

Select a Course:	Math Grade 3
Teacher:	CORE Math Grade 3
Course:	Math Grade 3
Year:	2016-17
Months:	- All -

August

Unit 1: Addition & Subtraction Applications (bar graphs, time, perimeter) 4-5 Week Time Frame

Enduring Understandings

Essential Questions

Standards

Knowledge & Skills

Academic Language

Information can be represented in bar graph and picture graph form. These graphs can be used to help us solve one- and two- step math problems.

Elapsed time is the interval of time, given a specific unit, from a starting time to an ending time.

Perimeter and addition are related.

A linear unit is used to measure perimeter.

How can understanding the relationship between addition and subtraction aid us in problem solving?

How do we use data represented in bar graphs and picture graphs to make sense of the world around us?

How is time represented and measured?

How does elapsed time help us to plan and organize real life responsibilities?

How does knowing the distance around objects (perimeter) support us in the real world?

3.MD.A.1 - Solve problems involving measurement and estimation ~ 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.B.3 - Represent and interpret data ~ 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.8 - Geometric measurement: recognize perimeter ~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.

3.OA.D.8 - Solve problems involving the four operations, and identify and explain patterns in arithmetic ~ 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

CCSS.Math.Practice.MP1 - Make sense of problems and persevere in solving them.

CCSS.Math.Practice.MP4 - Model with mathematics.

CCSS.Math.Practice.MP5 - Use appropriate tools strategically.

Addition and subtraction computation and problem solving strategies.

A.M. represents time from midnight to noon.

P.M. represents time from noon to midnight.

60min=1hour.

Tell and write time to the nearest minute. (3.MD.1)

Solve word problems involving elapsed time. (3.MD.1)

Use a number line or clocks to model elapsed time and record calculations. (3.MD.1)

Draw and label a picture graph and bar graph to represent a data set (including the scale, title, categories, etc.). (3.MD.3)

Solve one- and two-step "how many more" and "how many less" problems using information presented in bar graphs. (3.MD.3)

- place value
- whole number
- elapsed time
- model
- scale (of graph)
- add (addition)
- sum
- subtract (subtraction)
- graph
- picture graph
- bar graph
- perimeter

 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths. (3.MD.8)

 Solve real world and mathematical problems involving perimeters of polygons, including finding an unknown side length. (3.MD.8)

 **Unit 2: Introduction to Area** 2-3 Week Time Frame

Enduring Understandings ✕

Essential Questions ✕

Standards ✕

Knowledge & Skills ✕

Academic Language ✕

 Everyday objects have a variety of attributes, each of which can be measured in many ways.

 Area and addition are related.

 Perimeter and area are related.

 How can understanding the relationship between addition and area aid in problem solving?

 How are area and perimeter measured?

3.MD.C.5 - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ Recognize area as an attribute of plane figures and understand concepts of area measurement.

3.MD.C.6 - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).

3.MD.C.5a - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.

3.MD.C.5b - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ 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.D.8 - Geometric measurement: recognize perimeter ~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.

CCSS.Math.Practice.MP4 - Model with mathematics.

CCSS.Math.Practice.MP5 - Use appropriate tools strategically.

CCSS.Math.Practice.MP6 - Attend to

 Addition problem solving strategies.

 A square unit is used to measure area.

 Recognize areas as an attribute of plane figures and understand concepts of area measurement. (3.MD.5)

 Measure areas by counting unit squares (square cm, square m, square in., square ft., and improvised units). (3.MD.6)

 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. (3.MD.8)

 attribute

 perimeter

 area

 square unit

 square cm

 square m

 square in.

 square ft.

