • Calendar Grid • Number Line	MP.8 • Calendar Grid • Calendar Collector

3rd Grade Priority:

- I multiply using the Commutative Property (turn-around facts). (3.OA.5)
 - Computational Fluency
- I multiply three 1-digit numbers using the Associative Property. (3.OA.5)
 - Computational Fluency
- I multiply a 2-digit by 1-digit number using the Distributive Property. (3.OA.5)
 - Computational Fluency
- I find the answer to a division problem by thinking of the missing factor in a multiplication problem. (3.OA.6)
 - Computational Fluency
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Computational Fluency
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Computational Fluency
- I label fractions on a number line because I know the space between any two whole numbers on the number line can be thought of as a whole. (3.NF.2a)
 - Number Line
- I show whole numbers as fractions. (3.NF.3c)
 - Number Line
- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Number Line
- I compare two fractions with the same numerator or denominator. (3.NF.3d)
 - Number Line
- I compare fractions using symbols $>$, $<$, $=$ and prove my comparison by using models. (3.NF.3d)
 - Number Line
- I show and tell time on an analog clock to the nearest minute. (3.MD.1)
 - Calendar Grid
- I calculate elapsed time in word problems. (3.MD.1)
 - Calendar Grid
- I recognize area as an attribute of plane figures and understand concepts of area measurement. (3.MD.5)
 - Calendar Collector
- I measure areas by counting unit squares (square cm, square m, square in, square ft, and improvise units). (3.MD.6)

- Calendar Collector
- I find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. (3.MD.7a)
 - Calendar Collector
- I multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning. (3.MD.7b)
 - Calendar Collector
 - Solving Problems
- I use tiling to show in a concrete case that the area of a rectangle with whole number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. (3.MD.7c)
 - Calendar Collector
- I recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (3.MD.7d)
 - Calendar Collector
 - Solving Problems

3rd Grade/Course Supporting:

- I use data to create a bar graph or pictograph, including those with scales greater than 1. (3.MD.3)
 - Calendar Grid
- I use data from a graph to answer one- and two- step problems. (3.MD.3)
 - Calendar Grid
- I solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeter. (3.MD.8)
 - Calendar Collector
 - Solving Problems
-

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Number Corner Checkup #3

Other assessment options

May include, but are not limited to the following:

- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox

April

Unit Overview: This month addresses key skill and concepts for fractions and multiplication/division. The workouts help students develop strategies and understanding through the use of models, discussion, hands-on activities, games, reflection, and problem solving. Students extend and deepen the work they have been doing with fractions, multiplication and division all year.

Unit Standards

Priority Standards

3.OA.A Represent and solve problems involving multiplication and division.

- 3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ? \div 3$, $6 \times 6 = ?$.

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)
- 3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

3.OA.C Multiply and divide within 100.

- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

3.NF.A Develop understanding of fractions as numbers.

- 3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - (a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- 3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (a) Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.
 - (b) Recognize and generate simple equivalent fractions eg. $\frac{1}{2}$ equals $\frac{2}{4}$, $\frac{4}{6}$ equals $\frac{2}{3}$. Explain why the fractions are equivalent eg. by using a visual fraction model.
 - (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.

3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes,

and masses of objects.

- 3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Supporting Standards

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- 3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none"> • Calendar Collector 	MP.6 <ul style="list-style-type: none"> • Number Line • Computational Fluency
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> • Calendar Grid 	MP.3 <ul style="list-style-type: none"> • Number Line
Modeling & Tools	MP.4 <ul style="list-style-type: none"> • Solving Problems 	MP.5 <ul style="list-style-type: none"> • Calendar Collector • Number Line
Seeing Structure & Generalizing	MP.7 <ul style="list-style-type: none"> • Calendar Grid • Computational Fluency 	MP.8 <ul style="list-style-type: none"> • Calendar Grid

3rd Grade Priority:

- I find the missing number in a multiplication and/or division number sentence (3.OA.4)
 - Computational Fluency
 - Solving Problems
- I multiply using the Commutative Property (turn-around facts). (3.OA.5)
 - Computational Fluency
 - Solving Problems
- I multiply three 1-digit numbers using the Associative Property. (3.OA.5)
 - Computational Fluency
 - Solving Problems
- I multiply a 2-digit by 1-digit number using the Distributive Property. (3.OA.5)
 - Solving Problems
- I find the answer to a division problem by thinking of the missing factor in a multiplication problem. (3.OA.6)
 - Computational Fluency
 - Solving Problems
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Computational Fluency

- Solving Problems
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Computational Fluency
- I show and understand that fractions represent equal parts of a whole, where the numerator is a quantity and the denominator is the total number of parts in the whole. (3.NF.1)
 - Calendar Grid
 - Calendar Collection
 - Number Line
- I label fractions on a number line because I know the space between any two whole numbers on the number line can be thought of as a whole. (3.NF.2a)
 - Calendar Grid
 - Number Line
- I understand two fractions are equal if they are the same size or one the same point on a number line. (3.NF.3a)
 - Calendar Grid
 - Number Line
- I recognize, write/show, and explain simple equivalent fractions. (3.NF.3b)
 - Calendar Grid
 - Calendar Collector
 - Number Line
- I show whole numbers as fractions. (3.NF.3c)
 - Calendar Grid
 - Calendar Collector
 - Number Line
- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Calendar Grid
 - Calendar Collector
 - Number Line
- I show and tell time on an analog clock to the nearest minute. (3.MD.1)
 - Calendar Collector
- I calculate elapsed time in word problems. (3.MD.1)
 - Calendar Collector

3rd Grade/Course Supporting:

- I can multiply any one-digit whole number by a multiple of 10 (6×20 , 4×70) to solve extended multiplication fact problems and number stories. (3.NBT.3)
 - Computational Fluency

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- None

Other assessment options

May include, but are not limited to the following:

- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

May/June

Unit Overview: Workouts this month review and extend many key third grade skills and concepts, including: fractions, multiplication facts, and properties of multiplication.

