

Units of Study

<u>Grade 3 Mathematics</u>	
<u>Unit 1</u>	NUMBER SENSE: PLACE VALUE, ROUNDING, ADDITION, AND SUBTRACTION (Duration: 14 Days) August 23-September 10
<u>Unit 2</u>	MULTIPLICATION, DIVISION (<u>UNIT 2.5</u> - AREA AND PERIMETER) (Duration: 27 days) September 13-October 2
<u>Unit 2.5</u>	AREA AND PERIMETER (Duration: 16 days) October22-November 15
<u>Unit 3</u>	WORD PROBLEMS USING ALL FOUR OPERATIONS (Duration: 15 days)November 16-December 9
<u>Unit 4</u>	NUMBER SENSE: FRACTIONS (Duration: 27 days)December 10- January 31
<u>Unit 5</u>	MEASUREMENT AND DATA (Duration: 41 days) February1-April 7
<u>Unit 6</u>	GEOMETRY (Duration: 15 days) April 8-April 29

Green: Priority Standards
Grey: Additional Standards

Pink: Supporting Standards
Orange: Standards Not in Grade Level

	UNIT		1	2	3	4	5	6
Standards	NS	1	X					
		2	X					
		3				X		
		4				X		
		5				X		
		6				X		
		7				X		
		8				X		
		9	X					
	C	1	X					
		2		X		,		
		3		X				
		4		X				
		5		X				
		6		X				
	AT	1	X					
		2	X		X			
		3			X			At3 L20/21
		4		X				
		5		X				
		6		X				
	G	1						G2 L33B

		2						G2 L31A/32
		3						G2 L31A
		4				X		
	M	1					X	At1/ M5 L22/ 23A
		2					X	M5 L23B
		3					X	At3 L20/21
		4					X	At3 L31B
		5		X				
		6		X				
		7		X				
	DA	1					X	L24
		2					X	L25&26

Unit 1- PLACE VALUE, ROUNDING (Duration: 14 Days) August 23-September 10

<p><u>General Description of the Unit</u></p> <p>In this unit we will be reading and writing whole numbers up to 10,000 in various forms. We will use place value to compare whole numbers and to round numbers to the tens or the hundreds. We will also be adding and subtracting numbers fluently up to 1,000. Along with being able to add fluently, we will also be solving real world problems using addition and subtraction.</p>	
<p><u>Priority Standards</u></p> <ul style="list-style-type: none"> • 3.NS.1 - Read and write whole numbers up to 10,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 10,000. • 3.C.1 - Add and subtract whole numbers fluently within 1000. • 3.AT.1 - Solve real-world problems involving addition and subtraction of whole numbers within 1000 (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). 	<p><u>Supporting Standards</u></p> <ul style="list-style-type: none"> • 3.NS.2 - Compare two whole numbers up to 10,000 using $>$, $=$, and $<$ symbols. • 3.NS.9 - Use place value understanding to round 2- and 3-digit whole numbers to the nearest 10 or 100. • 3.AT.2 - Solve real-world problems involving whole number multiplication and division within 100 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><u>Proficiency Scales</u></p> <p><u>3.NS.1</u> <u>3.C.1</u> <u>3.AT.1</u></p>	<p><u>Tiered Assessments-</u></p> <p><u>3.NS.1</u> <u>3.C.1</u> <u>3.AT.1</u></p>
<p><u>Enduring Understandings</u></p> <ul style="list-style-type: none"> • Digits in a number are related to each other and place value relationships can help simplify mathematical operations and equations. • Understanding place value can lead to number sense and efficient strategies for computing with numbers. 	<p><u>Essential Questions</u></p> <ul style="list-style-type: none"> • How would you describe 1, 258 to someone? What does that mean to a person? • What could you compare 2,368 to in your world? • What strategies would you use to solve a real-world problem?