 nonstandard units

 array

			precision. CCSS.Math.Practice.MP8 - Look for and express regularity in repeated reasoning.		
September	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
October	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
November	Unit 3: Multiplication & Division Concepts 6-8 Week Time Frame				
	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
	<ul style="list-style-type: none"> 🏠 Multiplication and division are related operations. 🏠 The operations of multiplication and division are related to Area. 🏠 Real world situations involving equal groups and area can be represented with multiplication and division equations and models. 	<ul style="list-style-type: none"> 🏠 How will modeling with equal groups help us in understanding multiplication situations? 🏠 How does modeling division problems help in problem solving? 🏠 How can the strategy of breaking apart (decomposing) numbers make multiplication easier to understand? 🏠 How can we use multiplication to solve division problems? 🏠 What are some strategies that can make multiplication and division easier to understand? 	<p>3.OA.A.1 - Represent and solve problems involving multiplication and division ~ Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.</p> <p>3.OA.A.2 - Represent and solve problems involving multiplication and division ~ 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.</p> <p>3.OA.A.4 - Represent and solve problems involving multiplication and division ~ Determine the unknown whole number in a multiplication or division equation relating three whole numbers.</p> <p>3.OA.B.5 - Understand properties of multiplication and the relationship between multiplication and division ~ Apply properties of operations as strategies to multiply and divide.</p> <p>3.OA.B.6 - Understand properties of multiplication and the relationship between multiplication and division ~ Understand division as an unknown-factor problem.</p> <p>3.OA.C.7 - Multiply and divide within 100 ~ 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>	<ul style="list-style-type: none"> 🏠 Multiplication and division facts. 🏠 Interpret products of whole numbers as the total number of objects in "so many" groups of "so many" objects each. (3.OA.1) 🏠 Interpret whole-number quotients of whole numbers as the number of objects in each share or as a number of equal shares. (3.OA.2) 🏠 Determine the unknown whole number in a multiplication and division equation relating three whole numbers. (3.OA.4) 🏠 Apply properties of operations as strategies to multiply and divide. (3.OA.5) 🏠 Understand division as an unknown-factor problem. (3.OA.6) 🏠 Fluently multiply and divide within 100, using various strategies. (3.OA.7) 🏠 Identify arithmetic 	<ul style="list-style-type: none"> 🏠 multiplication 🏠 decomposing 🏠 array 🏠 multiple 🏠 product 🏠 factor 🏠 divisor 🏠 dividend 🏠 quotient 🏠 remainder 🏠 equal groups 🏠 equal shares 🏠 fact family/related fact

3.OA.D.9 - Solve problems involving the four operations, and identify and explain patterns in arithmetic ~ Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

CCSS.Math.Practice.MP1 - Make sense of problems and persevere in solving them.

CCSS.Math.Practice.MP2 - Reason abstractly and quantitatively.

CCSS.Math.Practice.MP4 - Model with mathematics.

CCSS.Math.Practice.MP7 - Look for and make use of structure.

patterns (including patterns in the addition table or multiplication table). (3.OA.9)

Explain arithmetic patterns using properties of operations. (3.OA.9)

Unit 4: Multiplication & Division Applications 6-8 Week Time Frame

Enduring Understandings ✕

Essential Questions ✕

Standards ✕

Knowledge & Skills ✕

Academic Language ✕

- Area is additive.
- Modeling multiplication and division problems based upon their problem-solving structure can help in finding solutions.
- There is a relationship between area and multiplication.
- Properties of Operations will assist in problem-solving situations.
- Metric measurement units are related to place value concepts/multiples of 10.

- How can modeling multiplication and divisions problems help in finding their solutions?
- What is the relationship between area and multiplication?
- What are the Properties of Operations?
- How does metric measurement connect to multiples of 10?

- 3.MD.A.2 - Solve problems involving measurement and estimation ~ Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).1 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.7a - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ 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.C.7b - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ 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.C.7c - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~ 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.C.7d - Geometric measurement: understand concepts of area and relate area to multiplication and to addition ~

- Multiplication and division facts.
- Problem-solving structures for area/arrays and for equal groups.
- Metric measurements units for liquid volume and weight.
- Use drawings and equations with a symbol for the unknown number to represent the problem. (3.OA.3)
- Relate area to the operations of multiplication and addition. (3.MD.7)
- 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 $a \times c$. (3.MD.7)
- Use area models to represent the distributive property in mathematical reasoning. (3.MD.7)
- Solve two-step

- multiplication
- division
- array
- area
- equal groups
- equal shares
- multiple
- product
- factor
- divisor
- dividend
- quotient
- remainder
- fact family
- unknown
- strategies
- reasonableness
- mental computation
- operation

