



Alloway Township School

Home of the Tigers

Amy Morley
Chief School Administrator

Kimberly Fleetwood
Business Administrator

Grade 3 Unit 3 — Dates: 1/2/25 - 2/25/25

Rationale for Unit 3 Expectations

Unit 3 focuses on concepts of area, the distributive property, solving one-step and two-step word problems using the four operations and using scaled graphs. Learners build upon earlier work with arrays and repeated addition from the prior unit and Grade 2 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).

Unit 3 Description & Expectations

Days of Instruction: 35 days *Includes 1 day for Diagnostic 2 (2/26)

Unit Completion Date: 2/25

Unit Themes: Multiplication: Finding Area, Solving Word Problems, and Using Scaled Graphs

[Topic: Understand Area](#)

[Topic: Multiply to Find Area](#)

[Topic: Add Areas](#)

[Topic: Solve One-Step Word Problems Using Multiplication and Division](#)

[Topic: Solve Two-Step Word Problems Using Multiplication and Division](#)

[Topic: Scaled Graphs](#)



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[Topic: Applying Our Knowledge](#)

Whole Group Instruction	Differentiation: Teacher Table	Differentiation: Independent Practice/Small Group Center
Guidelines		
30-45 minutes of daily instruction using Core Resources	30-45 minutes of daily differentiation	
<p>Number Sense Making Routines: (5-10 minutes daily) Number sense is built through experiences. Vary your sense making routines based on the needs of your classroom. They may be a whole group activity, but they also may be done as a small group depending upon the need. Example areas of focus: Verbal Counting, Object Counting, Cardinality, Subitizing, Spatial Relationships, One/Two More & Less, Benchmark</p>	<p>Number of groups to meet with each day: two When planning for differentiation, it is important to first think about what each</p>	<p>Activities should be aligned to specific skills & standards addressed during whole group instruction and practice of fluency standards.</p>



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Numbers, Part-Part-Whole, Magnitude, etc.

Core Resource for Whole Group Instruction: Ready Classroom Math (30-45 minutes daily)

Ready Classroom Math design & expectations:

- **Understand Lessons** - Focus on developing conceptual understanding and help students connect new concepts to familiar ones as they learn new skills and strategies.
- **Strategy Lessons** - Focus on helping students persevere in solving problems, discuss solution strategies, and compare multiple representations through the *Try-Discuss-Connect* routine. Strategy Lessons are taught over multiple days (usually 3-5 days) and consist of different sessions.
 - **Explore Session(s)** follow the *Try-Discuss-Connect Routine* and draw on students' prior knowledge and make connections to new concepts.
 - **Develop Session(s)** develop strategies and understanding through problem solving and discourse.
 - **Refine Session(s)** are when students work independently with a partner, while the teacher monitors performance and differentiates instruction.
- **Math in Action Lessons (Grades 2-6)** - Feature open-ended problems with many points of entry and more than one possible solution. In Math in Action Lessons students apply strategies and build procedural fluency.

student needs. You may have different focuses for different groups of students. Below are suggestions to consider when planning for small group differentiated instruction.

Gifted Students: When planning for students who are gifted, consider differentiating the content, process or product.

Tier I Remedial Groups: When planning for remedial work (additional work on grade level concepts), identify your Essential Understandings, Objectives, Standards, skills being taught, and Learner Outcomes, then, anticipate the most common unique needs and common misconceptions. Doing this will help you to plan effectively, and form groups based on daily exit tickets and Ready Unit Prerequisite Report.



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Try - Discuss - Connect Routine is primarily used in Explore and Develop Sessions in Ready Math. Each Step in this routine will have expected Language Routines, Teacher Moves and Conversation Tips. *Language Routines* are predictable, repeatable formats that help students process word problems and communicate their growing understanding. *Teacher Moves* are powerful facilitation techniques to guide conversations in which students talk with each other rather than responding to the teacher. *Conversation Tips* are specific hints that show students what it means to engage in academic discourse. The six tips show students what it means to participate in academic discourse: listening attentively, explaining ideas, justifying, building on the ideas of others, disagreeing respectfully and making connections.

- **Try It** - The teacher displays the *Start* question to draw on prior knowledge to the day's session. The teacher guides students in making sense of the problem, and to slow down to recognize and understand important information in the problem before beginning to solve. Teacher displays the problem and uses:
 - *Language Routines* - Three Reads, Co-Crafted Questions, Notice/Wonder and Say It Another Way
 - *Teacher Moves* - Turn & Talk and Individual Think Time (*Typically 10 seconds to 2 minutes*)

Students apply what they have learned while making sense of the problem to represent the situation using a **Part-Part-Whole model** and

Support students using scaffolding and/or additional practice for grade level concepts and skills.

Tier II or Tier III Remedial Groups: When planning your grade level instruction for students that are in Tier II or Tier III considerations of each individual students' Math Intervention Plan need to be taken. Interventions and number sense relationships should be leveraged to support students with grade level content (bridging foundational concepts to support students' work at grade level content). Resources should be aligned to core content instructional resources (ie, Tools for Instruction, Fluency Skills & Practice pages, Prerequisite Lessons, Reteach Activities,



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begin solving.

- **Discuss It** - Students work in pairs to share their thinking - even incomplete thinking. Students should analyze their representations and strategies while using sentence frames when appropriate. The teacher strategically selects and sequences students' representations and strategies based upon the learning goal of the lesson. While circulating the teacher should use:
 - *Language Routines* - Compare & Contrast and Collect & Display
 - *Teacher Moves* - Turn & Talk, Individual Think Time and Four Rs (*Repeat, Rework, Rephrase, Record*)Selected students present and explain their solution methods and listen to critiques of others. The teacher facilitates the discussion and the class looks at highlighted strategies in the *Picture It* and *Model It* sections.
- **Connect It** - The teacher and students connect representations and strategies using a combination of individual work time and partner and whole-class discourse. Carefully selected questions lead students to recognize important mathematical ideas that were initially presented in the **Try It** problem. The teacher should use:
 - *Language Routines* - Collect & Display and Compare & Connect
 - *Teacher Moves* - Turn & Talk, Individual Think Time and Four Rs

Closing: (2-5 minutes daily)

The closure should be directly related to the goal of the lesson. Formal closure to lessons may consist of synthesizing information learned during the

Vocabulary pages, etc.), while a direct explicit connection between intervention strategies and grade level content is built.