<ul style="list-style-type: none"> Place value can be used to determine if an answer makes sense based upon estimation. 		
<p><u>Key Concepts</u></p> <ul style="list-style-type: none"> I can read and write numbers to 10,000. I can write numbers in word form. I can write numbers in expanded form. I can use models to represent numbers. I can add numbers within 1000. I can subtract numbers within 1000. I can solve real-world problems involving addition within 1000. I can solve real-world problems involving subtraction within 1000. 	<p><u>Related Concepts</u></p> <ul style="list-style-type: none"> I can compare numbers to 10,000 using greater than, less than, and equal to symbols. I can round numbers to the nearest 10. I can round numbers to the nearest 100. I can solve real-world multiplication problems that involve arrays. I can solve real-world multiplication problems that involve grouping. I can solve real-world multiplication problems that involve measurements. I can solve real-world division problems that involve arrays. I can solve real-world division problems that involve grouping. I can solve real-world division problems that involve measurements. 	<p><u>Assessment Vocabulary</u></p> <ul style="list-style-type: none"> Standard form Word form Expanded form Greater than Less than Equal Round Place value Addend Sum Difference Array Product Quotient
<p><u>Mathematical Processes</u></p> <ul style="list-style-type: none"> PS.6: Attend to precision. 	<p><u>Employability Skills</u></p> <ul style="list-style-type: none"> 3-5.LS.2 Communicate with others by applying a variety of speaking skills. 	

	<ul style="list-style-type: none">● 3-5.LS.3 Communicate with others using a variety of technology.● 3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations.● 3-5.WE.4 Complete tasks or activities with prompting and guidance from adult educators.● 3-5.WE.5 Demonstrate perseverance to complete tasks and activities.● 3-5.WE.6 Begin to take steps to organize and prioritize tasks.	
<u>SEL Indicators</u> <ul style="list-style-type: none">● SEL 2C - Students demonstrate self-efficacy.● SEL 4A - Students demonstrate communication skills.● SEL 7A - Students demonstrate a willingness to learn, especially when faced with challenges or following a failure.		
<u>Resources</u>		
<u>Textbook</u> Lessons 8a & 8b (8Days) Lesson 9 (6 days)	<u>Digital</u> <ul style="list-style-type: none">● Open Middle- Rounding/Subtraction● Open Middle- Subtraction● Open Middle- Addition	<u>Manipulatives</u> <u>Virtual Manipulatives</u> <ul style="list-style-type: none">● Base ten blocks● unifix cubes● snap cubes● hundreds chart
<u>Reflection</u>		
<u>Data Analysis</u>		<u>Celebrations/Changes</u>

Unit 2- MULTIPLICATION, DIVISION AND AREA (Approximate Duration: 27 days September 13-October 21
if L27/28 & 30 moved unit 2.5)

General Description of the Unit

In this unit we will be learning the concept of multiplication and division using various strategies (ex. equal groups, sharing, or jumps on a number line). Along with learning the concept of multiplication and division, we will also be covering fact families- the correlation between multiplication and division.

Priority Standards

- 3.C.2 Represent the concept of multiplication of whole numbers with the following models: equal-sized groups, arrays, area models, and equal "jumps" on a number line. Understand the properties of 0 and 1 in multiplication.
- 3.C.3 Represent the concept of division of whole numbers with the following models: partitioning, sharing, and an inverse of multiplication. Understand the properties of 0 and 1 in division.
- 3.AT.5 Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

Supporting Standards

- 3.C.5 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.AT.6 Create, extend, and give an appropriate rule for number patterns using multiplication within 100.
- 3.C.4 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).
- 3.AT.4 Interpret a multiplication equation as equal groups (e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each). Represent verbal statements of equal groups as multiplication equations.

			<ul style="list-style-type: none"> Additional: 3.C.6 Demonstrate fluency with mastery of multiplication facts and corresponding division facts of 0 to 10
<u>Proficiency Scales</u> 3.C.2 3.C.3 3.AT.5			<u>Tiered Assessments</u> 3.C.2 3.C.3 3.AT.5
<u>Enduring Understandings</u> <ul style="list-style-type: none"> Multiplication and division are inverse operations. There are patterns in arithmetic and the larger world. Multiplication is repeated addition, related to division, and can be used to solve story problems and find area. For a given set of numbers, there are relationships that are always true called properties, and these are the rules that govern arithmetic. 			<u>Essential Questions</u> <ul style="list-style-type: none"> Is there more than one way of multiplying to get the same product? How can the same array represent both multiplication and division? How can you use multiplication to divide? What are strategies for learning multiplication facts? How does understanding patterns, sequences, and functions help us to solve problems and find area?
<u>Key Concepts</u> <ul style="list-style-type: none"> I can use arrays to demonstrate multiplication. I can use groups to demonstrate multiplication. I can use area models to demonstrate multiplication. I can “jump” to demonstrate multiplication on a number line. 	<u>Related Concepts</u> <ul style="list-style-type: none"> I can use the relationship between multiplication and division operations to solve multiplication and division problems within 100. I can create multiplication number patterns within 100. I can extend multiplication number patterns within 100. 	<u>Assessment Vocabulary</u> <ul style="list-style-type: none"> Array Area model Multiplicative Identity Property Product Quotient Divisor Dividend Factor Multiple 	

