Alloway Township School
Home of the Tigers

Amy Morley
Chief School Administrator

Kimberly Fleetwood
Business Administrator

Grade 2 Unit 5 — Dates: 5/13/25 - 6/6/25

Rationale for Unit 5 Expectations

In this final unit of Grade 2, learning is focused on geometry and its applications. Learners use what they know from first grade about shapes to reason about how shapes have attributes that define them. They then use those attributes, specifically length in rectangles and squares, to partition to create shares of a shape (fractions of the shape, namely halves, thirds and fourths/quarters). [*Likewise partitioning circles in the same manner.*] This segways into learners beginning to reason about odd and even numbers by pairing objects, using arrays and writing equations. Learners partition rectangles into rows and columns of same-size squares and skip count to find the total. Then, they use repeated addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns, laying the foundation for multiplication in grade 3.

Unit 5 Description & Expectations

Days of Instruction: 17 days (*1 day is included for iReady Diagnostic 3, 1 day included for field trip.)
Unit Completion Date: 6/6
Unit Topics/Themes: Knowing the number of sides and angles a shape has can help students identify the shape. Students can use what they know about dividing a shape into equal parts to show halves, thirds, and fourths; an array is an arrangement of objects in equal rows and columns. Students can use what they know about addition and skip counting to find the number of objects in an array.

Topic: Recognize and Draw Shapes (Lesson 28)
Topic: Understand Partitioning Shapes into Halves, Thirds, and Fourths (Lesson 29)
Topic: Partition Rectangles (Lesson 30)

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Topic: Add Using Array (Lesson 31)

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**	
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	**Number of groups to meet with each day: two** When planning for	Activities should be aligned to specific skills & standards addressed during whole group instruction and practice of

need. Example areas of focus: Verbal Counting, Object Counting, Cardinality, Subitizing, Spatial Relationships, One/Two More & Less, Benchmark 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	differentiation, it is important to first think about what each 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	fluency standards.

many points of entry and more than one possible solution. In Math in Action Lessons students apply strategies and build procedural fluency. *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*)	based on daily exit tickets and Ready Unit Prerequisite Report. 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 &	

Students apply what they have learned while making sense of the problem to represent the situation using a Part-Part-Whole model and 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, Reword, 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)**	Practice pages, Prerequisite Lessons, Reteach Activities, Vocabulary pages, etc.), while a direct explicit connection between intervention strategies and grade level content is built.	

The closure should be directly related to the goal of the lesson. Formal closure to lessons may consist of synthesizing information learned during the 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.		
Whole Group Instruction	**Differentiation: Teacher Table**	**Differentiation: Independent Practice/Small Group Center**
Unit Resources		
● 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 ● Silent Hand Signals ● Georgia Frameworks (K-5) ● Howard County, MD:	● 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!)	● 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: ○ Gr 2

○ Gr 2 ● Achieve the Core Coherence Map ● Illustrative Mathematics ● You Cubed ● San Francisco Unified School District (SFUSD) ○ Gr2 ● Three Act Tasks: ○ Ms. Castillo's Math (K-5) ○ Graham Fletcher (K-6) ○ Robert Kaplinsky (K-6) ● Sense Making Routines: ○ Subitizing Slides (Steve Wyborney) ○ Esti-Mysteries (Steve Wyborney) ○ Even More Esti-Mysteries (Steve Wyborney) ○ Estimation Clipboard (Steve Wyborney) ○ Which One Doesn't Belong (Christopher Danielson) ○ 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)	● Virtual Manipulatives: ○ TheMathLearningCenter - ten frames, counters, time, number line, math rack, geoboards ○ SplatSquare-InteractiveHundredsChart ○ Dreambox Teacher Tools	

○ 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) ● PBS Learning Media - instructional videos, interactive ● Online Manipulatives on Mathigon		
Whole Group Instruction	**Differentiation: Teacher Table**	**Differentiation: Independent Practice/Small Group Center**
Assessments		
● Ready Unit Assessments ● Ready Lesson Quizzes ● Ready - Math In Action ● CFAs ● Exit Tickets	● Daily log of small group instruction ● Anecdotal Notes ● Grade Level Math Interview ● CFAs ● RCM Fluency Practice Pages ● RCM Prerequisite Lessons ● RCM Tools for Instruction Lessons	Examples of accountability measures: Recording sheets, Fluency Practice Pages, exit tickets, rubrics, reflections, etc.