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<p>lesson that relates to the objective. For example, students could share with the class something new that they learned that day (the question should be detailed and related to the goal/objective), complete an exit ticket (related to the goal/objective), reflect on what challenged them (related to the goal/objective), etc.</p>		
Whole Group Instruction	Differentiation: Teacher Table	Differentiation: Independent Practice/Small Group Center
Unit Resources		
<ul style="list-style-type: none"> ● Suggested Pacing Guide ● Ready Unit Flow and Progression Video ● Ready Math Background: Models, Progressions, and Teaching Tips ● Ready Interactive Tutorials ● Ready Unit Self Reflection ● Ready Unit Review ● Ready Discourse Cards/Cube ● Ready Digital Math Tools ● Ready Daily Session Slides ● Silent Hand Signals ● Georgia Frameworks (K-5) ● Howard County, MD: <ul style="list-style-type: none"> ○ Gr 3 	<ul style="list-style-type: none"> ● Scheduling Small Groups and Rotations ● CFAs ● RCM Fluency Practice Pages ● RCM Prerequisite Lessons ● RCM Tools for Instruction Lessons ● RCM Discourse Bookmarks ● K-5 Math Teaching Resources (no direct links to free documents!) ● Virtual Manipulatives: 	<ul style="list-style-type: none"> ● Scheduling Small Groups and Rotations ● RCM Unit Game ● RCM Literacy Connections Activities ● RCM Discourse Bookmarks ● K-5 Math Teaching Resources (no direct links to free documents!) ● Howard County, MD: <ul style="list-style-type: none"> ○ Gr 3



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- Achieve the Core [Coherence Map](#)
- [Illustrative Mathematics](#)
- Mindset Mathematics ([Gr 3-6](#)) by Jo Boaler
- [You Cubed](#)
- [Online Manipulatives in Mathigon](#)
- [PBS Learning Media](#)
- San Francisco Unified School District (SFUSD)
 - [Gr 3](#)
- Three Act Tasks:
 - [Ms. Castillo's Math](#) (K-5)
 - [Graham Fletcher](#) (K-6)
 - [Robert Kaplinsky](#) (K-6)
 - [Jon Orr](#) (Gr 3-6)
 - [Kyle Pearce](#) (Gr 3-6)
- Sense Making Routines:
 - [Subitizing Slides](#) (Steve Wyborney)
 - [Estimation 180](#) (Andrew Stadel)
 - [Esti-Mysteries](#) (Steve Wyborney)
 - [Even More Esti-Mysteries](#) (Steve Wyborney)
 - [Estimation Clipboard](#) (Steve Wyborney)
 - [Which One Doesn't Belong](#) (Christopher Danielson)

- [K6-ThinkCentral](#) -
counters, base ten blocks,
number line, 100s chart,
graphs, fractions,
measurement
- [TheMathLearningCenter](#) -
ten frames, counters,
time, number line, math
rack, geoboards
- [Glencoe](#)
[WorkMats/Storyboards/M](#)
[anips.](#)
- [SplatSquare-InteractiveHu](#)
[ndredsChart](#)
- [EduPlace - NumberLine](#) -
allows for multiple jumps
to introduce open number
line concept, decomposing
numbers
- [virtual Rekenrek](#)
- [Dreambox Teacher Tools](#)



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<ul style="list-style-type: none"> ○ Math Visuals (Berkley Everett) ○ Would You Rather...? (John Stevens) ○ Numberless Word Problems (Brian Bushart) ○ Number Talk Images (Tracey Zager & Pierre Tranche) ○ Daily Routines to Jumpstart Math Class (Curriculum Shared Drive) ○ Clothesline Math (Dan Kaufmann) ○ Math Spy (Dan Kaufmann) ○ Same or Different (Brian Bushart) ○ Same But Different (Sue Looney) ○ Splat (Steve Wyborney) ○ Open Middle (Robert Kaplinsky) ○ Get to Math K-5 ○ Number Talks K-5 (Kristen Northrop) ○ Visual Patterns 		
Whole Group Instruction	Differentiation: Teacher Table	Differentiation: Independent Practice/Small Group Center
Assessments		
<ul style="list-style-type: none"> ● Ready Unit Assessment ● Mid-Unit Assessment 	<ul style="list-style-type: none"> ● Daily log of small group instruction 	Examples of accountability measures: Recording sheets,



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<ul style="list-style-type: none">● Ready Lesson Quizzes● Ready - Math In Action● CFAs● Exit Tickets	<ul style="list-style-type: none">● Anecdotal Notes● Grade Level Math Interview● CFAs● RCM Fluency Practice Pages● RCM Prerequisite Lessons● RCM Tools for Instruction Lessons● Exit Tickets● Achieve the Core Coherence Map● Illustrative Mathematics	Fluency Practice Pages, exit tickets, rubrics, reflections, etc.
Standards		
<p>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. <i>*BENCHMARKED Unit 2</i></p> <p>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.</p> <p>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. <i>For</i></p>	<p>In addition to Whole Group Standards, you may choose to focus on grade level fluency standards or other priority standards listed below:</p> <p>**Unit 3 Center Focuses:</p> <p>2.NBT.A.2 Skip-count by 5s, 10s, and 100s. (Skip count by any factor is suggested). (*foundational multiplication skill)</p> <p>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</p>	



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example, draw a bar graph in which each square in the bar graph might represent 5 pets.

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 area.
- b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.

3.MD.C.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard 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.
- c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
- d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

with a symbol for the unknown number to represent the problem.

