

# TOWNSHIP OF UNION PUBLIC SCHOOLS



# Grade 3 Mathematics

Adopted October 20, 2020

### **Mission Statement**

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

### **Philosophy Statement**

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

## Unit 1 - Module A

### Unit Title: Mathematics – Introductory Multiplication and Division Concepts – Unit 1 – Module A

Grade level: Grade 3

Timeframe: 1st Marking Period

### Rationale

#### Grade 3 – Introductory Multiplication and Division Concepts – Unit 1

*Unit 1 focuses on an introduction to multiplication and division concepts. Learners build upon their Grade 2 work with arrays and repeated addition to work with equal groups and larger arrays. They explore this concept of multiplication together with the concept of division. By exploring the concepts together, learners learn to reason about the relationship between the two operations and come to understand division as an unknown-factor problem. Learners use increasingly sophisticated strategies to solve multiplication and division problems involving single digit numbers. As learners apply strategies to solve these problems, they begin working towards accuracy and efficiency (fluency) with these operations. By the end of the unit, learners use drawings and equations with a symbol for the unknown to represent simple two-step word problems using the four operations.*

*Note: Double asterisks (\*\*) indicate that the example(s) included within the New Jersey Student Learning Standard may be especially informative when considering the Student Learning Objective.*

### Essential Questions

*How can you use multiplication to find how many in all?*

*What strategies can you use to multiply?*

*How can you use division to find how many in each group or how many equal groups?*

*What strategies can you use to divide?*

## Standards

### Standards (Taught and Assessed):

- **3.OA.A.1** Interpret products of whole numbers, e.g., interpret  $5 \times 7$  as the total number of objects in 5 groups of 7 objects each. For example describe and/or represent a context in which a total number of objects can be expressed as  $5 \times 7$ .
- **3.OA.A.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 and/or represent a context in which a number of shares or a number of groups can be expressed as  $56 \div 8$ .
- **3.OA.A.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.

Key: ■ Major Cluster □ Supporting Cluster ◎ Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections			
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels  Mods per students' IEPs  RTI			

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
<b>We are learning to/that</b>				
<b>3.OA.A.1 – WALT</b> interpret products of whole numbers in terms of the number of groups and objects**	<i>Use manipulatives to model equal groups and arrays.</i>  <i>Use drawings to connect to and explain equations.</i>	<i>Exit ticket</i>  <i>Non verbal check ins- Ex) Thumbs up-thumbs down.</i>  <i>Self Reflection</i>	<i>Number Talk about repeated addition</i>  <i>Use manipulatives or counters to represent equal groups</i>	<i>Modifications per students' IEP, in addition to:</i>  <i>Additional manipulatives</i>  <i>Read text</i>

<p>3.OA.A.3 – WALT use multiplication and <del>division</del> within 100 to solve word problems in situations involving: equal groups, arrays and measurement quantities</p>	<p>counted</p> <p><b>Vocabulary:</b> Equal groups, product, factor, repeated addition, multiply, array</p> <p>Use CUBES to solve word problems</p> <p>Represent a multiplication word problem with models, drawings, and equations.</p> <p>Solve word problems with multiplication.</p>	<p>Teacher created pretests</p> <p>Observations/checklists</p> <p>Quick write/Response card</p> <p>Standards Mastery Check (iReady)</p>	<p>arrays</p> <p>Write multiplication equations using models</p> <p>Review text strategies to determine key components of the word problem (ex: CUBES)</p> <p>Use equal groups, arrays, repeated addition or multiplication to solve the word problems</p> <p>Use equal groups, arrays, repeated addition or multiplication to solve the unknown factor in word problems</p> <p>Use teacher modeling.</p> <p>Use drawings and physical models to show equal groups.</p> <p>Hands on activities and practice</p> <p><b>Resources:</b></p> <p><u><a href="#">Khan Academy- OA</a></u></p> <p><u><a href="#">Prodigy Game-OA</a></u></p> <p><u><a href="#">i-Ready - OA</a></u></p> <p><u><a href="#">Learn Zillion 3.OA</a></u></p>	<p>Less problems</p> <p>Provide additional scaffolding</p> <p>Extended time</p> <p>Using prior knowledge</p>
<p>3.OA.A.3 – WALT use drawings and equations with a symbol for the unknown number to represent multiplication and <del>division</del> word problems within 100</p>	<p><b>Vocabulary:</b> Equal groups, product, factor, repeated addition, multiply, array, unknown</p>			

<p><b>3.OA.A.2 – WALT</b> interpret whole number quotients of whole numbers as the number of objects in each share (or groups) or as the number of shares (or groups) that result from partitioning a total number of objects**</p>	<p>Use division to determine the size of each group when the number of groups is known</p> <p>Use division to determine the number of groups when the size of each group is known.</p> <p>Represent division with models and drawings.</p> <p>Write an equation for a division situation.</p> <p>Use division to find how many in each group or how many equal groups</p> <p>Use strategies to divide</p>	<p>Exit ticket</p> <p>Non verbal check ins- Ex) Thumbs up-thumbs down.</p> <p>Self Reflection</p> <p>Student conferences</p> <p>Teacher created pretests</p> <p>Observations/checklists</p> <p>Quick write/Response card</p> <p>Standards Mastery Check (iReady)</p>	<p>Use division with equal groups.</p> <p>Use division with arrays.</p> <p>Relate repeated subtraction to representations of division.</p> <p>Write an equation for a division problem.</p>	<p>Read text</p> <p>Clarify words</p> <p>Less problems</p> <p>Provide additional scaffolding</p>
<p><b>3.OA.A.3 – WALT</b> use multiplication and division within 100 to solve word problems in situations involving: equal groups, arrays and measurement quantities</p>	<p>Use CUBES to solve word problems</p> <p>Represent a multiplication word problem with models, drawings, and equations.</p>		<p>Review text strategies to determine key components of the word problem (ex: CUBES)</p> <p>Use equal groups, arrays, repeated subtraction or division to solve the word problems</p>	
<p><b>3.OA.A.3 – WALT</b> use drawings and equations with a symbol for the unknown number to represent multiplication and division word problems within 100</p>	<p>Solve word problems with multiplication.</p>		<p>Use equal groups, arrays, repeated subtraction or division to solve the unknown factor in word problems</p>	

	<p><b>Vocabulary:</b> Equal groups, quotient, dividend, divisor, repeated subtraction, divide, array, unknown</p>		<p>physical models to show equal groups.</p> <p>Hands on activities and practice</p> <p><b>Resources:</b></p> <p><u><a href="#">Khan Academy- OA</a></u></p> <p><u><a href="#">Prodigy Game-OA</a></u></p> <p><u><a href="#">i-Ready - OA</a></u></p> <p><u><a href="#">Learn Zillion 3.OA</a></u></p> <p><u><a href="#">Nearpod Lessons</a></u></p> <p><u><a href="#">Go Math!</a></u></p>
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**Benchmark Assessment 1**

<p><b>Benchmark Assessment</b></p> <p><i>Ed-Connect</i></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Benchmark Assessment 2**

<p><b>Benchmark Assessment</b></p> <p><i>I-Ready</i></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Summative Assessments (add rows as needed)**

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Collaboratively Designed Assessment Standards Mastery (I-Ready)	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Interdisciplinary Connections**

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections

**Unit 1- Module B**

**Unit Title: Mathematics – Introductory Multiplication and Division Concepts – Unit 1 – Module B**

**Grade level: Grade 3**

**Timeframe: 1st Marking Period**

## Rationale

### Grade 3 – Introductory Multiplication and Division Concepts – Unit 1

*Unit 1 focuses on an introduction to multiplication and division concepts. Learners build upon their Grade 2 work with arrays and repeated addition to work with equal groups and larger arrays. They explore this concept of multiplication together with the concept of division. By exploring the concepts together, learners learn to reason about the relationship between the two operations and come to understand division as an unknown-factor problem. Learners use increasingly sophisticated strategies to solve multiplication and division problems involving single digit numbers. As learners apply strategies to solve these problems, they begin working towards accuracy and efficiency (fluency) with these operations. By the end of the unit, learners use drawings and equations with a symbol for the unknown to represent simple two-step word problems using the four operations.*

*Note: Double asterisks (\*\*) indicate that the example(s) included within the New Jersey Student Learning Standard may be especially informative when considering the Student Learning Objective.*

## Essential Questions

*How can you use multiplication facts, place value, and properties to solve multiplication problems?*

*What strategies can you use to multiply?*

*What strategies can you use to divide?*

*What are some ways you can describe a pattern in a table?*

*How can you use an array or a multiplication table to find an unknown factor or product?*

*How can you write a set of related multiplication and division facts?*

*How can you round numbers?*

## Standards (Taught and Assessed):

- **3.OA.A.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  $8 \times ? = 48$ ,  $5 = \frac{?}{3}$ ,  $6 \times 6 = ?$ .
- **3.OA.B.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  $8 \times 7$  as  $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property)*
- **3.OA.C.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.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 why 4 times a number can be decomposed into two equal addends.
- **3.OA.B.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.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.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.NBT.A.1** Use place value understanding to round whole numbers to the nearest 10 or 100.