Unit Standards

Priority Standards

3.OA.A Represent and solve problems involving multiplication and division.

- **3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.
- **3.OA.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ? \div 3$, $6 \times 6 = ?$.

3.OA.B Understand properties of multiplication and the relationship between multiplication and division.

- **3.OA.5** Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)
- **3.OA.6** Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

3.OA.C Multiply and divide within 100.

- **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- **3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain them using properties of operations.

3.NF.A Develop understanding of fractions as numbers.

- **3.NF.2** Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - (a) Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- **3.NF.3** Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - (b) Recognize and generate simple equivalent fractions eg. $\frac{1}{2}$ equals $\frac{2}{4}$, $\frac{4}{6}$ equals $\frac{2}{3}$. Explain why the fractions are equivalent eg. by using a visual fraction model.

- (c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.

3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- **3.MD.5** Recognize area as an attribute of plane figures and understand concepts of area measurement.
 - (a) A square with side lengths 1 unit, called “a unit square”, is said to have “1 square unit” of area and can be used to measure area.
 - (b) A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- **3.MD.7** Relate area to the operations of multiplication and division.
 - (a) Find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.
 - (d) Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Supporting Standards

3.MD.B Represent and interpret data.

- **3.MD.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

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

- **3.G.2** Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.

3.NBT.A Use place value understanding and properties of operations, and identify and explain patterns in arithmetic.

- **3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Learning Targets

3rd Grade Priority:

Mathematical Practice Standard Connections		
Habits of Mind	MP.1 <ul style="list-style-type: none"> ● Solving Problems 	MP.6 <ul style="list-style-type: none"> ● Computational Fluency ● Number Line
Reasoning & Explaining	MP.2 <ul style="list-style-type: none"> ● Solving Problems 	MP.3 <ul style="list-style-type: none"> ● Calendar Collector ● Number Line ● Solving Problems
Modeling & Tools	MP.4 <ul style="list-style-type: none"> ● Calendar Grid 	MP.5 <ul style="list-style-type: none"> ● (none)
Seeing Structure	MP.7	MP.8

& Generalizing

- Computational Fluency

- Calendar Grid
- Calendar Collector

3rd Grade Priority:

- I understand division by thinking about how one group can be divided into smaller groups. (3.OA.2)
 - Calendar Grid
 - Solving Problems
- I find the missing number in a multiplication and/or division number sentence (3.OA.4)
 - Computational Fluency
 - Solving Problems
- I multiply using the Commutative Property (turn-around facts). (3.OA.5)
 - Computational Fluency
 - Solving Problems
- I multiply three 1-digit numbers using the Associative Property. (3.OA.5)
 - Computational Fluency
 - Solving Problems
- I multiply a 2-digit by 1-digit number using the Distributive Property. (3.OA.5)
 - Computational Fluency
 - Solving Problems
- I find the answer to a division problem by thinking of the missing factor in a multiplication problem. (3.OA.6)
 - Computational Fluency
 - Solving Problems
- I easily and quickly multiply and/or divide within 100 from memory. (3.OA.7)
 - Calendar Grid
 - Calendar Collector
 - Computational Fluency
 - Solving Problems
- I identify patterns in addition and multiplication tables and explain them using what I know about how numbers work. (3.OA.9)
 - Calendar Grid
 - Calendar Collector
 - Computational Fluency
- I label fractions on a number line because I know the space between any two whole numbers on the number line can be thought of as a whole. (3.NF.2a)
 - Calendar Grid
 - Number Line
- I understand two fractions are equal if they are the same size or one the same point on a number line. (3.NF.3a)
 - Number Line
- I recognize, write/show, and explain simple equivalent fractions. (3.NF.3b)
 - Calendar Grid
 - Number Line
- I show whole numbers as fractions. (3.NF.3c)
 - Calendar Grid
 - Number Line

- I recognize fractions that are equal to whole numbers. (3.NF.3c)
 - Calendar Grid
 - Number Line
- I recognize area as an attribute of plane figures and understand concepts of area measurement. (3.MD.5)
 - Calendar Grid
- I find the area of a rectangle with whole number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. (3.MD.7a)
 - Calendar Grid
- I recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. (3.MD.7d)
 - Calendar Grid

3rd Grade Supporting:

- I use data to create a bar graph or pictograph, including those with scales greater than 1. (3.MD.3)
 - Calendar Collector
- I use data from a graph to answer one- and two- step problems. (3.MD.3)
 - Calendar Collector
- I divide shapes into equal parts with equal areas and show these parts as fractions. (3.G.2)
 - Calendar Grid

Assessment Evidence

Performance Assessment Options

May include, but are not limited to the following:

- Number Corner Checkup #4

Other assessment options

May include, but are not limited to the following:

- Student Work Samples
- Classroom Exit Tickets

Digital Tools & Supplementary Resources

Bridges Intervention
ALEKS and Dreambox