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.



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3.DL.A.1 Develop data-based questions and decide what data will answer the questions.	
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Unit 3 Math Pacing Guide

Topic: Understand Area		
Student Learning Standard(s):	<p>3.MD.C.5</p> <p>3.MD.C.6</p>	<p>-Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <p>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 area.</p> <p>b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.</p> <p>-Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard units).</p>
Math Practices:	<ul style="list-style-type: none"> • MP.1 Make sense of the problem and persevere in solving them. • MP.2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP.4 Model with Mathematics. • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision. 	
Days: 3 1/2 - 1/6	Focus: Major Content	Benchmarked Standard: Y Fluency Standard: N
Critical Knowledge & Skills		
Objective:	<p>We are learning to:</p> <ul style="list-style-type: none"> • Understand what a square unit is and the fact that it can be different sizes. (Session 1 & 2) • Understand that a square unit is used to measure area. (All sessions) • Understand how to measure area by covering a shape with square units and counting square units. (Sessions 2 & 3) • Find the area of shapes using different-sized square units, including square centimeters, square meters, square inches and square feet. (Session 3) 	



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Essential Question(s):	How does what you're measuring affect how you measure it?
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Core Resources		
Core Whole Group Resources	Core Formative Assessment	
<p style="color: blue; text-decoration: underline;">Ready Classroom Math Lessons</p> <p>Lesson 14 Sessions 1-3 *Lesson material per student: inch ruler, index card</p>	<p>-RCM Lesson Quizzes -CFAs</p>	
Additional Leveled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
<p>-Anchor Chart Links 3.MD.5, 3.MD.6 Example Area Anchor Chart</p> <p>-Number Sense Lessons/Resources SFUSD Math Talks Bank Suggestions (pg 9) & Visuals</p> <p>-Interactive Tools</p> <p>-LearnZillion Resources 5.MD.5a , 5.MD.5b , 5.MD.6</p>	<p>-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities -Scholastic Ideas -Inside Mathematics -Fact Practice for Speed and Accuracy: Xtra Math -Fact Practice for Flexibility: Splash Learn</p>	<p>-RCM Prerequisite Lessons -RCM Tools for Instruction -LearnZillion Resources 5.MD.5a , 5.MD.5b , 5.MD.6 -SFUSD 3.MD.C.6 3.MD.C.6 -Inside Mathematics</p>



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<p>-Area of Rectangles by Desmos -Online Manipulatives in Mathigon</p> <p>-Grade 3 NJSLA Reasoning/Modeling Problems Slide #16</p>	<p>-Illustrative Mathematics: 3.MD.C.6 Finding the Area of Polygons</p> <p>-K-5 Math Teaching Resources: 3.MD.C.5a Square Units 3.MD.C.5b Area on the Geoboard 3.MD.C.5b Find the Area 3.MD.C.6 Grid Paper Animals 3.MD.C.6 Cover Your Notebook -3MDC5&6 Area Tiling Shared Drive Folder -Area of Rectangles by Desmos</p>	
<p style="text-align: center;">Vocabulary for Students - Unit 3 Digital Word Wall</p>	<p style="text-align: center;">Mentor Text List</p>	
<p>Area measure length width</p>	<p>Bigger, Better, Best! by Stuart J. Murphy (YouTube Read Aloud) <i>Chickens on the Move</i> by Pam Pollack and Meg Beliviso (YouTube Read Aloud) <i>Perimeter, Area, and Volume: A Monster Book of Dimensions</i> by David A. Adler (YouTube Read Aloud)</p>	

Topic: Multiply to Find Area



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Student Learning Standard(s):	3.MD.C.7a-b	<p>Relate area to the operations of multiplication and addition.</p> <p>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.</p> <p>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.</p>	
Math Practices:	<ul style="list-style-type: none"> • MP.1 Make sense of the problem and persevere in solving them. • MP.2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP.4 Model with Mathematics. • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision. • MP.7 Look for and make use of structure. • MP.8 Look for and express regularity in repeated reasoning. 		
Days: 4 1/7 - 1/10	Focus: Major Content		Benchmarked Standard: Y Fluency Standard: N
Critical Knowledge & Skills			
Objective:	<p>We are learning to:</p> <p><i>*All sessions</i></p> <ul style="list-style-type: none"> • Understand that multiplying side lengths of a rectangle provides the same results as tiling it and counting the units. • Use the area formula for rectangles to solve mathematical and real-world problems. 		
Essential Question(s):	How does what you're measuring affect how you measure it?		



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Core Resources		
Core Whole Group Resources	Core Formative Assessment	
Ready Classroom Math Lessons Lesson 15 Sessions 1-4 *Lesson material per student: 20 inch tiles	-RCM Lesson Quizzes -CFAs	
Additional Levelled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links -Number Sense Lessons/Resources SFUSD Math Talks Bank Suggestions (pg 9) & Visuals -Interactive Tools -LearnZillion Resources 3.MD.7 3.MD.7a 3.MD.7b - 3 Act: The Paper Cut by Graham Fletcher - Would You Rather Pieces of Cake by John Stevens - Online Manipulatives in Mathigon	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities - Scholastic Ideas -Illustrative Mathematics: 3.MD.C.7a India's Bathroom Tiles - K-5 Math Teaching Resources: 3.MD.C.7a Find the Area of a Rectangle - Inside Mathematics	-RCM Prerequisite Lessons -RCM Tools for Instruction -Illustrative Mathematics: 3.MD.C.7a India's Bathroom Tiles -LearnZillion Resources 3.MD.7 3.MD.7a 3.MD.7b - Inside Mathematics



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<p>-Grade 3 NJSLA Reasoning/Modeling Problems Slide #11</p>	<p>-Fact Practice for Speed and Accuracy: Xtra Math -Fact Practice for Flexibility: Splash Learn -3MDC7ab Multiplication with Area Shared Drive Folder -Would You Rather Pieces of Cake by John Stevens</p>	
<p style="text-align: center;">Vocabulary for Students - Unit 3 Digital Word Wall</p>		<p style="text-align: center;">Mentor Text List</p>
<p>Area multiplication square unit</p>		<p>Bigger, Better, Best! by Stuart J. Murphy YouTube Read Aloud Chickens on the Move by Pam Pollack and Meg Beliviso YouTube Read Aloud Perimeter, Area, and Volume: A Monster Book of Dimensions by David A. Adler YouTube Read Aloud</p>

Topic: Add Areas		
Student Learning	3.MD.C.7c-d	Relate area to the operations of multiplication and addition.