Key: ■ Major Cluster □ Supporting Cluster ◎ Additional Cluster

## Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.

- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels  Mods per students' IEPs  RTI

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
We are learning to/that				
<b>3.OA.A.5 – WALT</b> apply properties of operations (commutative, associative) as	<i>Model the Commutative Property of Multiplication and</i>	<i>Exit ticket</i> <i>Non verbal check ins- Ex)</i>	<i>Use counters or objects to model arrays and equal groups for both multiplication facts</i>	<i>Modifications per students' IEP, in addition</i>

<p><b>3.OA.D.9 – WALT</b> identify arithmetic patterns, including patterns in the addition table or multiplication table, and explain them using properties of operations</p>	<p><b>Essential Vocabulary:</b> <i>Commutative Property of Multiplication</i></p> <p>Recall even and odd numbers</p> <p>Identify patterns on the multiplication table.</p> <p>Explain patterns on the multiplication table.</p>	<p><i>Self Reflection</i></p> <p>Student conferences</p> <p>Teacher created pretests</p> <p>Observations/checklists</p> <p>Quick write/Response card</p> <p>Standards Mastery Check (iReady)</p> <p>Performance Tasks</p>	<p><u>Go Math!</u></p> <p>Give each child a copy of a multiplication table and highlight/color various patterns on the table.</p> <p><u>Printable Multiplication Chart</u></p> <p><u>Nearpod Lessons</u></p> <p><u>Go Math!</u></p>	<p>manipulatives</p> <p>Read text</p> <p>Clarify words</p> <p>Less problems</p> <p>Provide additional scaffolding</p> <p>Extended time</p> <p>Using prior knowledge</p>
<p><b>3.OA.A.4 – WALT</b> determine the unknown whole number in a multiplication or division equation relating three whole numbers **</p>	<p><b>Essential Vocabulary:</b> <i>pattern, even, odd</i></p> <p>Recall basic understanding of multiplication and how to create equal groups and arrays</p>	<p><u>Unknown Factor Assessment</u></p>	<p>Student sharing activity: See resource below</p> <p>Use manipulatives or counters to represent arrays and equal groups to determine the unknown number</p> <p>Create Fact Family Triangles to demonstrate how multiplication and division are related and can be used to find unknown numbers</p>	<p>Read The Grapes of Math and create math riddles</p> <p><u>Student Sharing Activity</u></p> <p><u>Unknown Factor Video</u></p> <p><u>Unknown Factor Tic Tac Toe</u></p> <p><u>Multiplication/Division/Factor Game</u></p>
<p><b>3.OA.B.6 – WALT</b> a related multiplication problem with an unknown factor can be used to solve a division problem</p>	<p><i>Determine which operation is needed to find the unknown.</i></p> <p><i>Multiply or divide, within 100, to find the unknown whole number in a multiplication or division equation.</i></p>			

Go Math!

*Write division number sentences as unknown factor problems.*

*Solve multiplication and division of whole numbers by finding the unknown factor.*

*Use an array, equal groups, or a multiplication table to find an unknown factor.*

*write multiplication and division equations with an unknown factor.*

*Identify factors of fact families.*

*write additional equations using the three factors of the equation.*

	<p><b>Essential Vocabulary:</b></p> <p><i>equal groups, factor, multiply, product, multiple</i></p> <p><i>divide, equal groups, array, dividend, divisor, quotient, inverse operations, related facts,</i></p>		
<p><b>3.OA.C.7 – WALT</b> multiply and divide within 100 using strategies such as the relationship between multiplication and division, or properties of operations (working towards accuracy and efficiency)</p>	<p><i>Write a set of related multiplication and division facts</i></p> <p><i>Identify factors in a fact family</i></p> <p><i>Demonstrate proficiency in multiplying one and two-digit numbers within 100</i></p> <p><b>Essential Vocabulary:</b> <i>related facts</i></p>		<p><i>Create fact cards for faster fluency.</i></p> <p><i>Play fact games on the computer.</i></p> <p><i>Work with a partner/group on center fact fluency games: examples Bingo</i></p> <p><u><i>Ice Cream Sundae Multiplication Game</i></u></p> <p><u><i>Multiplication Concentration Game</i></u></p> <p><u><i>Multiplication Facts Game</i></u></p> <p><u><i>Alien Division Game</i></u></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p>
<p><b>3.OA.D.8 – WALT</b> solve simple two-step word problems using the four operations</p>	<p><i>Use CUBES to solve word problems</i></p> <p><i>Use drawings and equations with a symbol for the unknown number to</i></p>		<p><i>Review text strategies to determine key components of the word problem (ex: CUBES)</i></p> <p><i>Review keywords that signal the operation that needs to be used to complete the problem.</i></p>
<p><b>3.OA.D.8 – WALT</b> represent two-step word problems using equations</p>	<p><i>Use drawings and equations with a symbol for the unknown number to</i></p>		

<p>unknown quantity</p>	<p>division word problems within 100</p> <p>Create and solve word problems with an unknown factor.</p>	<p><i>Hands on activities and practice.</i></p> <p><b>Resources:</b></p> <p><u><a href="#">Khan Academy- OA</a></u></p> <p><u><a href="#">Prodigy Game-OA</a></u></p> <p><u><a href="#">i-Ready - OA</a></u></p> <p><u><a href="#">Learn Zillion 3.OA</a></u></p> <p><u><a href="#">Go Math!</a></u></p> <p><u><a href="#">Nearpod Lessons</a></u></p> <p><u><a href="#">Flocabulary Word Problems Video</a></u></p>	
<p><b>3.NBT.A.1 – WALT</b> round whole numbers to the nearest 10 or 100, using place value understanding</p>	<p>Recall place value: ones, tens, hundreds</p> <p>Name the places in 2 and 3 digit number</p> <p>Compare numbers using place value</p> <p>Determine whether a number rounds up or down</p>	<p><i>Number Talk about place value.</i></p> <p><i>Teach rounding songs/poems.</i></p> <p><i>Example:</i></p> <p><i>"The underlined digit says</i></p> <p><i>If I'm 5 or more raise the circled number score,</i></p> <p><i>If I'm 4 or less let the circled number rest,</i></p> <p><i>Now change the rest to zeros And you will all be math heroes."</i></p> <p><i>Create rounding number line manipulatives</i></p> <p><u><a href="#">Nearpod Lessons</a></u></p>	

	<p><i>round a whole number to the nearest 10 and 100</i></p> <p><b>Essential Vocabulary:</b> <i>place value, ones, tens, hundreds, number line, digit, round</i></p>		<p><u><a href="#">Flocabulary Rounding Video</a></u></p> <p>Review text strategies to determine key components of the word problem (ex: CUBES)</p> <p>Use teacher modeling to review mental computation and estimation strategies including rounding.</p> <p>Hands on activities and practice.</p> <p><b>Resources:</b></p> <p><u><a href="#">Khan Academy- OA</a></u></p> <p><u><a href="#">Prodigy Game-OA</a></u></p> <p><u><a href="#">i-Ready - OA</a></u></p> <p><u><a href="#">Learn Zillion 3 OA</a></u></p> <p><u><a href="#">Nearpod Lessons</a></u></p> <p><u><a href="#">Go Math!</a></u></p>	
<p><b>3.OA.D.8 – WALT</b> assess the reasonableness of answers in two-step word problems using mental computation and estimation strategies including rounding</p>	<p>Use CUBES to solve word problems</p> <p>Count by tens and ones, use a number line, make compatible numbers, or use friendly numbers to find sums mentally.</p> <p>Use a number line, friendly numbers, or the break apart strategy to find differences mentally.</p> <p>Use compatible numbers and rounding to estimate sums or differences.</p> <p><b>Essential Vocabulary:</b> <i>Compatible numbers, estimate</i></p>			

**Benchmark Assessment 1**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>Ed-Connect</i>	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>
Standards Mastery (I-Ready)	

**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>

## CAR Unit 2 - Module A

**Unit Title: Mathematics – Relating Area to Multiplication and Addition –**

**Grade level: Grade 3**

**Timeframe: 2nd Marking Period**

### Rationale

*Grade 3 – Relating Area to Multiplication and Addition – Unit 2*

*This unit focuses on the concepts of area, the distributive property, and multiplication. Learners build upon earlier work with arrays and repeated addition from the prior unit and grade to tile rectangular areas, relating area to multiplication and addition. Learners use area models and properties of operations to reason about and to calculate products of whole numbers, using increasingly sophisticated strategies to solve multiplication word problems involving area. By the end of the unit, learners recognize area as additive and use the concept to determine areas of rectilinear figures. As learners apply strategies to solve multiplication and division problems, they continue working towards accurately and efficiently multiplying and dividing within 100 (fluency).*

### Essential Questions

*How can you solve problems involving area?*

*How can you use the Distributive Property to find the product?*

*Why can you multiply to find the area of a rectangle?*

*How can you find the area of a plane figure?*

*How can you break apart a figure to find the area?*

### Standards

#### **Standards (Taught and Assessed):**

**3.MD.C.5** Recognize area as an attribute of plane figures and understand concepts of area measurement.

- a. 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 the area.