		<p>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.</p> <p>3.NBT.A.3 - Use place value understanding and properties of operations to perform multi-digit arithmetic ~ 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.</p> <p>3.OA.A.3 - Represent and solve problems involving multiplication and division ~ 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.</p> <p>3.OA.C.7 - Multiply and divide within 100 ~ 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> <p>3.OA.D.8 - Solve problems involving the four operations, and identify and explain patterns in arithmetic ~ 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</p> <p>CCSS.Math.Practice.MP1 - Make sense of problems and persevere in solving them.</p> <p>CCSS.Math.Practice.MP3 - Construct viable arguments and critique the reasoning of others.</p> <p>CCSS.Math.Practice.MP4 - Model with mathematics.</p> <p>CCSS.Math.Practice.MP7 - Look for and make use of structure.</p> <p>CCSS.Math.Practice.MP8 - Look for and express regularity in repeated reasoning.</p>	<p>word problems using the four operations. (3.OA.8)</p> <p>Represent these problems using equations with a letter standing for the unknown quantity. (3.OA.8)</p> <p>Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (3.OA.8)</p> <p>Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (3.MD.2)</p> <p>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.2)</p> <p>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. (3.OA.7)</p> <p>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.NBT.3)</p>	<p>estimation</p> <p>patterns</p> <p>gram</p> <p>kilogram</p> <p>liter</p>
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December	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
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January	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
February	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
March	<p>Unit 5: Fractions 6-8 Week Time Frame</p>				
	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
	<p>U The size of the fractional part is relative to the size of the whole.</p> <p>U Fractions represent quantities where a whole is divided into equal-sized parts using models, manipulatives, words, and/or number lines.</p> <p>U Fractions can be used as a tool to understand and model quantities and relationships.</p> <p>U Fractions are composed of unit fractions.</p> <p>U Fractions that represent equal-sized quantities are equivalent.</p>	<p>U What do fractions represent?</p> <p>U What makes fractions equivalent?</p>	<p>3.MD.B.4 - Represent and interpret data ~ 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.</p> <p>3.NF.A.1 - Develop understanding of fractions as numbers ~ 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 $1/b$.</p> <p>3.NF.A.2 - Develop understanding of fractions as numbers ~ Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>3.NF.A.3 - Develop understanding of fractions as numbers ~ Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p> <p>3.NF.A.2a - Develop understanding of fractions as numbers ~ 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.</p> <p>3.NF.A.2b - Develop understanding of fractions as numbers ~ 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.</p> <p>3.NF.A.3a - Develop understanding of fractions as numbers ~ Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.</p>	<p>U Divide shapes into parts with equal areas. (3.G.2)</p> <p>U Represent the area of each part as a unit fraction. (3.G.2)</p> <p>U Represent a whole using unit fractions. (3.NF.1)</p> <p>U Represent a fraction as the composition of unit fractions. (3.NF.1)</p> <p>U Divide a number line diagram into equal segments and label the appropriate fractional parts. (3.NF.2)</p> <p>U Model equivalent fractions using manipulatives, pictures, or number line diagrams and explain in words why the fractions are equivalent. (3.NF.3)</p> <p>U Represent whole numbers as fractions using area models, number line diagrams, and numbers. (3.NF.3)</p> <p>U Compare two fractions with the same numerator or same denominator using visual models, symbols and words. (3.NF.3)</p> <p>U Generate</p>	<p>U partition</p> <p>U equal parts</p> <p>U fraction</p> <p>U equal distance</p> <p>U equivalent</p> <p>U equivalence</p> <p>U reasonable</p> <p>U denominator</p> <p>U numerator</p> <p>U justify</p> <p>U unit fraction</p> <p>U sixth</p> <p>U eighth</p>

	<p>3.NF.A.3b - Develop understanding of fractions as numbers ~ Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.</p> <p>3.NF.A.3c - Develop understanding of fractions as numbers ~ 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.</p> <p>3.NF.A.3d - Develop understanding of fractions as numbers ~ 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 $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>3.G.A.2 - Reason with shapes and their attributes ~ Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.</p> <p>CCSS.Math.Practice.MP2 - Reason abstractly and quantitatively.</p> <p>CCSS.Math.Practice.MP4 - Model with mathematics.</p> <p>CCSS.Math.Practice.MP5 - Use appropriate tools strategically.</p> <p>CCSS.Math.Practice.MP7 - Look for and make use of structure.</p>	<p>measurement data by measuring lengths to the $1/4$ and $1/2$ inch. (3.MD.4)</p> <p>Show data in a line plot given a scale in $1/2$, $1/4$, or whole numbers. (3.MD.4)</p>
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Unit 6: Geometry 1-2 Week Time Frame

Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
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Objects can be described and compared using their geometric attributes.

Figures are categorized according to their attributes.

How can 2-dimensional shapes be described?

How are geometric figures constructed?

3.G.A.1 - Reason with shapes and their attributes ~ 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.