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Standard(s):		<p>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.</p> <p>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.</p>
Math Practices:	<ul style="list-style-type: none"> • MP.1 Make sense of the problem and persevere in solving them. • MP.3 Construct viable arguments and critique the reasoning of others. • MP.5 Use appropriate tools strategically. • MP.7 Look for and make use of structure. 	<ul style="list-style-type: none"> • MP.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.
Days: 4 1/13 - 1/16	Focus: Major Content	Benchmarked Standard: Y Fluency Standard: N
Critical Knowledge & Skills		
Objective:	<p>We are learning to:</p> <ul style="list-style-type: none"> • Use area models to show how the distributive property can be used to find areas of combined rectangles. (Session 1 & 2) • Understand area is additive by decomposing shapes formed by rectangles, find the area of each rectangle, and add the areas to find the total area of the shape. (Session 3 & 4) 	
Essential Question(s):	<p>How do basic operations build our understanding of math?</p> <p>How are drawings useful in math? How do mathematical models/ representations shape our understanding of math?</p>	



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Core Resources		
Core Whole Group Resources	Core Formative Assessment	
<p>Ready Classroom Math Lessons Lesson 16 Sessions 1-4 *Activity Sheet: 1-inch Grid Paper</p>	<p>-RCM Lesson Quizzes -CFAs</p>	
Additional Levelled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
<p>-Anchor Chart Links: 3.MD.C.7c, 3.MD.C.7d</p> <p>-Number Sense Lessons/Resources SFUSD Math Talks Bank Suggestions (pg 9)& Visuals</p> <p>-Interactive Tools -3 Act: Cover the Floor by Graham Fletcher</p> <p>-Online Manipulatives in Mathigon</p>	<p>-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities -Illustrative Mathematics: 3.MD.C.7c Introducing Distributive Property 3.MD.C.7d Three Hidden Rectangles</p> <p>-K-5 Math Teaching Resources: 3.MD.C.7c Jack's Rectangles</p>	<p>-RCM Prerequisite Lessons -RCM Tools for Instruction -SFUSD 3.MD.C.7c 3.MD.C.7c 3.MD.C.7d</p> <p>Challenges you may encounter: -Some students may find it very challenging to visualize the division of the shape into rectangles. -Students may struggle to identify whether their shapes are indeed rectangles.</p>



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<p>-Grade 3 NJSLA Reasoning/Modeling Problems Slide #12</p> <p>-Grade 3 NJSLA Reasoning/Modeling Problems Slide #15</p> <p>-Grade 3 NJSLA Reasoning/Modeling Problems Slide #33</p>	<p>3.MD.C.7d Find Areas of Rectilinear Figures (v.1) 3.MD.C.7d Design a Flower Bed</p> <p>-Inside Mathematics</p> <p>-Fact Practice for Speed and Accuracy: Xtra Math</p> <p>-Fact Practice for Flexibility: Splash Learn</p>	<p>-Students may struggle to break the shape up in such a way that the rectangles don't overlap and that there are no gaps.</p> <p>Differentiation Suggestions/Universal Support:</p> <p>-Some students will find it helpful to cut the shape up in order to create rectangles.</p> <p>-Some students will prefer to use color pencils to help them see the possibilities for rectangles.</p> <p>-Inside Mathematics</p>
<p style="text-align: center;">Vocabulary for Students - Unit 3 Digital Word Wall</p>	<p style="text-align: center;">Mentor Text List</p>	
<p>Area product square unit</p>	<p>Bigger, Better, Best! by Stuart J. Murphy YouTube Read Aloud</p> <p>Chickens on the Move by Pam Pollack and Meg Beliviso YouTube Read Aloud</p> <p>Perimeter, Area, and Volume: A Monster Book of Dimensions by David A. Adler YouTube Read Aloud</p>	



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Topic: Area and Perimeter of Shapes		
Student Learning Standard(s):	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.
Math Practices:	<ul style="list-style-type: none"> MP.1 Make sense of the problem and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.7 Look for and make use of structure. <ul style="list-style-type: none"> MP.2 Reason abstractly and quantitatively. MP.4 Model with Mathematics. MP.6 Attend to precision. 	
Days: 5 1/21 - 1/27		Focus: (Supporting Content)
		Benchmarked Standard: N Fluency Standard: N
Critical Knowledge & Skills		
Objective:	We are learning to: <ul style="list-style-type: none"> Understand the difference between perimeter and area Use the side lengths to find the perimeter of a shape Find an unknown side length given the perimeter of a shape Understand that rectangles with the same area can have different perimeters Understand that rectangles with the same perimeter can have different areas 	



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Essential Question(s):	How are showing and explaining different? How does what you're measuring determine how you measure it?
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	Core Formative Assessment
Ready Classroom Math Lessons Lesson 32 - 5 Sessions	-RCM Lesson Quizzes -CFAs
Additional Levelled Resources	

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links 3.M.D.D.8 -Number Sense Lessons/Resources -Interactive Tools - Would You Rather Size of Bedroom by John Stevens - Online Manipulatives in Mathigon	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities - Scholastic Ideas - Inside Mathematics -Fact Practice for Speed and Accuracy: Xtra Math	-RCM Prerequisite Lessons -RCM Tools for Instruction - Inside Mathematics