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

**3.MD.C.7** Relate area to the operations of multiplication and addition.

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.

**3.OA.C.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.MD.C.7** Relate area to the operations of multiplication and addition.

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.

**3.OA.B.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  $8 \times 7$  as  $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)*

**Key:** Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively. ■
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems. ■
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings. ■
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success. ■
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason. ■
- CRP6. Demonstrate creativity and innovation. ■
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity. ■

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management ■
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
We are learning to/that				
3.MD.C.5 – WALT a square with side length 1 unit, called “a unit square,” is said to have ‘one square unit of area	Use drawings, models, and manipulatives to count unit squares to find the area.  Count the unit squares in a shape to determine the area	Exit ticket  Non verbal check ins- Ex) Thumbs up-thumbs down.  Self Reflection	Use teacher modeling. Use drawings and physical models equations.  Hands on activities and practice.  Interactive notebook lesson	Modifications per student IEP, in addition to:  Additional manipulatives  Read text
3.MD.C.5 – WALT a unit square can be used to measure area	Recall the difference between centimeter, meter, inches, and feet  <b>Vocabulary: unit square, square unit, area</b>	Student conferences  Teacher created pretests  Observations/checklists  Quick write/Response card  Standards Mastery Check (iReady)	Cross curricular Activity: Write spelling words on graph paper and count the area of each word  <b>Resources:</b> <u>Nearpod Lessons</u>	Clarify words  Less problems  Provide additional scaffolding  Extended time  Using prior knowledge
3.MD.C.6 – WALT measure area by counting unit squares including square cm, square m, square in, square ft, and nonstandard units		Performance Tasks	<u>Flocabulary Area Lesson</u>	

			<p><i>I-Ready Lessons</i></p> <p><u><i>Go Math!</i></u></p> <p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Design a mall or house and find the area of the stores/rooms.</i></p> <p><i>Interactive notebook lesson</i></p> <p><b>Resources:</b></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p> <p><u><i>I-Ready Lessons</i></u></p>
<p><b>3.MD.C.5 – WALT</b> area is an attribute of a plane figure</p>	<p><i>Use drawings, models, and manipulatives to count unit squares to find the area.</i></p>		
<p><b>3.MD.C.5 – WALT</b> the number of <math>n</math> square units covering a plane figure without gaps or overlaps, determines its area</p>	<p><i>Measure area of plane figures by counting squares</i></p>		
<p><b>3.MD.C.7.a – WALT</b> find the area of a rectangle with whole-number side lengths by tiling it</p>	<p><i>Use drawings, models, and manipulatives to count unit squares to find the side lengths and area</i></p>		<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Complete a sort, matching the rectangles with the correct area.</i></p> <p><i>Interactive notebook lesson</i></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p>
<p><b>3.MD.C.7.a – WALT</b> show that a tiled area is the same as can be found by multiplying the side lengths</p>	<p><i>Multiply 2 side lengths to find the area</i></p>		
<p><b>3.MD.C.7.b – WALT</b> multiply side lengths of rectangles to find areas in the context of real world</p>	<p><i>Use CUBES to solve real world word problems</i></p>		

<p><b>3.MD.C.7.c – WALT</b> represent whole-number products and rectangular areas</p>	<p><b>3.MD.C.7.c – WALT</b> use tiling to show the area of a rectangle with whole-number side lengths, <math>a</math> and <math>b + c</math>, is composed of two additive areas, <math>a \times b</math> and <math>a \times c</math></p>	<p><b>3.OA.B.5 – WALT</b> apply properties of operations (distributive property) as strategies to multiply</p>	<p><b>3.MD.C.7.c – WALT</b> use area models to represent and explain the distribution property by using mathematical reasoning</p>	<p><b>3.OA.C.7 – WALT</b> multiply and divide within 100 using strategies such as the relationship between multiplication and division or properties of operations (working towards accuracy and efficiency)</p>
		<p><i>Break apart a rectangle</i></p>	<p><i>Model the Distributive Property of Multiplication and use it to find products.</i></p>	<p><i>Write a set of related multiplication and division facts</i></p> <p><i>Identify factors in a fact family</i></p> <p><i>Demonstrate proficiency in multiplying one and two-digit numbers within 100</i></p>
		<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson</i></p>	<p><b>Resources:</b></p> <p><u><i>Flocabulary Math Properties Video</i></u></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p> <p><u><i>I-Ready Lessons</i></u></p>	<p><i>Flash cards</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson</i></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p> <p><u><i>I-Ready Lessons</i></u></p>

**Benchmark Assessment 1**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Ed-Connect</i>	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>
Standards Mastery (I-Ready)	

**Interdisciplinary Connections**

## CAR Unit 2 - Module B

**Unit Title: Mathematics – Relating Area to Multiplication and Addition –**

**Grade level: Grade 3**

**Timeframe: 2nd Marking Period**

### **Rationale**

*Grade 3 – Relating Area to Multiplication and Addition – Unit 2*

*This unit focuses on the concepts of area, the distributive property, and multiplication. Learners build upon earlier work with arrays and repeated addition from the prior unit and grade to tile rectangular areas, relating are to multiplication and addition. Learners use area models and properties of operations to reason about and to calculate products of whole numbers, using increasingly sophisticated strategies to solve multiplication word problems involving area. By the end of the unit, learners recognize area as additive and use the concept to determine areas of rectilinear figures. As learners apply strategies to solve multiplication and division problems, they continue working towards accurately and efficiently multiplying and dividing within 100 (fluency).*

### **Essential Questions**

*How can you solve problems involving area?*

*How can you use the strategy draw a diagram to multiply with multiples of 10*

How can you model and record multiplying 1-digit whole numbers by multiples of 10?

## Standards

### Standards (Taught and Assessed):

**3.OA.B.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  $8 \times 7$  as  $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)*

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

**3.OA.C.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.

Key: Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them. ■
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

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## Instructional Plan

### Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
We are learning to/that				
3.OA.B.5 – WALT apply properties of operations (associative property) as strategies to multiply	Model the Associative Property of Multiplication and use it to find products.	Exit ticket Non verbal check ins- Ex) Thumbs up-thumbs down. Self Reflection Student conferences Teacher created pretests Observations/checklists Quick write/Response card Standards Mastery Check (iReady) Performance Tasks	Use teacher modeling. Use drawings and physical models equations. Hands on activities and practice. Interactive notebook lesson <b>Resources:</b> <u>Flocabulary Math Properties Video</u> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u>	Modifications per student IEP, in addition to: Additional manipulatives Read text Clarify words Less problems Provide additional scaffolding Extended time Using prior knowledge
IBT.A.3 – WAI.T	Multiply by multiples of 10.		Use skip counting. a number	

<p>numbers by multiples of 10 in the range 10 to 90 using strategies based on place value and properties of operations</p>			<p>10.</p> <p>Use base-ten blocks or place value to multiply with multiples of 10.</p> <p>Hands on activities and practice.</p> <p>Interactive notebook lesson</p> <p><b>Resources:</b></p> <p><u>Nearpod Lessons</u></p> <p><u>Go Math!</u></p> <p><u>I-Ready Lessons</u></p>	
<p><b>3.OA.C.7 – WALT</b> multiply and divide within 100 using strategies such as: relationship between multiplication and division or properties of operations (working towards accuracy and efficiency)</p>	<p><i>Write a set of related multiplication and division facts</i></p> <p><i>Identify factors in a fact family</i></p> <p><i>Demonstrate proficiency in multiplying one and two-digit numbers within 100</i></p>		<p><u>Flash Cards</u></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson</i></p> <p><b>Resources:</b></p> <p><u>Nearpod Lessons</u></p> <p><u>Go Math!</u></p> <p><u>I-Ready Lessons</u></p>	