	● Exit Tickets ● Achieve the Core Coherence Map ● Illustrative Mathematics	
Standards		
2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. 2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. 2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (Clarification: sizes are compared directly or visually, not compared by measuring) 2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves, thirds, half of, a third of,* etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. For example, students partition a rectangle (i.e. the whole) into three equal shares, identify each of the shares as a 'third' and describe the rectangle as three 'thirds'.	In addition to Whole Group Standards, you may choose to focus on grade level fluency standards or other priority standards listed below: **** Unit 3 Center Focuses:** **2.OA.B.2** With accuracy and efficiency, add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers. (See standard 1.OA.C.6 for a list of mental strategies.) **2.NBT.A.2** Skip-count by 2s, 3s, 5s, 10s, and 100s. **2.NBT.B.5** With accuracy and efficiency, add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. **2.NBT.B.7** Add and subtract within 1000, using concrete models or drawings and strategies based on place value.	

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Unit 5 Math Pacing Guide

Topic: Recognize and Draw Shapes		
Student Learning Standard(s):	**2.G.A.1**	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (Clarification: sizes are compared directly or visually, not compared by measuring)
Math Practices: (add 7 & 8 as needed)	• 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.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.
Days: 4 Lesson 28 (5/13 - 5/19) *One day open for Field Trip	**Focus**: Additional Content	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills		
Objective:	**We are learning to**: - Identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides and angles they have - Identify cubes based on the number and shape of faces that are the same - Distinguish among triangles, quadrilaterals, pentagons, and hexagons based on their attributes - Draw a shape based on specific attributes	
Essential Question(s):	How do composing and decomposing shapes help us build our understanding of mathematics?	

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Core Resources	
Core Whole Group Resources	**Core Formative Assessment**
Ready Classroom Math Lessons **Lesson 28**: Recognize and Draw shapes **(Complete Session 1 only)** - Lesson Materials **Lesson** *per student:* geoboard, a block that is a cube *Activity Sheet:* dot paper **Activities** *per student*: geoboard, 3-5 rubber bands, 2-foot lengths of string, 8-10 straws cut in various sizes *Per Pair* scissors, tape *For display* various objects that are rectangular prisms, including some that are cubes *Activity Sheets* nets for cubes, tangram shapes, copied on cardstock if possible **Math toolkit** 1-cm grid paper, cm ruler, inch ruler, counters, sticky notes, color tiles, geoboards, dot paper, whiteboards, straws, index cards	~~-RCM Lesson Quizzes~~

Additional Leveled Resources		
Activities and Additional Resources for Whole Group	**Differentiated Independent Activities/Center Ideas**	**Teacher Table Differentiated Resources**

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- Anchor Chart Links 2D Shapes 3D Shapes 2nd Grade Anchor Charts - Number Sense Lessons/Resources - Interactive Tools - Brainpop Jr. Polygons Quadrilaterals Solid Shapes	- iReady Individual Path - iReady Teacher Assigned Lessons *Recognize and Draw Shapes* *Practice: identify two, three, or four equal parts* - RCM Interactive Practice: Recognize Shapes - RCM Center Activities - RCM Enrichment Activities - Quadrilateral Cut and Sort - Tell me about it - Shape Hunt - Toothy: Geometry	- RCM Prerequisite Lessons - RCM Tools for Instruction - K-5 Math Teaching Resources 2.G.1 My Shape Riddle 2.G.1 Geoboard Quadrilaterals 2.G.1 Tangram Shapes 2.G.1 Skeletal Models Literature Connection 2.G.1 *The Greedy Triangle*

Vocabulary for Students		**Mentor Text List**
Angle Edge Pentagon Rectangle Side triangle face	Cube Hexagon Quadrilateral Rhombus Square Vertex	*The Shape of Me and Other Stuff* by Dr. Seuss *Shape Up!: Fun with Triangles and Other Polygon*s by David A. Adler *The Shape of Things* by Dayle Dodds *The Greedy Triangle* by Marilyn Burns *When a Line Bends, A Shape Begins* by Rhonda Greene

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Topic: Understand Partitioning Shapes into Halves, Thirds, and Fourths		
Student Learning Standard(s):	**2.G.A.3**	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves, thirds, half of, a third of,* etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. For example, students partition a rectangle (i.e. the whole) into three equal shares, identify each of the shares as a 'third' and describe the rectangle as three 'thirds'.
Math Practices: (add 7 & 8 as needed)	• 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.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.
Days:3 Lesson 29 (5/20 - 5/22)	**Focus**: Additional Content	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills		
Objective:	**We are learning to**: - Identify and name halves, thirds, and fourths as parts into which a shape is divided (s1) - Recognize that fractional parts are equal in size (s2) - Understand that the more parts a while in divided into, the smaller the size of each part (s1, s3)	
Essential Question(s):	How do composing and decomposing shapes help us build our understanding of mathematics?	