<ul style="list-style-type: none">• I can show that multiplying any number by 0, the product is always 0.• I can show that multiplying any number by 1 will produce the same number.• I can use partitioning to solve division problems.• I can use sharing to solve division problems.• I can show how division is the inverse of multiplication.• I can demonstrate that when dividing 0 by an number, the quotient is 0.• I can demonstrate that when dividing any number by 1, the quotient is the original number.• I can solve for the missing number in a multiplication equation that relates 3 numbers.• I can solve for the missing number in a division equation that relates 3 numbers.	<ul style="list-style-type: none">• I can explain multiplication number patterns within 100.• I can explain that a quotient is the number of groups a number can be shared into.• I can solve real-world problems that are two steps by using addition, subtraction, multiplication, or division.• I can represent a multiplication problem by creating equal groups.	<ul style="list-style-type: none">• Dividend• Divisor• Quotient• Partition• Multiplicative Identity Property• Product• Factor• Array• Factor• Dividend• Divisor• Product• Quotient• Equation
<p><u>Mathematical Processes</u></p> <ul style="list-style-type: none">• PS.4: Model with mathematics.• PS.8: Look for and express regularity in repeated reasoning	<p><u>Employability Skills</u></p> <ul style="list-style-type: none">• 3-5.LS.2 Communicate with others by applying a variety of speaking skills.	

	<ul style="list-style-type: none"> • 3-5.LS.3 Communicate with others using a variety of technology. • 3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations. • 3-5.WE.4 Complete tasks or activities with prompting and guidance from adult educators. • 3-5.WE.5 Demonstrate perseverance to complete tasks and activities. • 3-5.WE.6 Begin to take steps to organize and prioritize tasks. 				
<u>SEL Indicators</u> <ul style="list-style-type: none"> • SEL 1B - Students manage transitions and changes in routine. • SEL 2C - Students demonstrate self-efficacy. • SEL 4A - Students demonstrate communication skills. 					
<u>Resources</u>					
<p style="text-align: center;"><u>Textbook</u></p> <p>L1 (4 days),2(5 days),3 (5 days),5(5 days), L4(3days),5(5 days),6(5 days) L1(4 days) L6(5 days)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><u>Digital</u></th> <th style="text-align: center;"><u>Manipulatives</u> <u>Virtual Manipulatives</u></th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Area/Perimeter Problem Solving Task- Level A • Multiplication Patterns Task- Level A (Level B Advanced) • Multiplication/Division Patterns with Multiples/Remainders • Math Fact Memory Game </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Geoboards • Math Cubes • Graph Paper • Book / “Perimeter,Area, & Volume” by David Adler • Book / “Spaghetti & Meatballs for All” by Marilyn Burns </td> </tr> </tbody> </table>	<u>Digital</u>	<u>Manipulatives</u> <u>Virtual Manipulatives</u>	<ul style="list-style-type: none"> • Area/Perimeter Problem Solving Task- Level A • Multiplication Patterns Task- Level A (Level B Advanced) • Multiplication/Division Patterns with Multiples/Remainders • Math Fact Memory Game 	<ul style="list-style-type: none"> • Geoboards • Math Cubes • Graph Paper • Book / “Perimeter,Area, & Volume” by David Adler • Book / “Spaghetti & Meatballs for All” by Marilyn Burns
<u>Digital</u>	<u>Manipulatives</u> <u>Virtual Manipulatives</u>				
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	<ul style="list-style-type: none"> • Multiplication Arrays/Area Game 	<ul style="list-style-type: none"> • Hundreds Chart
<u>Reflection</u>		
<u>Data Analysis</u>		<u>Celebrations/Changes</u>

Unit 2.5- AREA AND PERIMETER (Approximate Duration: 16 days) October22-November 15