CCSS.Math.Practice.MP1 - Make sense of problems and persevere in solving them.

CCSS.Math.Practice.MP6 - Attend to precision.

CCSS.Math.Practice.MP7 - Look for and

Geometric shapes that represent quadrilaterals.

Shapes are categorized.

Quadrilaterals are two-dimensional.

Analyze, compare, and classify 2-dimensional shapes by their properties. (3.G.1)

Draw shapes with pre-specified attributes. (3.G.1)

quadrilateral

rhombus

rectangle

square

attribute

geometric

2-dimensional

plane

make use of structure.

 Investigate, describe, and reason about decomposing and composing quadrilaterals to make other quadrilaterals. (3.G.1)

 Rotate arrays physically and mentally to view them as compositions of smaller arrays. (3.G.1)

 **Unit 7: Addition & Subtraction within 1,000** 4-5 Week Time Frame

Enduring Understandings ✕

Essential Questions ✕

Standards ✕

Knowledge & Skills ✕

Academic Language ✕

 Rounding is a method of approximating an answer.

 How is rounding an efficient method of estimating?

 Why and when would we round?

 How does rounding help assess the reasonableness of a solution?

3.MD.B.3 - Represent and interpret data ~ 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.8 - Geometric measurement: recognize perimeter ~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.

3.NBT.A.1 - Use place value understanding and properties of operations to perform multi-digit arithmetic ~ Use place value understanding to round whole numbers to the nearest 10 or 100.

3.NBT.A.2 - Use place value understanding and properties of operations to perform multi-digit arithmetic ~ 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.OA.D.8 - Solve problems involving the four operations, and identify and explain patterns in arithmetic ~ 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

CCSS.Math.Practice.MP2 - Reason

 When to round in a real-life situation.

 Add and subtract within 1000.

 Model algorithms based upon place value, properties of operations and/or the relationship between adding and subtracting.

 place value

 round

 addition

 add

 addend

 sum

 subtraction

 subtract

 difference

 strategies

 properties

		<p>abstractly and quantitatively.</p> <p>CCSS.Math.Practice.MP4 - Model with mathematics.</p> <p>CCSS.Math.Practice.MP7 - Look for and make use of structure.</p>		
April	<p>Enduring Understandings ✕</p>	<p>Essential Questions ✕</p>	<p>Standards ✕</p>	<p>Knowledge & Skills ✕</p> <p>Academic Language ✕</p>
May	<p> rounding/add and subtract within 1000/ quadrilaterals</p>			
	<p>Enduring Understandings ✕</p>	<p>Essential Questions ✕</p> <p>3.G.A.1 - Reason with shapes and their attributes ~ 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.</p> <p>3.G.A.2 - Reason with shapes and their attributes ~ Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.</p> <p>3.NBT.A.1 - Use place value understanding and properties of operations to perform multi-digit arithmetic ~ Use place value understanding to round whole numbers to the nearest 10 or 100.</p> <p>3.NBT.A.2 - Use place value understanding and properties of operations to perform multi-digit arithmetic ~ 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.</p> <p>3.NBT.A.3 - Use place value understanding and properties of operations to perform multi-digit arithmetic ~ 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.</p> <p>3.OA.D.8 - Solve problems involving the four operations, and identify and explain patterns in arithmetic ~ 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</p>	<p>Standards ✕</p>	<p>Knowledge & Skills ✕</p> <p>Academic Language ✕</p>

			<p>including rounding.3</p> <p>3.OA.D.9 - Solve problems involving the four operations, and identify and explain patterns in arithmetic ~ Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.</p> <p>CCSS.Math.Practice.MP1 - Make sense of problems and persevere in solving them.</p> <p>CCSS.Math.Practice.MP2 - Reason abstractly and quantitatively.</p> <p>CCSS.Math.Practice.MP3 - Construct viable arguments and critique the reasoning of others.</p> <p>CCSS.Math.Practice.MP4 - Model with mathematics.</p> <p>CCSS.Math.Practice.MP5 - Use appropriate tools strategically.</p> <p>CCSS.Math.Practice.MP6 - Attend to precision.</p> <p>CCSS.Math.Practice.MP7 - Look for and make use of structure.</p> <p>CCSS.Math.Practice.MP8 - Look for and express regularity in repeated reasoning.</p>		
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June	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕
July	Enduring Understandings ✕	Essential Questions ✕	Standards ✕	Knowledge & Skills ✕	Academic Language ✕