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		-Fact Practice for Flexibility: Splash Learn - Would You Rather Size of Bedroom by John Stevens	
Vocabulary for Students		Mentor Text List	
Area	perimeter	<i>Spaghetti and Meatballs for All!</i> by Marilyn Burns (YouTube Read Aloud) <i>Bigger, Better, Best!</i> by Stuart J. Murphy (YouTube Read Aloud) <i>Chickens on the Move</i> by Pam Pollack and Meg Beliviso (YouTube Read Aloud) <i>Perimeter, Area, and Volume: A Monster Book of Dimensions</i> by David A. Adler (YouTube Read Aloud) <i>Racing Around</i> by Stuart J. Murphy	

Topic: Mid-Unit Assessment or Spiral Review	
Days: 1	Mid-Unit Assessment Date: 1/27
Scoring Submission in LinkIt:	Data Review Date:



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Topic: Solve One-Step Word Problems Using Multiplication and Division		
Student Learning Standard(s):	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.
Math Practices:	<ul style="list-style-type: none"> • MP.1 Make sense of the problem and persevere in solving them. • MP.2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP.4 Model with Mathematics. • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision. • MP.7 Look for and make use of structure. 	
Days: 5 1/28 - 2/3	Focus: Major Content	Benchmarked Standard: Y Fluency Standard: N
Critical Knowledge & Skills		
Objective:	We are learning to: <ul style="list-style-type: none"> • Solve multiplication and division word problems involving equal groups. (Sessions 1, 2, 3) • Solve multiplication and division word problems involving arrays. (Sessions 1, 2, 3) • Solve multiplication and division word problems involving area. (Session 4 & 5) 	
Essential Question(s):	How do mathematical models/representations shape our understanding of mathematics?	



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Core Resources		
Core Whole Group Resources	Core Formative Assessment	
<p>Ready Classroom Math Lessons Lesson 17 Sessions 1-5 *Lesson material per student: 15 unit tiles, 12 sticky notes</p>	<p>-RCM Lesson Quizzes -CFAs</p>	
Additional Levelled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
<p>-Anchor Chart Links 3.OA.3 Multiplication/Division</p> <p>-Number Sense Lessons/Resources SFUSD Number Talk Suggestions (pg 6) -Interactive Tools -Learnzillion 3.OA.3 Solve word problems using the idea of equal groups -SFUSD A Hard Day's Work Word Problem -Online Manipulatives in Mathigon</p>	<p><i>*Include 1-step addition and subtraction word problems in centers for reinforcement.</i></p> <p>-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities</p> <p>-K-5 Math Teaching Resources: 3.OA.A.3 Word Problems: Arrays (Set 1) -Inside Mathematics -Fact Practice for Speed and Accuracy: Xtra Math</p>	<p>-RCM Prerequisite Lessons -RCM Tools for Instruction</p> <p>-Illustrative Mathematics: 3.OA.A.3 Two Interpretations of Division 3.OA.A.3 Gifts from Grandma</p> <p>-Inside Mathematics</p>



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	-Fact Practice for Flexibility: Splash Learn	
Vocabulary for Students - Unit 3 Digital Word Wall		Mentor Text List
Array multiplication equation	division multiplication equation	<i>Hershey's Kisses Multiplication and Division</i> by Jerry Pallotta <i>Amanda Bean's Amazing Dream: A Mathematical Story</i> by Cindy Neuschwander (YouTube Read Aloud) <i>One Hundred Hungry Ants</i> by Elinor J. Pinczes (YouTube Read Aloud) <i>Six Dinner Sid</i> by Inga Moore (YouTube Read Aloud) <i>The Doorbell Rang</i> by Pat Hutchins (YouTube Read Aloud) <i>A Remainder of One</i> by Elinor J. Pinczes (YouTube Read Aloud) <i>Bean Thirteen</i> by Math McElligott (YouTube Read Aloud) <i>The Great Divide: A Mathematical Marathon</i> by Dayle Ann Dodds (YouTube Read Aloud) <i>Divide and Ride</i> by Stuart J. Murphy (YouTube Read Aloud)



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Topic: Solve two-step word problems using the four operations		
Student Learning Standard(s):	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.
Math Practices:	<ul style="list-style-type: none"> MP.1 Make sense of the problem and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. <ul style="list-style-type: none"> MP.2 Reason abstractly and quantitatively. MP.4 Model with Mathematics. MP.6 Attend to precision. 	
Days: 8 2/4 - 2/13 *extra days for remediation	Focus: Major Content	Benchmarked Standard: N Fluency Standard: N
Critical Knowledge & Skills		
Objective:	We are learning to: <i>*All sessions</i> <ul style="list-style-type: none"> Determine operations needed to solve two-step word problems. Model and solve two-step problems with four operations using a variety of representations, including equations with a variable and assess the reasonableness of answers. 	
Essential Question(s):	How are solving and proving different? What makes an estimate reasonable? How are showing and explaining different? How do you develop a convincing argument?	



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Core Resources		
Core Whole Group Resources	Core Formative Assessment	
<p>Ready Classroom Math Lessons Lesson 18 Sessions 1-5 *Lesson materials per student: base-ten blocks (2 hundreds flats, 10 tens rods, 10 ones units), 12 counters</p>	<p>-RCM Lesson Quizzes -CFAs</p>	
Additional Levelled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
<p>-Anchor Chart Link Three Reads</p> <p>-Number Sense Lessons/Resources SFUSD Number Talk Suggestions (pg 6) -Interactive Tools -Fluency page for estimation with Session 4 that could be used as a day's lesson. -3.OA.D.8 The Class Trip -Dr. Word Problem -SFUSD Dinosaur Museum Word Problem -SFUSD Who Is Right? Word Problem</p>	<p>-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities</p> <p>-K-5 Math Teaching Resources: 3.OA.D.8 Word Problems: Two-Step (Set 2)</p> <p>-Inside Mathematics -Fact Practice for Speed and Accuracy: Xtra Math</p>	<p>-RCM Prerequisite Lessons -RCM Tools for Instruction</p> <p>-Illustrative Mathematics: 3.OA.D.8 The Class Trip</p> <p>-Inside Mathematics</p>