<u>General Description of the Unit</u>

<p>This unit will explore area and perimeter as it relates to addition and multiplication. It will not address partitioning, as it will be addressed in another unit.</p>		
<p><u>Priority Standards</u></p> <ul style="list-style-type: none"> 3.M.5 Find the area of a rectangle with whole-number side lengths by modeling with unit squares, and show that the area is the same as would be found by multiplying the side lengths. Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters. 	<p><u>Supporting Standards</u></p> <ul style="list-style-type: none"> 3.M.6 Multiply side lengths to find areas of rectangles with whole-number side lengths to solve real-world problems and other mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. 3.M.7 Find perimeters of polygons given the side lengths or by finding an unknown side length. 	
<p><u>Proficiency Scales</u> 3.M.5</p>	<p><u>Tiered Assessments</u> 3.M.5</p>	
<p><u>Enduring Understandings</u></p> <ul style="list-style-type: none"> Area and addition are related. Perimeter and area are related. Multiplication is repeated addition, related to division, and can be used to solve story problems and find area. 	<p><u>Essential Questions</u></p> <ul style="list-style-type: none"> What does area mean? What are different ways to find the area of a shape? How can perimeter be measured and found? How can understanding the relationship between addition and area aid in problem solving? 	
<p><u>Key Concepts</u></p> <ul style="list-style-type: none"> I can use unit squares to find the area of a rectangle. I can demonstrate that multiplying the side lengths of a rectangle and filling it with unit squares creates the same area. I can identify and draw rectangles that have the same perimeter and different areas. 	<p><u>Related Concepts</u></p> <ul style="list-style-type: none"> I can solve real-world problems by finding the area of rectangles. I can show how the area of a rectangle is the product of a multiplication equation. I can find the perimeter of a polygon by adding the side lengths. I can find the perimeter of a polygon by finding an unknown side length. 	<p><u>Assessment Vocabulary</u></p> <ul style="list-style-type: none"> Area Perimeter Unit squares Square Rectangle Factor Product

<ul style="list-style-type: none">I can identify and draw rectangles that have different perimeters and the same area.		
<u>Mathematical Processes</u> <ul style="list-style-type: none">See Unit 2.	<u>Employability Skills</u> <ul style="list-style-type: none">3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations.3-5.LS.11 Complete assignments, projects, and activities with some redirection from teachers, mentors, or supervisors.3-5.LS.12 Complete activities and assignments by following directions closely3-5.LS.13 Utilize effective questioning and brainstorming techniques.	
<u>SEL Indicators</u> <ul style="list-style-type: none">SEL 2C - Students demonstrate self-efficacy.		
<u>Resources</u>		
<u>Textbook</u> L27/28(8 days), L30(8days)	<u>Digital</u> <ul style="list-style-type: none">Interactive Area/Perimeter LessonArea/Perimeter Problem Solving Task	<u>Manipulatives</u> <u>Virtual Manipulatives</u> <ul style="list-style-type: none">Colored tilesLegosGeoboardsSnap cubes
<u>Reflection</u>		

<u>Data Analysis</u>	<u>Celebrations/Changes</u>
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Unit 3- WORLD PROBLEMS USING ALL FOUR OPERATIONS (Approximate Duration: 15 days) November 16-December 9

<p><u>General Description of the Unit</u></p> <p>In this unit we will solve two-step real-world problems using the four operations of addition, subtraction, multiplication, and division.</p> <ul style="list-style-type: none"> Drawings and equations with a symbol for the unknown number to represent the problem. 		
<p><u>Priority Standards</u></p> <ul style="list-style-type: none"> 3.AT.3 Solve two-step real-world problems using the four operations of addition, subtraction, multiplication and division (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). 	<p><u>Supporting Standards</u></p> <ul style="list-style-type: none"> 3.AT.2 Solve real-world problems involving whole number multiplication and division within 100 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><u>Proficiency Scales</u></p> <p><u>3.AT.3</u></p>	<p><u>Tiered Assessments</u></p> <p><u>3.AT.3</u></p>	
<p><u>Enduring Understandings</u></p> <ul style="list-style-type: none"> Mathematical operations are used in solving problems in which a new value is produced from one or more values. Algebraic thinking involves choosing, combining, and applying effective strategies for answering questions. Numbers enable us to use the four operations to combine and separate quantities. 	<p><u>Essential Questions</u></p> <ul style="list-style-type: none"> In what ways can operations affect numbers? How can different strategies be helpful when solving a problem? How does knowing and using algorithms help us to be efficient problem solvers? How are multiplication and addition alike? How are subtraction and division related? 	
<p><u>Key Concepts</u></p> <ul style="list-style-type: none"> I can solve real-world problems that are two steps by using 	<p><u>Related Concepts</u></p> <ul style="list-style-type: none"> I can solve real-world multiplication problems that involve arrays. 	<p><u>Assessment Vocabulary</u></p> <ul style="list-style-type: none"> Array Product Quotient