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Core Resources	
Core Whole Group Resources	**Core Formative Assessment**
Ready Classroom Math Lessons **Lesson 29**: Understand Partitioning shapes into halves, thirds, and fourths - Lesson Materials **Lesson** *Activity Sheet* 1-cm grid paper **Activities** *per student* scissors, paper, glue *Activity Sheets* dot paper, 1-cm grid paper	- RCM Lesson Quizzes

Additional Leveled Resources		
Activities and Additional Resources for Whole Group	**Differentiated Independent Activities/Center Ideas**	**Teacher Table Differentiated Resources**
- Anchor Chart Links Partition Shapes Fraction Action Different Geometry Anchor Charts - Number Sense Lessons/Resources - Interactive Tools - Sliced Up - Brainpop Jr. Basic Parts of a Whole Equivalent Fractions	- Ready Individual Path - iReady Teacher Assigned Lessons *Divide shapes into three equal parts* *Divide shapes into two, three, or four equal parts* *Practice: identify two, three, or four equal parts* - RCM Interactive Practice: Understand Partitioning Shapes - RCM Center Activities - RCM Enrichment Activities - Cover a rectangle - Partition a rectangle into squares	- RCM Prerequisite Lessons - RCM Tools for Instruction - CFA - K-5 Math Teaching Resources 2.G.3 Geoboard Halves 2.G.3 Fraction Barrier Game

	- CFA - Engage NY – Module 8: Lesson 7 Equal Shares of Composite Shapes Lesson 8 Equal Shares of Composite Shapes Lesson 11 Describe Whole Numbers Lesson 12 Different Ways to Make Halves, Thirds and Fourths from the Same Whole - Partitioning shape practice - Toothy: Fractions	

Vocabulary for Students	**Mentor Text List**
one fourth one half one third thirds fourths halves	*Hershey's Chocolate Math: From Addition to Multiplication* by Jerry Pallotta **(focus on the addition sentences)**

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Topic: Partition Rectangles		
Student Learning Standard(s):	**2.G.A.2**	Partition a rectangle into rows and columns of same-size squares and count to find the total number of them
Math Practices: (add 7 & 8 as needed)	• 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.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.	
Days: 3 Lesson 30 (5/27 - 5/29) **5/30 is included for iReady Diagnostic 3*	**Focus**: Additional Content	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills		
Objective:	**We are learning to**: partition rectangles into rows and columns	
Essential Question(s):	How are drawings useful in math?	

Core Resources	
Core Whole Group Resources	**Core Formative Assessment**

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Ready Classroom Math Lessons **Lesson 30**: Partition Rectangles - Lesson Materials **Lesson** none **Activities** *per student* 12in x 18in sheet of construction paper, inch ruler, glue *Activity Sheet* 1-in grid paper, 2-in grid paper **Math Toolkit** 1-inch tiles, 1-cm tiles, 1-in grid paper, 1-cm grid paper, ½-in grid paper	- RCM Lesson Quizzes

Additional Leveled Resources

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
- Anchor Chart Links Different Geometry Anchor Charts Rows and Columns - Number Sense Lessons/Resources - Interactive Tools - Brainpop Jr. Repeated addition	- iReady Individual Path - iReady Teacher Assigned Lessons N/A - RCM Interactive Practice: N/A - RCM Center Activities - RCM Enrichment Activities - -EngageNY – Module 6: Lesson 12 Compose a Rectangle with Square Tiles Lesson 13 Use Square Tiles to Decompose Rectangles Lesson 14 Use Scissors to Partition a Rectangle Lesson 15 Use Math Drawings to Partition Rectangles -EngageNY – Module 8:	- RCM Prerequisite Lessons - RCM Tools for Instruction - Partition Rectangles - K-5 Math Teaching Resources 2.G.2 Cover a Rectangle