Benchmark Assessment 1

Benchmark Assessment

Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections

	<i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>
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**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to:  Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to:  Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>
Standards Mastery (I-Ready)	

**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>

## CAR Unit 2 - Module C

**Unit Title: Mathematics – Relating Area to Multiplication and Addition –**

**Grade level: Grade 3**

**Timeframe: 2nd Marking Period**

### Rationale

*Grade 3 – Relating Area to Multiplication and Addition – Unit 2*

*This unit focuses on the concepts of area, the distributive property, and multiplication. Learners build upon earlier work with arrays and repeated addition from the prior unit and grade to tile rectangular areas, relating area to multiplication and addition. Learners use area models and properties of operations to reason about and to calculate products of whole numbers, using increasingly sophisticated strategies to solve multiplication word problems involving area. By the end of the unit, learners recognize area as additive and use the concept to determine areas of rectilinear figures. As learners apply strategies to solve multiplication and division problems, they continue working towards accurately and efficiently multiplying and dividing within 100 (fluency).*

### Essential Questions

*How can you solve problems involving area?*

### Standards

**Standards (Taught and Assessed):**

**3.MD.C.7** Relate area to the operations of multiplication and addition.

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.

**3.NBT.A.2** Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or

Key: Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

<b>WALT</b>	<b>Student Strategies</b>	<b>Formative Assessment</b>	<b>Activities and Resources</b>	<b>Modifications (ELL,</b>
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				<b>Failure, 504) and Reflections</b>
<p><b>3.MD.C.7.d – WALT</b> recognize area as additive by finding areas of rectangles</p>		<p>Exit ticket Non verbal check ins- Ex) Thumbs up-thumbs down. Self Reflection Student conferences</p>	<p>Use teacher modeling. Use drawings and physical models equations. Hands on activities and practice. Interactive notebook lesson</p>	<p>Modifications per student IEP, in addition to: Additional manipulatives Read text Clarify words Less problems</p>
<p><b>3.MD.C.7.d – WALT</b> recognize area as additive by finding areas of rectilinear figures **</p>	<p>Relate area to addition and multiplication by using area models.</p>	<p>Teacher created pretests Observations/checklists</p>	<p><b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u></p>	<p>Provide additional scaffolding Extended time Using prior knowledge</p>
<p><b>3.MD.C.7.d – WALT</b> decompose rectilinear figures into non-overlapping rectangles and find their areas to solve real world problems</p>	<p>Apply the Distributive Property to area models and to find the area of combined rectangles.</p>	<p>Quick write/Response card Standards Mastery Check (iReady) Performance Tasks</p>	<p>Use teacher modeling. Use drawings and physical models equations. Hands on activities and practice. Interactive notebook lesson</p>	
<p><b>3.NBT.A.2 – WALT</b> add within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction (working towards accuracy and efficiency)</p>	<p>Use place value to add within 1,000. Use properties of operations to add within 1,000.</p>		<p><b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u> <u>Flocabulary Subtraction with Regrouping Video</u></p>	

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**Benchmark Assessment 1**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Ed-Connect</i>	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>

**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to: Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to:</i>
Standards Mastery (I-Ready)	<i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>

**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
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**CAR Unit 3 - Module A**

**Unit Title: Mathematics – Introductory Fraction Concepts –**

**Grade level: Grade 3**

**Timeframe: 3rd Marking Period**

### Grade 3 – Introductory Fraction Concepts – Unit 3

Unit 3 focuses on the foundational fraction concepts. It begins by building upon Grade 2 expectation that learners partition circles and rectangles into two, three, or four equal shares, and describe the shares using the words halves, thirds, or fourths. Learners also build upon their work with area in the previous unit to partition shapes into parts with equal areas. They come to understand unit fractions as quantities formed by partitioning a whole into equal parts. They use visual fraction models to represent simple fractions, to generate simple equivalent fractions, and to compare two fractions by reasoning about their size. Learners also come to understand fractions as numbers by placing them on the number line, and that all fractions are built from unit fractions.

This unit integrates (1) solving word problems involving telling and writing time to the nearest minute; (2) measuring length using rulers and representing the data on line plots; and (3) solving two-step word problems using the four operations; and working towards accurately and efficiently adding and subtracting within 1000.

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## Essential Questions

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*How can you use fractions to describe how much or how many?*

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## Standards

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### Standards (Taught and Assessed):

- 3.NF.A.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.G.A.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  $1/4$  of the area of the shape.

**Key:** Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 0.1.4.A.5 Analyze critical thinking and problem-solving skills across and family settings.

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>  <i>Standards Pre-Assessment</i>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>  Tiered Instruction - 3 levels Mods per students' IEPs RTI
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### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
We are learning to/that				
<b>3.NF.A.1 – WALT</b> a fraction is a quantity formed when a whole is	<i>Use a fraction to name one part of a whole that is divided into equal parts.</i>	<i>Exit ticket Non verbal check ins- Ex) Thumbs up-thumbs down.</i>	<i>Use teacher modeling. Use drawings and physical models equations.</i>	<i>Modifications per student IEP, in addition to: Additional manipulatives</i>

<p>is the quantity formed by 1 part when a whole is partitioned into <math>b</math> equal parts. (For example, <math>\frac{1}{4}</math> is the quantity that is formed by 1 part of the 4 total parts when the whole is partitioned into 4 equal parts)</p>	<p><i>Fraction, Unit Fraction</i></p>	<p><i>Student conferences</i> <i>Teacher created pretests</i> <i>Observations/checklists</i> <i>Quick write/Response card</i> <i>Standards Mastery Check (iReady)</i> <i>Performance Tasks</i></p>	<p><i>Interactive notebook lesson</i> <b>Resources:</b> <u><i>Nearpod Lessons</i></u> <u><i>Go Math!</i></u> <u><i>I-Ready Lessons</i></u> <u><i>Flocabulary Fractions</i></u></p>	<p><i>Clarify words</i> <i>Less problems</i> <i>Provide additional scaffolding</i> <i>Extended time</i> <i>Using prior knowledge</i></p>
<p><b>3.NF.A.1 – WALT</b> a fraction <math>a/b</math> as the quantity formed by <math>a</math> parts, where each part has a size of <math>1/b</math>. (For example, <math>\frac{3}{4}</math> is the quantity that is formed by 3 parts of the 4 total parts where each part has a size of <math>\frac{1}{4}</math>.)</p>	<p><i>Use a fraction to name part of a whole that is divided into equal parts.</i> <i>Read, write, and model fractions that represent more than one part of a whole that is divided into equal parts.</i> <b>Vocabulary:</b> <i>Halves, Thirds, Fourths, Sixths, Eighths, Numerator, Denominator</i></p>		<p><i>Use teacher modeling. Use drawings and physical models equations.</i> <i>Hands on activities and practice.</i> <i>Interactive notebook lesson</i> <b>Resources:</b> <u><i>Nearpod Lessons</i></u> <u><i>Go Math!</i></u> <u><i>I-Ready Lessons</i></u> <u><i>Flocabulary Fractions</i></u></p>	
<p><b>3.G.A.2 – WALT</b> partition shapes into parts with equal areas <b>3.G.A.2 – WALT</b> express area of each part as a</p>	<p><i>Explore and identify equal parts of a whole.</i> <i>Divide models to make equal shares.</i></p>		<p><i>Use teacher modeling. Use drawings and physical models equations.</i> <i>Hands on activities and practice.</i> <i>Interactive notebook lesson</i></p>	

	<p><i>name one part of a whole that is divided into equal parts.</i></p> <p><b>Vocabulary:</b></p> <p><i>Equal parts, whole</i></p>		<p><b>Resources:</b></p> <p><u>Nearpod Lessons</u></p> <p><u>Go Math!</u></p> <p><u>I-Ready Lessons</u></p> <p><u>Floccubulary Fractions</u></p>	
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**Benchmark Assessment 1**

<p><b>Benchmark Assessment</b></p> <p><i>Ed-Connect</i></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Benchmark Assessment 2**

<p><b>Benchmark Assessment</b></p> <p><i>I-Ready</i></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Summative Assessments (add rows as needed)**

<p><b>Summative Assessment</b></p> <p>Collaboratively Designed Assessment</p> <p>Standards Mastery (I-Ready)</p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide</i></p>
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**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>