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<p>-3 Act: Get Knotty by Graham Fletcher -Would You Rather Read the Number of Pages by John Stevens -Would You Rather Buy the Number of Eggs by John Stevens -How Many Peaches by Desmos -Online Manipulatives in Mathigon</p> <p>-Grade 3 NJSLA Reasoning/Modeling Problems Slide #32</p>	<p>-Fact Practice for Flexibility: Splash Learn -3OAD8 2 Step Word Problems Shared Drive Folder -Would You Rather Read the Number of Pages by John Stevens -How Many Peaches by Desmos</p>	
<p>Vocabulary for Students - Unit 3 Digital Word Wall</p>	<p>Mentor Text List</p>	
<p>Equation estimate (noun) estimate (verb) operation round</p>	<p><i>Math-terpieces: The Art of Problem Solving</i> by Greg (YouTube Read Aloud)</p>	

Topic: Scaled Graphs



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Student Learning Standard(s):	<p>3.MD.B.3</p> <p>3.DL.A.1</p>	<p>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. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p> <p>Develop data-based questions and determine what data will answer the questions. For example, “What size shoe does a third grader wear?”, “How many books does a third grader read?”</p>
Math Practices:	<ul style="list-style-type: none"> • MP.1 Make sense of the problem and persevere in solving them. • MP.2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP.4 Model with Mathematics. • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision. • MP.7 Look for and make use of structure. 	
Days: 4 2/12- 2/18	Focus: Supporting Content	Benchmarked Standard: N Fluency Standard: N
Critical Knowledge & Skills		
Objective:	<p>We are learning to: <i>*All sessions</i></p> <ul style="list-style-type: none"> • Interpret data displayed in a bar graph or picture graph to solve one- and two-step problems involving addition, subtraction, and multiplication. • Recognize that data displayed in picture graphs and bar graphs can be represented by a scale other than 1. • Use multiplication to determine the number of items in data categories on graphs with a scale other than 1. • Draw scaled picture graphs and scaled bar graphs. • Develop data-based questions and decide what data will answer those questions. 	



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Essential Question(s):	How does what you're measuring determine how you measure it?
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Core Resources		
Core Whole Group Resources	Core Formative Assessment	
<p>Ready Classroom Math Lessons Lesson 19 <i>(Skip Session 4)</i> 5 Sessions *Lesson material per student: Activity Sheets: Picture Graph, Bar Graphs *Please check Educator Notes section in RCM toolbox for standard 3.DL.A.1</p>	<p>-RCM Lesson Quizzes -CFAs</p>	
Additional Levelled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
<p>-Anchor Chart Links Graphs -Number Sense Lessons/Resources SFUSD Number Talk Suggestions (pg 6) -Interactive Tools -BrainPop Videos: -Tally Charts & Bar Graphs Pictographs</p>	<p>-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: NAME -RCM Center Activities -RCM Enrichment Activities -Illustrative Mathematics: 3.MD.B.3 Classroom Supplies</p>	<p>-RCM Prerequisite Lessons -RCM Tools for Instruction -SFUSD 3.MD.B.3 -Inside Mathematics</p>



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<p>-LearnZillion: 3.MD.3 -Online Manipulatives in Mathigon</p>	<p>-K-5 Math Teaching Resources: 3.MD.B.3 Represent and Interpret Data 3.MD.B.3 Gummy Bear Graph</p> <p>-Inside Mathematics -Fact Practice for Speed and Accuracy: Xtra Math -Fact Practice for Flexibility: Splash Learn</p>	
Vocabulary for Students - Unit 3 Digital Word Wall	Mentor Text List	
<p>Bar graph data key picture graph scale (on a graph)</p>	<p><i>Giraffe Graphs</i> by Melissa Stewart (YouTube Read Aloud) <i>The Great Graph Contest</i> by Loreen Leedy (YouTube Read Aloud) <i>Jellybeans</i> by Charlotte Stadler <i>Lemonade for Sale</i> by Stuart J. Murphy (YouTube Read Aloud) <i>Tally O'Malley</i> by Stuart J. Murphy (YouTube Read Aloud) <i>Tiger Math: Learning to Graph from a Baby Tiger</i> by Ann Whitehead Nagda <i>Tim's Ice Cream Store</i> by Rachel Griffiths</p>	

Topic: Unit Review and Unit Assessment



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Days: 2	Review Date: 2/24 Unit Assessment Date: 2/25
Scoring Submission in LinkIt:	Data Review Date:

**Math In Action Lessons can be completed if time allows within the unit. They may also be used for differentiation for G&T students.*

Topic: Applying Our Knowledge		
Student Learning Standard(s):	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 area. b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
	3.MD.C.6	Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard 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. 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.



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		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.	
Math Practices:	<ul style="list-style-type: none"> MP.1 Make sense of the problem and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with Mathematics. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning. 		
Days: 0	Focus: Major Content		Benchmarked Standard: N Fluency Standard: N
Critical Knowledge & Skills			
Objective:	We are learning to: apply our knowledge of area to a real world problem involving counting or multiplying and addition to find the area of a large irregular figure.		
Essential Question(s):	How does what you're measuring affect how you measure it?		