<p>addition, subtraction, multiplication, or division.</p>	<ul style="list-style-type: none"> • I can solve real-world multiplication problems that involve grouping. • I can solve real-world multiplication problems that involve measurements. • I can solve real-world division problems that involve arrays. • I can solve real-world division problems that involve grouping. • I can solve real-world division problems that involve measurements. 	
<p><u>Mathematical Processes</u></p> <ul style="list-style-type: none"> • PS.1: Make sense of problems and persevere in solving them 	<p><u>Employability Skills</u></p> <ul style="list-style-type: none"> • 3-5.WE.6 Begin to take steps to organize and prioritize tasks. • 3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations. • 3-5.LS.11 Complete assignments, projects, and activities with some redirection from teachers, mentors, or supervisors. • 3-5.LS.12 Complete activities and assignments by following directions closely • 3-5.LS.13 Utilize effective questioning and brainstorming techniques. • 3-5.LS.8 Develop criteria for making decisions and predict results of choices to find the best solution. • 3-5.LS.9 Understand how decision-making is related to career planning. • 3-5.LS.10 Identify a short-term goal and develop a plan of action. • 	

<u>SEL Indicators</u> <ul style="list-style-type: none"> ● SEL 1B - Students manage transitions and changes in routine. ● SEL 2C - Students demonstrate self-efficacy. ● SEL 6A - Students demonstrate an understanding of metacognition. ● SEL 6B - Students understand the decision-making process. 		
<u>Resources</u>		
<u>Textbook</u> L11(5 days), 12(5 days), 13(5 days)	<u>Digital</u> Two-step Word Problems K-5 Math Two-step Word Problems Ed Galaxy Knotty Rope Graham Fletcher	<u>Manipulatives</u> <u>Virtual Manipulatives</u> <ul style="list-style-type: none"> ● Hundreds Chart ● Multiplication Chart ● Base Ten Blocks ● Flash Cards ● Counters ● Number Lines
<u>Reflection</u>		
<u>Data Analysis</u>	<u>Celebrations/Changes</u>	

Unit 4- NUMBER SENSE: FRACTIONS (Approximate Duration: 27 days) December 10- January 31

General Description of the Unit

In this unit we will be understanding that a fraction, $1/b$, as the quantity formed by 1 part, when a whole is partitioned into “b” equal parts. Students will also refer back to area using the following skills:

- Separating shapes into parts with equal areas.
- Showing that when shapes are broken into parts with equal areas, these are fractions of the whole.

Priority Standards

- 3.NS.3. 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 $1/b$. [In grade 3, limit denominators of fractions to 2, 3, 4, 6, 8.]
- 3.NS.7 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).

Supporting Standards

- 3.NS.4 Represent a fraction, $1/b$, on a number line 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.NS.5 Represent a fraction, a/b , on a number line by marking off 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.NS.6 Understand two fractions as equivalent (equal) if they are the same size, based on the same whole or the same point on a number line.
- 3.NS.8 Compare two fractions with the same numerator or the same denominator by reasoning about their size based on the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions (e.g., by using a visual fraction model).
- 3.G.4 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole ($1/2$, $1/3$, $1/4$, $1/6$, $1/8$).

<u>Proficiency Scales</u> <u>3.NS.3</u> <u>3.NS.7</u>		<u>Tiered Assessments</u> <u>3.NS.3</u> <u>3.NS.7</u>	
<u>Enduring Understandings</u> <ul style="list-style-type: none"> How to draw a visual representation of fractions using a variety of methods from their knowledge of fractional parts. The denominator tells us how many equal parts are in the whole and the numerator tells us how many parts are being used/taken. A unit fraction is defined as a fraction with the numerator of one. Fractions can be represented in a variety of ways (ex. picture or number line). When the numerator and the denominator are the same number that represents a whole. Fractions with different numerators and different denominators can still be equal. Use visual models to help compare relative size and equivalent parts of a whole. When the denominator is bigger, the fraction is actually smaller. 		<u>Essential Questions</u> <ul style="list-style-type: none"> What is a fraction? What visual models are most useful when working with a fraction? What are different ways to compare fractions? What is fraction equivalence and how can they be recognized? How can whole numbers be represented as a fraction? 	
<u>Key Concepts</u> <ul style="list-style-type: none"> I can explain a fraction as a piece of something that has been cut into equal parts. I can explain the denominator of a fraction as the total number of parts in which something has been separated. 	<u>Related Concepts</u> <ul style="list-style-type: none"> I can create a number line and break it into equal parts. I can show that equal parts of a number line are fractions with equal value. I can successfully place a fraction on a number line. 	<u>Assessment Vocabulary</u> <ul style="list-style-type: none"> Numerator Denominator Fraction Partition Number line Fraction Interval 	