**CAR Unit 3 - Module B**

**Unit Title: Mathematics – Introductory Fraction Concepts –**

**Grade level: Grade 3**

**Timeframe: 3rd Marking Period**

**Rationale**

*Grade 3 – Introductory Fraction Concepts – Unit 3*

*Unit 3 focuses on the foundational fraction concepts. It begins by building upon Grade 2 expectation that learners partition circles and rectangles into two, three, or four equal shares, and describe the shares using the words halves, thirds, or fourths. Learners also build upon their work with area in the previous unit to partition shapes into parts with equal areas. They come to understand unit fractions as quantities formed by partitioning a whole into equal parts. They use visual fraction models to represent simple fractions, to generate simple equivalent fractions, and to compare two fractions by reasoning about their size. Learners also come to understand fractions as numbers by placing them on the number line, and that all fractions are built from unit fractions.*

*This unit integrates (1) solving word problems involving telling and writing time to the nearest minute; (2) measuring length using rulers and representing the data on line plots; and (3) solving two-step word problems using the four operations; and working towards accurately and efficiently adding and subtracting within 1000.*

## Essential Questions

*How can you tell time?*

## Standards

### Standards (Taught and Assessed):

**3.MD.A.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.

Key: Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
<p><b>We are learning to/that</b></p> <p><b>3.MD.A.1 – WALT</b> tell and write time to the nearest minute and measure time intervals in minutes</p>	<p>Read, write, and tell time on analog and digital clocks to the nearest minute.</p> <p>Use a number line or an analog clock to measure time intervals in minutes.</p> <p><b>Vocabulary:</b></p> <p>Minute, analog clock, digital clock, half hour, hour, quarter hour, elapsed time</p>	<p>Exit ticket</p> <p>Non verbal check ins- Ex)</p> <p>Thumbs up-thumbs down.</p> <p>Self Reflection</p> <p>Student conferences</p> <p>Teacher created pretests</p> <p>Observations/checklists</p> <p>Quick write/Response card</p> <p>Standards Mastery Check (iReady)</p>	<p>Use teacher modeling. Use drawings, number lines and physical models equations.</p> <p>Create a clock using a paper plate and fold it to show the half and quarter hours.</p> <p>Hands on activities and practice.</p> <p>Interactive notebook lesson</p> <p><b>Resources:</b></p> <p><u>Nearpod Lessons</u></p> <p><i>Go Math!</i></p>	<p>Modifications per student. IEP, in addition to:</p> <p>Additional manipulatives</p> <p>Read text</p> <p>Clarify words</p> <p>Less problems</p> <p>Provide additional scaffolding</p> <p>Extended time</p> <p>Using prior knowledge</p>

<p><b>3.MD.A.1 – WALL</b> solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram</p>	<p><i>Solve problems involving time intervals in minutes by using addition and subtraction.</i></p>		<p><u>I-Ready Lessons</u>  <u>Flocabulary Telling Time to the Hour and Half Hour</u>  <u>Flocabulary Telling Time to Five Minutes</u>  <u>Flocabulary Elapsed Time</u></p> <p><i>Use teacher modeling. Use drawings, number lines and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson</i></p> <p><b>Resources:</b>  <u>Nearpod Lessons</u>  <u>Go Math!</u>  <u>I-Ready Lessons</u></p>	
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**Benchmark Assessment 1**

<p><b>Benchmark Assessment</b> <i>Ed-Connect</i></p>		<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>  <i>Modifications per students' IEP, in addition to:</i>  <i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Benchmark Assessment 2**

**Benchmark Assessment**

**Modifications (ELL, Special Education, Gifted, At-risk of Failure**

	<i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>
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**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to:</i>
Standards Mastery (I-Ready)	<i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>

**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>

## CAR Unit 3 - Module C

**Unit Title: Mathematics – Number Concepts and Counting to 10 –**

**Grade level: Grade 3**

**Timeframe: 3rd Marking Period**

### **Rationale**

*Grade 3 – Introductory Fraction Concepts – Unit 3*

*Unit 3 focuses on the foundational fraction concepts. It begins by building upon Grade 2 expectation that learners partition circles and rectangles into two, three, or four equal shares, and describe the shares using the words halves, thirds, or fourths. Learners also build upon their work with area in the previous unit to partition shapes into parts with equal areas. They come to understand unit fractions as quantities formed by partitioning a whole into equal parts. They use visual fraction models to represent simple fractions, to generate simple equivalent fractions, and to compare two fractions by reasoning about their size. Learners also come to understand fractions as numbers by placing them on the number line, and that all fractions are built from unit fractions.*

*This unit integrates (1) solving word problems involving telling and writing time to the nearest minute; (2) measuring length using rulers and representing the data on line plots; and (3) solving two-step word problems using the four operations; and working towards accurately and efficiently adding and subtracting within 1000.*

### **Essential Questions**

*How can you use fractions to describe how much or how many?*

*How can you compare fractions?*

*How can you use measurement to describe the size of something?*

## Standards

### Standards (Taught and Assessed):

- 3.NF.A.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.MD.B.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.NF.A.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, e.g.,  $1/2 = 2/4$ ,  $4/6 = 2/3$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- 3.NF.A.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  $>$ ,  $=$ , or  $<$ .

**Key:** Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively. ■
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them. ■
- CRP11. Use technology to enhance productivity.

- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources
<b>We are learning to/that</b>			
<b>3.NF.A.2 – WALT</b> fractions are numbers and can be found or represented on the number line	<i>Represent and locate fractions on a number line.</i>	<i>Exit ticket Non verbal check ins- Ex) Thumbs up-thumbs down. Self Reflection</i>	<i>Use teacher modeling. Use drawings, number lines, and physical models equations. Hands on activities and practice. Interactive notebook lesson.</i>
<b>3.NF.A.2 – WALT</b> represent and recognize a fraction <i>l/b</i> on a number line diagram by defining		<i>Student conferences Teacher created pretests</i>	<b>Resources:</b> <i>Clarify words Less problems</i>

<p>the whole and partitioning it into <math>b</math> equal parts and that the endpoint of the part based at 0 locates the number <math>1/b</math> on the number line</p>		<p><i>Quick write/Response card</i> <i>Standards Mastery Check (iReady)</i> <i>Performance Tasks</i></p>	<p><u>Go Math!</u> <u>I-Ready Lessons</u> <u>Flocabulary Fractions</u></p>	<p><i>Extended time</i> <i>Using prior knowledge</i></p>
<p><b>3.NF.A.2 – WALT</b> represent and recognize a fraction <math>a/b</math> on a number line diagram by marking off a lengths <math>1/b</math> from 0 and that its endpoint locates the number <math>a/b</math> on the number line</p>				
<p><b>3.NF.A.3 – WALT</b> compare fractions by reasoning about their size</p>	<p><i>Compare fractions using models.</i></p>		<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p>	
<p><b>3.NF.A.3a – WALT</b> two fractions are equivalent (equal) if they are the same size, or the same point on a number line</p>	<p><i>Model equivalent fractions by folding paper, using area models, and using number lines.</i></p>		<p><i>Hands on activities and practice.</i> <i>Interactive notebook lesson.</i></p>	
<p><b>3.NF.A.3b – WALT</b> recognize and generate simple equivalent fractions</p>	<p><i>Generate equivalent fractions by using models.</i></p>		<p><b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u></p>	
<p><b>3.NF.A.3b – WALT</b> explain why two fractions are equivalent by using a visual fraction model</p>	<p><i>Use a model to explain why two fractions are equivalent.</i></p>		<p><u>Flocabulary Equivalent Fractions</u></p>	
<p><b>3.NF.A.3c – WALT</b></p>				

<p><b>3.NF.A.3c – WALT</b> recognize fractions that are equivalent to whole numbers</p>	<p><i>Recognize fractions that are equivalent to whole numbers.</i></p>			
<p><b>3.NF.A.3d – WALT</b> compare two fractions with the same numerator or the same denominator by reasoning about their size</p>	<p><i>Compare fractions with the same denominator or numerator using models.</i></p> <p><b>Vocabulary:</b> <i>Equivalent, Equivalent fractions, Fractions greater than 1</i></p>			
<p><b>3.MD.B.4 – WALT</b> generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch</p>	<p><i>Measure length to the nearest half or fourth inch.</i></p> <p><b>Vocabulary:</b> <i>Inch</i></p>		<p><i>Use teacher modeling. Use drawings, measuring with a ruler, and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson.</i></p> <p><b>Resources:</b> <i>Nearpod Lessons</i> <i>Go Math!</i> <i>I-Ready Lessons</i></p>	
<p><b>3.MD.B.4 – WALT</b> make a line plot showing measurement data, where the horizontal scale is marked off in appropriate</p>	<p><i>Use measurement data to make a line plot.</i></p> <p><b>Vocabulary:</b> <i>Line plot</i></p>		<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and</i></p>	

halves, or quarters			<p><i>Interactive notebook lesson.</i></p> <p><b>Resources:</b></p> <p><u>Nearpod Lessons</u></p> <p><u>Go Math!</u></p> <p><u>I-Ready Lessons</u></p> <p><u>Flocabulary Line Plots</u></p>
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**Benchmark Assessment 1**