Core Resources	
Core Whole Group Resources	Core Formative Assessment



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<p>Select one or more:</p> <p>Piles of Tiles PBL by Graham Fletchy https://gfletchy.com/piles-of-tiles/ (this one is based on the slo above)</p> <p>Do We Have Enough Paint? PBL by Graham Fletchy https://robertkaplinsky.com/work/do-we-have-enough-paint/</p> <p>Do You Have Enough Money? https://robertkaplinsky.com/work/enough-money/ (this would be 3OA8 & 3OA5)</p>	<p>-RCM Lesson Quizzes -CFAs</p>	
Additional Levelled Resources		
Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
<p>-Anchor Chart Links</p> <p>-Number Sense Lessons/Resources</p> <p>-Interactive Tools</p> <p>-Ready Classroom Math Lessons</p> <p>Math In Action</p> <p>-Online Manipulatives in Mathigon</p>	<p>-iReady Individual Path</p> <p>-iReady Teacher Assigned Lessons</p> <p>-RCM Interactive Practice: NAME</p> <p>-RCM Center Activities</p> <p>-RCM Enrichment Activities</p> <p>-Inside Mathematics</p> <p>-Fact Practice for Speed and Accuracy: Xtra Math</p> <p>-Fact Practice for Flexibility: Splash Learn</p>	<p>-RCM Prerequisite Lessons</p> <p>-RCM Tools for Instruction</p> <p>-Inside Mathematics</p>



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Computer Science (8.1) and Design Thinking (8.2)

8.1.5.CS.3: Identify potential solutions for simple hardware and software problems using common troubleshooting strategies.

8.1.5.NI.1: Develop models that successfully transmit and receive information using both wired and wireless methods

8.1.5.NI.2: Describe physical and digital security measures for protecting sensitive personal information.

8.1.5.IC.1: Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.

8.1.5.IC.2: Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.

8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.

8.1.5.AP.4: Break down problems into smaller, manageable sub-problems to facilitate program development.

8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system.

8.2.5.ITH.2: Evaluate how well a new tool has met its intended purpose and identify any shortcomings it might have.

8.2.5.ITH.4: Describe a technology/tool that has made the way people live easier or has led to a new business or career.

8.2.5.NT.1: Troubleshoot a product that has stopped working and brainstorm ideas to correct the problem.

8.2.5.NT.2: Identify new technologies resulting from the demands, values, and interests of individuals, businesses, industries, and societies.

8.2.5.ETW.1: Describe how resources such as material, energy, information, time, tools, people, and capital are used in products or systems.

8.2.5.ETW.2: Describe ways that various technologies are used to reduce improper use of resources.

8.2.5.ETW.3: Explain why human-designed systems, products, and environments need to be constantly monitored, maintained, and improved.

8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.

Preparation for College, Careers, and Beyond



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Career Ready Practices	Personal Financial Literacy (9.1), Career Awareness, Exploration, and Preparation (9.2), Life Literacies and Key Skills (9.4)
<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>	<p>9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions</p> <p>9.4.5.CI.2: Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue</p> <p>9.4.5.CI.3: Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity</p> <p>9.4.5.CI.4: Research the development process of a product and identify the role of failure as a part of the creative process</p> <p>9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process</p> <p>9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem</p> <p>9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.</p> <p>9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global</p> <p>9.4.5.DC.1: Explain the need for and use of copyrights.</p> <p>9.4.5.DC.2: Provide attribution according to intellectual property rights guidelines using public domain or creative commons media.</p> <p>9.4.5.DC.3: Distinguish between digital images that can be reused freely and those that have copyright restrictions.</p> <p>9.4.5.DC.4: Model safe, legal, and ethical behavior when using online or offline technology</p>



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	<p>9.4.5.DC.5: Identify the characteristics of a positive and negative online identity and the lasting implications of online activity</p> <p>9.4.5.DC.6: Compare and contrast how digital tools have changed social interactions</p> <p>9.4.5.DC.7: Explain how posting and commenting in social spaces can have positive or negative consequences.</p> <p>9.4.5.DC.8: Propose ways local and global communities can engage digitally to participate in and promote climate action</p> <p>9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view</p> <p>9.4.5.IML.1: Evaluate digital sources for accuracy, perspective, credibility and relevance</p> <p>9.4.5.IML.2: Create a visual representation to organize information about a problem or issue</p> <p>9.4.5.IML.3: Represent the same data in multiple visual formats in order to tell a story about the data</p> <p>9.4.5.IML.4: Determine the impact of implicit and explicit media messages on individuals, groups, and society as a whole.</p> <p>9.4.5.IML.5: Distinguish how media are used by individuals, groups, and organizations for varying purposes</p> <p>9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions</p> <p>9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social</p> <p>9.4.5.TL.1: Compare the common uses of at least two different digital tools and identify the advantages and disadvantages of using each.</p> <p>9.4.5.TL.2: Sort and filter data in a spreadsheet to analyze findings.</p>
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	<p>9.4.5.TL.3: Format a document using a word processing application to enhance text, change page formatting, and include appropriate images graphics, or symbols.</p> <p>9.4.5.TL.4: Compare and contrast artifacts produced individually to those developed collaboratively</p> <p>9.4.5.TL.5: Collaborate digitally to produce an artifact</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="2" style="text-align: center;">Personal Financial Literacy (Standard 9.1)</th> </tr> <tr> <td style="text-align: center;">Strand A</td> <td style="text-align: center;">Income and Careers</td> </tr> <tr> <td style="text-align: center;">Strand B</td> <td style="text-align: center;">Money Management</td> </tr> <tr> <td style="text-align: center;">Strand C</td> <td style="text-align: center;">Credit and Debt Management</td> </tr> <tr> <td style="text-align: center;">Strand D</td> <td style="text-align: center;">Planning, Saving, and Investing</td> </tr> <tr> <td style="text-align: center;">Strand E</td> <td style="text-align: center;">Becoming a Critical Consumer</td> </tr> <tr> <td style="text-align: center;">Strand F</td> <td style="text-align: center;">Civic and Financial Responsibility</td> </tr> <tr> <td style="text-align: center;">Strand G</td> <td style="text-align: center;">Insuring and Protecting</td> </tr> <tr> <th colspan="2" style="text-align: center;">Career Awareness, Exploration, and Preparation (Standard 9.2)</th> </tr> <tr> <td style="text-align: center;">Strand A</td> <td style="text-align: center;">Career Awareness (by end of Grade 4)</td> </tr> <tr> <td style="text-align: center;">Strand B</td> <td style="text-align: center;">Career Exploration (by end of Grade 8)</td> </tr> <tr> <td style="text-align: center;">Strand C</td> <td style="text-align: center;">Career Preparation (by end of Grade 12)</td> </tr> </table>	Personal Financial Literacy (Standard 9.1)		Strand A	Income and Careers	Strand B	Money Management	Strand C	Credit and Debt Management	Strand D	Planning, Saving, and Investing	Strand E	Becoming a Critical Consumer	Strand F	Civic and Financial Responsibility	Strand G	Insuring and Protecting	Career Awareness, Exploration, and Preparation (Standard 9.2)		Strand A	Career Awareness (by end of Grade 4)	Strand B	Career Exploration (by end of Grade 8)	Strand C	Career Preparation (by end of Grade 12)
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Cross-Curricular Connections	
Interdisciplinary Connections	Technology Integration and Literacy
<ul style="list-style-type: none"> ● Literature connections (math mentor texts identified in “Resources and Activities”) ● Math journals ● Math word wall 	<p>Online links and possible resources for the integration of technology into lessons are embedded within the “Possible Resources and Activities” column for each Topic area.</p>