<ul style="list-style-type: none"> • I can explain the numerator as one or more parts of the whole. • I can identify equivalent fractions. • I can create equivalent fractions. • I can explain why one fraction is equivalent to another. 	<ul style="list-style-type: none"> • I can identify the location of a fraction on a number line by marking off intervals. • I can demonstrate that two fractions are equivalent based on their size. • I can demonstrate that two fractions are equivalent based on their location on a number line. • I can compare two fractions using greater than, less than, and equal to signs. • I can use what I know about the relationship between numerators and denominators to compare two fractions. • I can separate shapes into parts with equal areas. • I can show that when shapes are broken into parts with equal areas, these are fractions of the whole. 	<ul style="list-style-type: none"> • Fraction • Equivalent • Denominator • Fraction of the Whole • Number line • Numerator • Denominator • Greater than • Less than • Equal
<p><u>Mathematical Processes</u></p> <ul style="list-style-type: none"> • PS.3 Construct a viable argument and critique the reasoning of others. 	<p><u>Employability Skills</u></p> <ul style="list-style-type: none"> • 3-5.WE.6 Begin to take steps to organize and prioritize tasks. • 3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations. • 3-5.LS.11 Complete assignments, projects, and activities with some redirection from teachers, mentors, or supervisors. • 3-5.LS.12 Complete activities and assignments by following directions closely 	

		<ul style="list-style-type: none"> • 3-5.LS.13 Utilize effective questioning and brainstorming techniques. • 3-5.LS.8 Develop criteria for making decisions and predict results of choices to find the best solution.
<u>SEL Indicators</u> <ul style="list-style-type: none"> • SEL 1B - Students manage transitions and changes in routine. • SEL 2C - Students demonstrate self-efficacy. • SEL 6A - Students demonstrate an understanding of metacognition. • SEL 6B - Students understand the decision-making process. 		
<u>Resources</u>		
<u>Textbook</u> L14-19(BOTH COLORS) L14 (4 days), 15 (4 days), 16 (5 days), 17 (5 days), 18/19 (4 days) L33A(5 days)	<u>Digital</u> <ul style="list-style-type: none"> • Unit Fraction Task- Level A • Fraction Games--Education.com • Fraction Games--Sheppardsoftware.com 	<u>Manipulatives</u> <u>Virtual Manipulatives</u> <ul style="list-style-type: none"> • Colored counters • fraction strips or fractions circles • Area model
<u>Reflection</u>		
<u>Data Analysis</u>		<u>Celebrations/Changes</u>

Unit 5- MEASUREMENT AND DATA (Approximate duration: 41 days) February1-April 7

General Description of the Unit

In this unit we will be measuring lengths with rulers to the nearest quarter of an inch.

- Display data on line plots, with horizontal scale marked off in whole numbers, halves, or quarters.
- Read time to the nearest minute and calculate elapsed time.
- Find the value of a collection of money and solve real-world problems involving money.

Priority Standards

- 3.DA.2Generate measurement data by measuring lengths with rulers to the nearest quarter of an inch. Display the data by making a line plot, where the horizontal scale is marked off in appropriate units, such as whole numbers, halves, or quarters.

Supporting Standards

- 3.DA.1 Create scaled picture graphs, scaled bar graphs, and frequency tables to represent a data set—including data collected through observations, surveys, and experiments—with several categories. Solve one- and two-step “how many more” and “how many less” problems regarding the data and make predictions based on the data.
- 3.M.1 Estimate and measure the mass of objects in grams (g) and kilograms (kg) and the volume of objects in quarts (qt), gallons (gal), and liters (l). Add, subtract, multiply, or divide to solve one-step real-world 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.M.2 Choose and use appropriate units and tools to estimate and measure length, weight, and temperature. Estimate and measure length to a quarter-inch, weight in pounds, and temperature in degrees Celsius and Fahrenheit.