<b>Benchmark Assessment</b>			<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Benchmark Assessment 2**

<b>Benchmark Assessment</b>			<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p> <p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>			<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p>
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<p>Collaboratively Designed Assessment</p> <p>Standards Mastery (I-Ready)</p>	<p><i>Modifications per students' IEP, in addition to:</i></p> <p><i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i></p>
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**Interdisciplinary Connections**

<p><b>Interdisciplinary Connections</b></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p>

**CAR Unit 3 - Module D**

**Unit Title: Mathematics – Number Concepts and Counting to 10 –**

**Grade level: Grade 3**

**Timeframe: 3rd Marking Period**

<p><b>Rationale</b></p>
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*Grade 3 – Introductory Fraction Concepts – Unit 3*

*Unit 3 focuses on the foundational fraction concepts. It begins by building upon Grade 2 expectation that learners partition circles and*

quantities formed by partitioning a whole into equal parts. They use visual fraction models to represent simple fractions, to generate simple equivalent fractions, and to compare two fractions by reasoning about their size. Learners also come to understand fractions as numbers by placing them on the number line, and that all fractions are built from unit fractions.

This unit integrates (1) solving word problems involving telling and writing time to the nearest minute; (2) measuring length using rulers and representing the data on line plots; and (3) solving two-step word problems using the four operations; and working towards accurately and efficiently adding and subtracting within 1000.

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## Essential Questions

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*How can you solve two-step word problems?*

*How can you round whole numbers?*

*How can you add and subtract within 1,000?*

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## Standards

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### Standards (Taught and Assessed):

**3.OA.D.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.NBT.A.1** Use place value understanding to round whole numbers to the nearest 10 or 100.

**3.NBT.A.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.

**Key:** Major Cluster      Supporting Cluster      Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Analyze mathematics needs and technical skills.

- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

**Social-Emotional Learning Competencies**

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

**Instructional Plan**

**Pre-Assessment and Reflection**

<p><b>Pre-Assessment</b></p> <p><i>Standards Pre-Assessment</i></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b></p> <p>Tiered Instruction - 3 levels          Mods per students' IEPs          RTI</p>
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**Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)**

<p><b>SLO – WALT</b></p> <p><b>We are learning to/that</b></p>	<p><b>Student Strategies</b></p>	<p><b>Formative Assessment</b></p>	<p><b>Activities and Resources</b></p>	<p><b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b></p>
<p><b>3.OA.D.8</b> solve two-step word problems using the four operations</p>	<p><i>Use CUBES to solve word problems.</i></p>	<p><i>Exit ticket</i>  <i>Non verbal check ins- Ex) Thumbs up-thumbs down.</i></p>	<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p>	<p><i>Modifications per student IEP, in addition to: Additional manipulatives</i></p>

<p><b>3.OA.D.8</b> represent two-step word problems using equations with a letter standing for the unknown quantity</p>	<p>Create and solve two-step word problems with an unknown factor.</p>	<p>Student conferences Teacher created pretests Observations/checklists Quick write/Response card Standards Mastery Check (iReady) Performance Tasks</p>	<p>Interactive notebook lesson. <b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u> <u>Flocabulary Word Problems</u> <u>Flocabulary Estimation with Rounding</u></p>	<p>Clarify words Less problems Provide additional scaffolding Extended time Using prior knowledge</p>
<p><b>3.OA.D.8</b> assess the reasonableness of answers in two-step word problems using mental computation and estimation strategies including rounding</p>	<p>Use mental computation and estimation to decide the reasonableness of answers.</p>			
<p><b>3.NBT.A.1</b> round whole numbers to the nearest 10 or 100, using place value understanding</p>	<p>Round 2- and 3-digit numbers to the nearest ten or hundred.</p>		<p>Use teacher modeling. Use drawings and physical models equations. Hands on activities and practice. Interactive notebook lesson. <b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u> <u>Flocabulary Rounding Numbers</u></p>	
<p><b>3.NBT.A.2</b> add within 1000 with accuracy and efficiency using strategies</p>	<p>Recall using place value to add within 1,000.</p>		<p>Use teacher modeling. Use drawings and physical models equations.</p>	

<p>operations, and/or the relationship between addition and subtraction</p>	<p>1,000.</p>		<p>practice. Interactive notebook lesson. <b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u> <u>Flocabulary Addition with Regrouping Video</u></p>	
<p>3.NBT.A.2 subtract within 1000 with accuracy and efficiency using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction</p>	<p>Use place value to subtract within 1,000. Use properties of operations to subtract within 1,000.</p>		<p>Use teacher modeling. Use drawings and physical models equations. Hands on activities and practice. Interactive notebook lesson. <b>Resources:</b> <u>Nearpod Lessons</u> <u>Go Math!</u> <u>I-Ready Lessons</u> <u>Flocabulary Subtraction with Regrouping Video</u></p>	

**Benchmark Assessment 1**

**Benchmark Assessment**

*Ed-Connect*

**Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections**

*Modifications per students' IEP, in addition to:*

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**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to:  Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to:  Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>
Standards Mastery (I-Ready)	

**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>

## CAR Unit 4 - Module A

**Unit Title: Mathematics – Relating Area to Multiplication and Addition –**

**Grade level: Grade 3**

**Timeframe: 4th Marking Period**

### Rationale

*Grade 3 – Spatial Reasoning and Fluency with Operations – Unit 4*

*This final unit centers on problem solving with geometry and measurement. Learners measure and estimate liquid volumes and masses. They solve one-step word problems involving masses or volumes using the four operations. Building upon previous geometry content from earlier grades, they categorize shapes based on shared attributes. Learners solve real world and mathematical problems involving perimeters of polygons. Learners represent data with scaled graphs, and solve one- and two-step word problems using information presented in scaled graphs. To conclude the year, learners revisit addition and subtraction within 1000, and multiplication and division within 100 to demonstrate accurate and efficient use of strategies (fluency).*

### Essential Questions

*How can you estimate and measure liquid volume in metric units?*

*How can you estimate and measure mass in metric units?*

*How can you use models to solve liquid volume and mass problems?*

### Standards

#### Standards (Taught and Assessed):

**3.MD.A.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 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

**Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills**

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

**Social-Emotional Learning Competencies**

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

**Instructional Plan**

**Pre-Assessment and Reflection**

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

**Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)**

We are learning to/that				<b>Gifted, At-risk of Failure, 504) and Reflections</b>  <i>Modifications per student IEP, in addition to:</i>
<b>3.MD.A.2 – WALT</b> measure liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l)	<i>Recognize units of measurement.</i>  <i>Recall estimation strategies in order to estimate volume and mass</i>	<i>Exit ticket</i>  <i>Non verbal check ins- Ex)</i> <i>Thumbs up-thumbs down.</i>  <i>Self Reflection</i>	<i>Hands on activities and practice.</i>  <i>Interactive notebook lesson</i>  <b>Resources:</b> <i>Nearpod Lessons</i> <u><i>Go Math!</i></u> <i>I-Ready Lessons</i>	<i>Modifications per student IEP, in addition to:</i>  <i>Additional manipulatives</i> <i>Read text</i>  <i>Clarify words</i>  <i>Less problems</i>  <i>Provide additional scaffolding</i>  <i>Extended time</i>
<b>3.MD.A.2 – WALT</b> estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l)	<b>Essential Vocabulary:</b> <i>volume, mass, gram, kilogram, liter</i>	<i>Student conferences</i>  <i>Teacher created pretests</i>  <i>Observations/checklists</i>  <i>Quick write/Response card</i>	<i>Hands on activities and practice.</i>  <i>Interactive notebook lesson</i>  <b>Resources:</b> <i>Nearpod Lessons</i> <u><i>Go Math!</i></u> <u><i>I-Ready Lessons</i></u>	<i>Using prior knowledge</i>
<b>3.MD.A.2 – WALT</b> add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.**	<i>Use CUBES to solve word problems.</i>	<i>Standards Mastery Check (Ready)</i>  <i>Performance Tasks</i>		