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● Literacy Connections & Activities Ready Classroom Math	
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Possible Modifications and Accommodations			
Special Education/504 Plans	At-Risk	Gifted	English Language Learners
<p><i>*All teachers of students with special needs must review each student's IEP. Teachers must then select the appropriate modifications and/or accommodations necessary to enable the student to appropriately progress in the general curriculum.</i></p> <p>Possible Modifications/Accommodations</p> <ul style="list-style-type: none"> ● Number line on desk ● Extra time on timed calculation assessments ● Use of a calculator or chart of basic facts for computation ● Use of a graphic organizer to plan ways to solve math problems ● Use of concrete materials and objects (manipulatives) ● Opportunities for cooperative partner work ● Assign fewer problems at one time (e.g., assign only odds or evens) ● Basic computation – use counters 	<p>The possible list of modifications/accommodations identified for Special Education students can be utilized for At-Risk students. Teachers should utilize ongoing methods to provide instruction, assess student needs, and utilize modifications specific to the needs of individual students.</p> <p><i>*Refer to the individual student Math Plan for specific interventions.</i></p>	<p><i>*Teachers should select the appropriate modifications and/or accommodations for Gifted and Talented according to the following suggestions.</i></p> <p>Differentiating instruction based on:</p> <ul style="list-style-type: none"> ● Content: What is taught or the material used ● Process: How it is taught or support given or student grouping or environment ● Product: What students produce <p>To differentiate content consider:</p> <ul style="list-style-type: none"> ● Using different resources that have less explicit information (e.g., tiering assignments - consider what would make the content more complex to digest for gifted students) <ul style="list-style-type: none"> ○ For Example: tiering problem solving scenarios making a gifted learner's scenario more complex ○ For Example: gifted students could work on deriving the procedure for an abstract concept ● Organizing ideas through graphic organizers ● Using a learning contract (learning contracts are <i>individualized</i> and allow students to participate in designing their own learning which is motivating for gifted students) ● Using jigsaws 	<ul style="list-style-type: none"> ● Continue practicing vocabulary ● Demonstrate that vocabulary can have multiple meanings ● Encourage bilingual supports among students ● Provide visual cues, graphic representations, gestures, and pictures ● Rephrase math problems when appropriate ● Build knowledge from real-world examples ● Provide manipulatives and symbols ● Have students estimate each other's heights ● Have students measure themselves and one another ● Have students relate an object they know with a unit of measure ● Encourage peer discussions regarding how students are thinking about math



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Amy Morley
Chief School Administrator

Kimberly Fleetwood
Business Administrator

<ul style="list-style-type: none"> ● Differentiated center-based small group instruction ● Fractions – use fraction blocks ● Provide a copy of mathematical equations, class notes, and examples for math notebooks ● Highlight or underline key words in word problems ● If a manipulative is used during instruction, allow its use on a test ● Place value – use place value blocks ● Provide graph paper for arrays ● Provide reteach pages if necessary ● Provide several ways to solve a problem if possible ● Offer small and large graph paper options ● Provide visual aids and anchor charts ● Tiered lessons and assignments 	<ul style="list-style-type: none"> ● Using orbital studies (differ from independent investigations and is meant as an extension of the topics covered in class into specific fields of study e.g., manufacturing) <p>To differentiate the process consider:</p> <ul style="list-style-type: none"> ● How students are grouped ● Tiering materials used (e.g., graphic organizers varying in complexity, types of questions asked - DOK level) <ul style="list-style-type: none"> ○ For Example: <i>Below-Grade-Level Question:</i> ●●●●●● + ? = ●●●●●●●●●● <i>On-Grade-Level Question (Grade 1):</i> 6 + ? = 10 <i>Above-Grade-Level Question:</i> Jon has 6 puppies. He wants to have 10 puppies. How many more puppies does he need to buy? <p>To differentiate the product consider:</p> <ul style="list-style-type: none"> ● Using a choice board (the difficulty of the activity should be noted for each choice and should be at least 3 levels) ● Using a menu of options (each item is assigned a point value and students select the route to take) ● Using open ended tasks (have more than one correct answer and/or more than one way to get to/explain an answer) <ul style="list-style-type: none"> ○ For Example: (Grade 2) Use the digits 0 to 9, at most one time each, to make a true statement. □□ - □□ = □□ + □□ (Open Middle Link) ○ For Example: (Grade 3) Using the digits 1 to 9 exactly one time each, place a digit in each box to make the sum as 	<ul style="list-style-type: none"> ● RCM Unit Connect Language Development to Mathematics
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Individualized Learning Opportunities			
Possible independent study and online learning opportunities are embedded within the “Possible Resources and Activities” column for each Topic area. iReady			