		<ul style="list-style-type: none"> • 3.M.3 Tell and write time to the nearest minute from analog clocks, using a.m. and p.m., and measure time intervals in minutes. Solve real-world problems involving addition and subtraction of time intervals in minutes. • 3.M.4 Find the value of any collection of coins and bills. Write amounts less than a dollar using the ¢ symbol and write larger amounts using the \$ symbol in the form of dollars and cents (e.g., \$4.59). Solve real-world problems to determine whether there is enough money to make a purchase.
<u>Proficiency Scales</u> <u>3.DA.2</u>		<u>Tiered Assessments</u> <u>3.DA.2</u>
<u>Enduring Understandings</u> <ul style="list-style-type: none"> • Time can be measured. • Standard units provide common language for communicating time. • Some attributes of objects are measurable and can be quantified using unit amounts. • Capacity is a measure of the amount of liquid a container can hold. • Measurement is used to describe and quantify the world. • Graphs are a way to display and analyze data that has been collected. 		<u>Essential Questions</u> <ul style="list-style-type: none"> • How can lengths of time be measured and found? • How do units within a system relate to each other? • How are various representations of time related? • What are the customary units for measuring capacity and weight? • What are the metric units for measuring capacity and mass? • How can perimeter be measured and found? • How can understanding the relationship between addition and area aid in problem solving? • How can data be represented, interpreted, and analyzed?
<u>Key Concepts</u> <ul style="list-style-type: none"> • I can use a ruler to measure to the nearest quarter inch. 	<u>Related Concepts</u>	<u>Assessment Vocabulary</u> <ul style="list-style-type: none"> • ruler • line plot

<ul style="list-style-type: none"> • I can gather data by measuring lengths with a ruler. • I can display collected data on a line plot designed with appropriate unit. • I can represent data by creating picture graphs. • I can represent data by creating bar graphs. • I can represent data by creating frequency tables. • I can collect data through observations. • I can collect data through surveying. • I can collect data through experiments. • I can make predictions based on data. • I can solve problems based on data. 	<ul style="list-style-type: none"> • I can make a line plot to display a data set of measurements in fractions of a unit • I can use observations, surveys, and experiments to collect, represent, and interpret the data using tables, line plots, and bar graphs. • I can interpret data displayed in a circle graph. • I can use observations, surveys, and experiments to collect, represent, and interpret the data using tables, line plots, bar graphs, and line graphs. • I can estimate and measure the mass of objects in g and kg. (3.M.1) • I can estimate and measure the volume of objects in qt, gal, and l. (3.M.1) • I can add, subtract, multiply or divide to solve real-world problems involving mass. (3.M.1) • I can add, subtract, multiply, or divide to solve real-world problems that involve volume. (3.M.1) 	<ul style="list-style-type: none"> • capacity • Picture graph • Bar graph • Frequency table • Data • Survey • Observation
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	<ul style="list-style-type: none"> • I can measure length, weight, and temperature with appropriate tools. (3.M.2) • I can estimate and measure length to a quarter-inch. (3.M.2) • I can estimate and measure weight in pounds. (3.M.2) • I can estimate and measure temperature in both Celsius and Fahrenheit. (3.M.2) • I can use an analog clock to tell time to the nearest minute. (3.M.3) • I can write time to the nearest minute. (3.M.3) • I can measure time intervals in minutes. (3.M.3) • I can solve real-world problems that involve adding and subtracting time. (3.M.3) • I can use a.m. and p.m. to write the time. (3.M.3) • I can find the value of a set of money. (3.M.4) • I can use the cents sign to show money less than one dollar. (3.M.4) • I can use the dollar sign to show money more than one dollar. (3.M.4) 	
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	<ul style="list-style-type: none">I can solve real-world problems that involve determining whether there is enough money to buy something. (3.M.4)	
<u>Mathematical Processes</u> <ul style="list-style-type: none">PS.5: Use appropriate tools strategically.	<u>Employability Skills</u> <ul style="list-style-type: none">3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations.3-5.LS.11 Complete assignments, projects, and activities with some redirection from teachers, mentors, or supervisors.3-5.LS.12 Complete activities and assignments by following directions closely3-5.LS.13 Utilize effective questioning and brainstorming techniques.3-5.LS.8 Develop criteria for making decisions and predict results of choices to find the best solution.	
<u>SEL Indicators</u> <ul style="list-style-type: none">SEL 2C - Students demonstrate self-efficacy.SEL 6A - Students demonstrate an understanding of metacognition.SEL 6B - Students understand the decision-making process.		
<u>Resources</u>		
<u>Textbook</u> L20-21 (Time - 12 Days) L23b (Weight and Temp - 5 days) L26 (Line plots - 4 days) L22 and 23A (Mass - 5 days) L24-25 (Graphs - 5 days)	<u>Digital</u> <ul style="list-style-type: none">Do You Have Enough Money?Reading a Clock and Finding Elapsed TimeInterpreting and Understanding Data Website list	<u>Manipulatives</u> <u>Virtual Manipulatives</u> <ul style="list-style-type: none">Judy Clocksrulersunit squaresscales