**Benchmark Assessment 1**

**Benchmark Assessment**

*Ed-Connect*

**Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections**

*Modifications per students' IEP, in addition to:*

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**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to:  Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to:  Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding , Extended time</i>
Standards Mastery (I-Ready)	

**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>

## CAR Unit 4 - Module B

**Unit Title: Mathematics – Spatial Reasoning and Fluency with Operations –**

**Grade level: Grade 3**

**Timeframe: 4th Marking Period**

### **Rationale**

*Grade 3 – Spatial Reasoning and Fluency with Operations – Unit 4*

*This final unit centers on problem solving with geometry and measurement. Learners measure and estimate liquid volumes and masses. They solve one-step word problems involving masses or volumes using the four operations. Building upon previous geometry content from earlier grades, they categorize shapes based on shared attributes. Learners solve real world and mathematical problems involving perimeters of polygons. Learners represent data with scaled graphs, and solve one- and two-step word problems using information presented in scaled graphs. To conclude the year, learners revisit addition and subtraction within 1000, and multiplication and division within 100 to demonstrate accurate and efficient use of strategies (fluency).*

### **Essential Questions**

*How can you solve problems involving perimeter and area?*

*How can you find the perimeter of a shape?*

*How can you measure perimeter?*

*How can you find the unknown length of a side in a plane figure when you know its perimeter?*

*How is finding the area of a figure different from finding the perimeter of a figure?*

*How can you use area to compare rectangles with the same perimeter?*

*How can you use perimeter to compare rectangles with the same area?*

*What are some ways to describe and classify two-dimensional shapes?*

*What are some ways to describe two-dimensional shapes?*

*How can you describe angles in plane shapes?*

*How can you use line segments and angles to make polygons?*

*How can you describe line segments that are sides of polygons?*

*How can you draw quadrilaterals?*

*How can you use sides and angles to help you describe triangles?*

*How can you use different strategies to classify plane shapes?*

*How can you divide shapes into parts with equal areas and write the area as a unit fraction of the whole?*

## Standards

### Standards (Taught and Assessed):

**3.G.A.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.MD.D.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.

**Key:** Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management

Social Awareness

- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
We are learning to/that				
3.G.A.1 – WALT shapes (quadrilaterals) in different categories may share attributes, and that the shared attributes can define a larger category **	Recall the meaning of what a quadrilateral is.  Describe the attributes of a quadrilateral (side length, angles, side type)	Exit ticket  Non verbal check ins- Ex) Thumbs up-thumbs down.  Self Reflection  Student conferences  Teacher created pretests  Observations/checklists  Quick write/Response card  Standards Mastery Check (iReady)	Use pattern blocks to sort, describe, and classify  Interactive notebook lessons  Use various manipulatives and hands on materials to create and classify quadrilaterals.  <u>Quadrilateral Internet Activity</u>  <u>Shapes Flocabulary lesson</u>  <i>Normal Lessons</i>	Modifications per students' IEP, in addition to:  Additional manipulatives  Read text  Clarify words  Less problems  Provide additional scaffolding  Extended time  <i>Using prior knowledge</i>
3.G.A.1 – WALT recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories	Classify the different types of quadrilaterals.  <b>Essential Vocabulary:</b> polygon, quadrilateral, square, rhombus, rectangle, square, trapezoid			

		<i>Performance Tasks</i>			
<p><b>3.MD.D.8 – WALT</b> solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths</p>	<p><i>Recall addition strategies.</i></p> <p><i>Add multiple single digit numbers</i></p> <p><i>Recognize perimeter is around the outside of a shape</i></p>	<p><u>Go Math!</u></p> <p><u>I-Ready Lessons</u></p> <p><i>Review addition in order to preview perimeter</i></p> <p><i>Use teacher modeling. Use drawings and physical models equations</i></p> <p><i>Draw shapes with side lengths and have classmates solve.</i></p> <p><i>Have students use manipulatives to create shapes and measure the perimeter with a ruler</i></p> <p><i>Review subtraction to prepare for unknown side lengths.</i></p> <p><i>Hands on activities</i></p> <p><i>Interactive notebook lesson</i></p> <p><u>Nearpod Lessons</u></p> <p><u>Go Math!</u></p> <p><u>I-Ready Lessons</u></p>			
<p><b>3.MD.D.8 – WALT</b> solve real world and mathematical problems involving perimeters of polygons, including finding unknown side lengths when given the perimeter</p>	<p><i>Use problem solving strategies to figure out the missing side length</i></p> <p><b>Essential Vocabulary:</b></p> <p><i>perimeter</i></p>			<p><i>Have students create different models of rectangles. They will measure and compare the area and perimeter of each rectangle</i></p>	
<p><b>3.MD.D.8 – WALT</b> solve real world and mathematical problems involving exhibiting rectangles with the same</p>	<p><i>Identify the difference between area and perimeter.</i></p> <p><i>Recognize that shapes with the same perimeter do not have the same area and</i></p>				

area/different perimeters	<i>not have the same perimeter.</i>		<i>Hands on activities</i> <i>Interactive notebook lesson</i> <u><i>Flocabulary Area and Perimeter Lesson</i></u> <u><i>Nearpod Lessons</i></u> <u><i>Go Math!</i></u> <u><i>I-Ready Lessons</i></u>
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**Benchmark Assessment 1**

<b>Benchmark Assessment</b>			<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>Ed-Connect</i>			<i>Modifications per students' IEP, in addition to:</i> <i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Benchmark Assessment 2**

<b>Benchmark Assessment</b>			<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>I-Ready</i>			<i>Modifications per students' IEP, in addition to:</i> <i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>			<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
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Standards Mastery (I-Ready)	<i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>
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**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>

**CAR Unit 4 - Module C**

**Unit Title: Mathematics – Spatial Reasoning and Fluency with Operations –**

**Grade level: Grade 3**

**Timeframe: 4th Marking Period**

**Rationale**

*Grade 3 – Spatial Reasoning and Fluency with Operations – Unit 4*

*This final unit centers on problem solving with geometry and measurement. Learners measure and estimate liquid volumes and masses. They solve one-step word problems involving masses or volumes using the four operations. Building upon previous geometry content from earlier*

*They use their understanding of area to solve real-world problems involving area. They use their understanding of volume to solve real-world problems involving volume. They use their understanding of mass and weight to solve real-world problems involving mass and weight. They use their understanding of length to solve real-world problems involving length.*

graphs. To conclude the year, learners revisit addition and subtraction within 1000, and multiplication and division within 100 to demonstrate accurate and efficient use of strategies (fluency).

## Essential Questions

*How can you represent and interpret data?*

## Standards

### Standards (Taught and Assessed):

**3.MD.B.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*

**Key:** Major Cluster      Supporting Cluster      Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>				
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI				

### Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
<p><b>We are learning to/that</b></p> <p><b>3.MD.B.3 – WALT</b> draw a scaled picture graph to represent a data set with several categories</p>	<p><i>Use pictures to represent numbers in a picture graph</i></p> <p><i>Recall multiplication/division strategies to determine the key for the picture graph</i></p>	<p><i>Exit ticket</i></p> <p><i>Non verbal check ins- Ex) Thumbs up- thumbs down.</i></p> <p><i>Self Reflection</i></p> <p><i>Student conferences</i></p> <p><i>Teacher created pretests</i></p> <p><i>Observations/checklists</i></p>	<p><i>Review what data is and how it is collected</i></p> <p><i>Have students take a survey and use the data to create a picture graph.</i></p> <p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and</i></p>	<p><b>Modifications per students' IEP, in addition to:</b></p> <p><i>Additional manipulatives</i></p> <p><i>Read text</i></p> <p><i>Clarify words</i></p> <p><i>Less problems</i></p> <p><i>Provide additional</i></p>

		<p><i>Standards Mastery Check (iReady)</i></p> <p><i>Performance Tasks</i></p>	<p><i>Interactive notebook lesson</i></p> <p><u><i>Flocabulary Data Lesson</i></u></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p> <p><u><i>I-Ready Lessons</i></u></p>	<p><i>Extended time</i></p> <p><i>Using prior knowledge</i></p>
<p><b>3.MD.B.3 – WALT</b> draw a scaled bar graph to represent a data set with several categories</p>	<p><i>Use bars to represent data in a bar graph</i></p> <p><i>Recall multiplication/division strategies to determine the key for the bar graph</i></p> <p><b>Essential Vocabulary:</b> bar graph</p>	<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson</i></p> <p><u><i>Flocabulary Bar Graphs Lesson</i></u></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p> <p><u><i>I-Ready Lessons</i></u></p>	<p><i>Use teacher modeling. Use drawings and physical models equations.</i></p> <p><i>Hands on activities and practice.</i></p> <p><i>Interactive notebook lesson</i></p> <p><u><i>Flocabulary Bar Graphs Lesson</i></u></p> <p><u><i>Nearpod Lessons</i></u></p> <p><u><i>Go Math!</i></u></p> <p><u><i>I-Ready Lessons</i></u></p>	
<p><b>3.MD.B.3 – WALT</b> solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs</p>	<p><i>Add/ subtract 2 numbers.</i></p> <p><i>Use CUBES strategy to determine the operation needed to solve the problem.</i></p>		<p><u><i>Review CUBES.</i></u></p> <p><i>Have students use the data they collected to create these types of questions about their graph and switch with a classmate</i></p> <p><i>Use teacher modeling. Use drawings and physical models equations.</i></p>	

			<i>practice.</i> <i>Interactive notebook lessons</i> <i>Nearpod Lessons</i> <i>Go Math!</i> <i>I-Ready Lessons</i>	
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**Benchmark Assessment 1**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>Ed-Connect</i>	<i>Modifications per students' IEP, in addition to:</i> <i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>I-Ready</i>	<i>Modifications per students' IEP, in addition to:</i> <i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
Collaboratively Designed Assessment	<i>Modifications per students' IEP, in addition to:</i> <i>Additional manipulatives, Read text, Clarify words, Less problems, Provide</i>
Standards Mastery (I-Ready)	

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**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>

## CAR Unit 4 - Module D

**Unit Title: Mathematics – Spatial Reasoning and Fluency with Operations –**

**Grade level: Grade 3**

**Timeframe: 4th Marking Period**

### **Rationale**

*Grade 3 – Spatial Reasoning and Fluency with Operations – Unit 4*

*This final unit centers on problem solving with geometry and measurement. Learners measure and estimate liquid volumes and masses. They solve one-step word problems involving masses or volumes using the four operations. Building upon previous geometry content from earlier grades, they categorize shapes based on shared attributes. Learners solve real world and mathematical problems involving perimeters of polygons. Learners represent data with scaled graphs, and solve one- and two-step word problems using information presented in scaled graphs. To conclude the year, learners revisit addition and subtraction within 1000, and multiplication and division within 100 to demonstrate accurate and efficient use of strategies (fluency).*

### **Essential Questions**

### **Standards**

#### **Standards (Taught and Assessed):**

- 3.OA.D.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.NBT.A.1** Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.A.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.OA.C.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing

Key: Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21<sup>st</sup> Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

### Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

## Instructional Plan

### Pre-Assessment and Reflection

<b>Pre-Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>Standards Pre-Assessment</i>	Tiered Instruction - 3 levels Mods per students' IEPs RTI

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
We are learning to/that				
3.OA.D.8 – WALT solve two-step word problems using the four operations	Use CUBES to solve word problems	Exit ticket Non verbal check ins- Ex) Thumbs up-thumbs down.	Review text strategies to determine key components of the word problem (ex: CUBES)	Modifications per students' IEP, in addition to: Additional manipulatives
3.OA.D.8 – WALT represent two-step word problems using equations with a letter standing for the unknown quantity	Use drawings and equations with a symbol for the unknown number to represent multiplication and division word problems within 100	Self Reflection Student conferences Teacher created pretests Observations/checklists	Use teacher modeling to review mental computation and estimation strategies including rounding. Hands on activities and practice. Interactive notebook lesson	Read text Clarify words Less problems Provide additional scaffolding Extended time
3.OA.D.8 – WALT assess the reasonableness of answers in two-step word problems using mental computation and estimation strategies including rounding	Create and solve word problems with an unknown factor.  Count by tens and ones, use a number line, make compatible numbers, or use friendly numbers to find sums mentally.  Recall how to use a number line, friendly numbers, or the break apart strategy to find differences mentally.	Quick write/Response card Standards Mastery Check (iReady) Performance Tasks	<b>Resources:</b> <u>Khan Academy</u> <u>Prodigy Game</u> <u>i-Ready Lessons</u> <u>Learn Zillion</u> <u>Nearpod Lessons</u> <u>Go Math!</u>	Using prior knowledge

	<p><i>differences.</i></p>		<p><i>Review place value</i></p> <p><i>Review rounding songs/poems.</i></p> <p><i>Interactive notebook lesson</i></p> <p><b>Resources:</b></p> <p><i><u><a href="#">Khan Academy</a></u></i></p> <p><i><u><a href="#">Prodigy Game</a></u></i></p> <p><i><u><a href="#">i-Ready Lessons</a></u></i></p> <p><i><u><a href="#">Learn Zillion</a></u></i></p> <p><i><u><a href="#">Nearpod Lessons</a></u></i></p> <p><i><u><a href="#">Go Math!</a></u></i></p> <p><i><u><a href="#">Flocabulary Rounding Video</a></u></i></p>	
<p><b>3.NBT.A.1 – WALT</b> round whole numbers to the nearest 10 or 100, using place value understanding</p>	<p><i>Recall place value: ones, tens, hundreds</i></p> <p><i>Name the places in 2 and 3 digit number</i></p> <p><i>Compare numbers using place value</i></p> <p><i>Determine whether a number rounds up or down</i></p> <p><i>Use a number line to round a whole number to the nearest 10 and 100</i></p> <p><i>Round 2- and 3-digit numbers to the nearest ten or hundred.</i></p>		<p><i>Use teacher modeling to review addition strategies</i></p> <p><i>Hands on activities and practice</i></p> <p><i>Interactive notebook lesson</i></p> <p><b>Resources:</b></p> <p><i><u><a href="#">Khan Academy</a></u></i></p>	
<p><b>3.NBT.A.2 – WALT</b> add within 1000 with accuracy and efficiency by using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction</p>	<p><i>Recall using place value to add within 1,000.</i></p> <p><i>Recall using properties of operations to add within 1,000.</i></p>			

		<p><u><a href="#">i-Ready Lessons</a></u>  <u><a href="#">Learn Zillion</a></u>  <u><a href="#">Nearpod Lessons</a></u>  <u><a href="#">Go Math!</a></u></p>	
<p><b>3.NBT.A.2 – WALT</b>  substract within 1000 with accuracy and efficiency by using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction</p>	<p><i>Recall using place value to substract within 1,000</i></p> <p><i>Recall using properties of operations to substract within 1,000</i></p>	<p><i>Use teacher modeling to review subtraction strategies</i></p> <p><i>Hands on activities and practice</i></p> <p><i>Interactive notebook lessons</i></p> <p><b>Resources:</b></p> <p><u><a href="#">Khan Academy</a></u>  <u><a href="#">Prodigy Game</a></u>  <u><a href="#">i-Ready Lessons</a></u>  <u><a href="#">Learn Zillion</a></u>  <u><a href="#">Nearpod Lessons</a></u>  <u><a href="#">Go Math!</a></u></p>	
<p><b>3.OA.C.7 – WALT</b>  multiply and divide within 100 using strategies such as: relationship between multiplication and division or properties of operations with accuracy and efficiency</p>	<p><i>Recall how to write a set of related multiplication and division facts</i></p> <p><i>Recall how to identify factors in a fact family</i></p>	<p><i>Review fact cards for faster fluency.</i></p> <p><i>Play fact games on the computer.</i></p> <p><i>Work with a partner/group on center fact fluency games: examples Bingo</i></p>	

			<b>Resources:</b> <i>Xtra Math</i>	
<b>3.OA.C.7 – WALT</b> know from memory all products of two one-digit numbers	<i>Demonstrate proficiency in multiplying one and two-digit numbers within 100</i>		<i>Have a math bee for students to demonstrate mastery of multiplication math facts</i>  <b>Resources:</b> <i>Xtra Math</i>	

**Benchmark Assessment 1**

<b>Benchmark Assessment</b>  <i>Ed-Connect</i>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>  <i>Modifications per students' IEP, in addition to:          Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>
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**Benchmark Assessment 2**

<b>Benchmark Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>  <i>Modifications per students' IEP, in addition to:</i>
<i>I-Ready</i>	<i>Additional manipulatives, Read text, Clarify words, Less problems, Provide additional scaffolding, Extended time</i>

**Summative Assessments (add rows as needed)**

<b>Summative Assessment</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
<i>Collaboratively Designed Assessment</i>	<i>Modifications per students' IEP, in addition to:</i>

Standards Mastery (I-Ready)	<i>additional scaffolding , Extended time</i>
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**Interdisciplinary Connections**

<b>Interdisciplinary Connections</b>	<b>Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections</b>
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