L29 (add areas - 5 days) L31B (Money- 5 days)	<ul style="list-style-type: none"> • Counting Money 	<ul style="list-style-type: none"> • thermometers • money manipulatives
<u>Reflection</u>		
<u>Data Analysis</u>		<u>Celebrations/Changes</u>

Unit 6- GEOMETRY (Approximate Duration: 15 days) April 8-April 29

<p><u>General Description of the Unit</u></p> <p>In this unit we will learn shapes, such as rhombuses and rectangles, that may share attributes, such as having four sides. The shared attributes can define a larger category (quadrilaterals).</p> <ul style="list-style-type: none"> Recognize and draw rhombuses, rectangles, and squares as examples of quadrilaterals. Recognize and draw examples of quadrilaterals that do not belong to any of these subcategories. 		
<p><u>Priority Standards</u></p> <ul style="list-style-type: none"> 3.G.2 Understand that shapes (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 and draw rhombuses, rectangles, and squares as examples of quadrilaterals. Recognize and draw examples of quadrilaterals that do not belong to any of these subcategories. 	<p><u>Supporting Standards</u></p> <ul style="list-style-type: none"> 3.G.1 Identify and describe the following: cube, sphere, prism, pyramid, cone, and cylinder. 	
<p><u>Proficiency Scales</u></p> <p><u>3.G.2</u></p>	<p><u>Tiered Assessments</u></p> <p><u>3.G.2</u></p>	
<p><u>Enduring Understandings</u></p> <ul style="list-style-type: none"> Line and line segments are sets of points in space that can be used to describe parts of other geometric lines, shapes and solids. 	<p><u>Essential Questions</u></p> <ul style="list-style-type: none"> How can two-dimensional shapes be described, analyzed and classified? How are two-dimensional and three-dimensional shapes similar? How are they different? How can equal areas of parts of a shape be expressed? 	
<u>Key Concepts</u>	<u>Related Concepts</u>	<u>Assessment Vocabulary</u>

<ul style="list-style-type: none"> • I can explain how shapes are related to one another by identify features they have in common. • I can put different shapes into categories by their common features. • I can identify and draw rhombi. • I can identify and draw rectangles. • I can identify and draw squares. • I can identify and draw quadrilaterals that cannot be categorized. • I can identify cubes and explain their features. • I can identify spheres and explain their features. • I can identify prisms and explain their features. • I can identify pyramids and explain their features. • I can identify cones and explain their features. • I can identify cylinders and explain their features. 	<ul style="list-style-type: none"> • I can identify, describe, and draw parallelograms, rhombuses, and trapezoids. • I can classify triangles and quadrilaterals based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles. • I can identify and classify polygons. • I can solve real-world and other mathematical problems involving volume of cylinders and three-dimensional objects composed of right rectangular prisms. 	<ul style="list-style-type: none"> • Rhombus • Rectangle • Square • Quadrilateral • Right angle • Perpendicular • Parallel • Base • Side • Angle • Cube • Sphere • Prism • Pyramid • Cone • Cylinder
<p>Mathematical Processes</p> <ul style="list-style-type: none"> • PS.7: Look for and make use of structure. 	<p>Employability Skills</p> <ul style="list-style-type: none"> • 3-5.WE.9 Display a variety of skills needed for school, personal, and professional situations. 	

		<ul style="list-style-type: none"> • 3-5.LS.11 Complete assignments, projects, and activities with some redirection from teachers, mentors, or supervisors. • 3-5.LS.12 Complete activities and assignments by following directions closely • 3-5.LS.13 Utilize effective questioning and brainstorming techniques. • 3-5.LS.8 Develop criteria for making decisions and predict results of choices to find the best solution.
	<u>SEL Indicators</u> <ul style="list-style-type: none"> • SEL 2C - Students demonstrate self-efficacy. • SEL 6A - Students demonstrate an understanding of metacognition. • SEL 6B - Students understand the decision-making process. 	
	<u>Resources</u>	
	<u>Textbook</u> L31A-32 (5 days) L33B(3D shapes) (5 Days)	<u>Digital</u> education.com sheppardsoftware.com https://www.freckle.com/math/ Geometric Shapes Activities Area and Perimeter
	<u>Manipulatives</u> <u>Virtual Manipulatives</u> <ul style="list-style-type: none"> • Geometric shapes • Geometric solids • Geoboards 	
	<u>Reflection</u>	
	<u>Data Analysis</u>	<u>Celebrations/Changes</u>