	Lesson 9 Partition Circles and Rectangles Lesson 10 Partition Circles and Rectangles - Partition Rectangles - Rows and Columns - Partition Rectangles: Task Cards	

Vocabulary for Students	**Mentor Text List**
Column rows	*Hershey's Chocolate Math: From Addition to Multiplication* by Jerry Pallotta **(focus on the addition sentences)**

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Topic: Add Using Arrays			
Student Learning Standard(s):	**2.OA.C.4**	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	
Math Practices: (add 7 & 8 as needed)	• 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.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.	
Days: 5 Lesson 31 (6/2 - 6/6)	**Focus**: Supporting Content	**Benchmarked Standard:** N **Fluency Standard**: N	
Critical Knowledge & Skills			
Objective:	**We are learning to**: - Describe an array of up to 5 rows and 5 columns (s1) - Calculate the number of items in an array using repeated addition and skip-counting (s1) - Write an equation to express the sum of items in an array (s2, S3)		
Essential Question(s):	How are drawings useful in math?		

Core Resources

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Core Whole Group Resources	Core Formative Assessment
Ready Classroom Math Lessons **Lesson 31**: Add Using Arrays - Lesson Materials **Lesson** none **Activities** *per student* 20 counters, a variety of classroom manipulatives such as connecting subes, counters, or tiles, 10 objects such as counters or connecting cubes **Math Toolkit** counters, connecting cubes, hundred charts, number lines **Digital Math Tools** perimeter and area tool, number line, multiplication models	- RCM Lesson Quizzes

Additional Leveled Resources

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
- Anchor Chart Links Different Geometry Anchor Charts Rows and Columns Arrays Arrays - Number Sense Lessons/Resources - Interactive Tools	- iReady Individual Path - iReady Teacher Assigned Lessons N/A - RCM Interactive Practice: N/A - RCM Center Activities - RCM Enrichment Activities - Toothy: Arrays, Repeated Addition - Halloween Arrays	- RCM Prerequisite Lessons - RCM Tools for Instruction -K-5 Math Teaching Resources 2.OA.4 Roll an Array

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- Brainpop Jr. Repeated addition - Repeated Addition	- Array worksheet - Array cut and paste	

Vocabulary for Students	Mentor Text List
Array Column Row	*Hershey's Chocolate Math: From Addition to Multiplication* by Jerry Pallotta **(focus on the addition sentences)**

Computer Science (8.1) and Design Thinking (8.2)	
8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network. 8.1.2.NI.2: Describe how the Internet enables individuals to connect with others worldwide. 8.1.2.NI.3: Create a password that secures access to a device. Explain why it is important to create unique passwords that are not shared with others. 8.1.2.NI.4: Explain why access to devices need to be secured. 8.1.2.IC.1: Compare how individuals live and work before and after the implementation of new computing technology. 8.1.2.DA.2: Store, copy, search, retrieve, modify, and delete data using a computing device.	8.2.2.ED.1: Communicate the function of a product or device. 8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process. 8.2.2.ED.3: Select and use appropriate tools and materials to build a product using the design process. 8.2.2.ITH.1: Identify products that are designed to meet human wants or needs. 8.2.2.ITH.2: Explain the purpose of a product and its value. 8.2.2.ITH.3: Identify how technology impacts or improves life. 8.2.2.ITH.4: Identify how various tools reduce work and improve daily tasks. 8.2.2.EC.1: Identify and compare technology used in different schools, communities, regions, and parts of the world.

8.1.2.DA.3: Identify and describe patterns in data visualizations. 8.1.2.DA.4: Make predictions based on data using charts or graphs. 8.1.2.AP.4: Break down a task into a sequence of steps 8.1.2.AP.5: Describe a program's sequence of events, goals, and expected outcomes.	

Preparation for College, Careers, and Beyond	
Career Ready Practices	**Personal Financial Literacy (9.1), Career Awareness, Exploration, and Preparation (9.2), Life Literacies and Key Skills (9.4)**
CRP1. Act as a responsible and contributing citizen and employee. CRP2. Apply appropriate academic and technical skills. CRP3. Attend to personal health and financial well-being. CRP4. Communicate clearly and effectively and with reason. CRP5. Consider the environmental, social and economic impacts of decisions. CRP6. Demonstrate creativity and innovation. CRP7. Employ valid and reliable research strategies. CRP8. Utilize critical thinking to make sense of problems and persevere in solving them. CRP9. Model integrity, ethical leadership and effective management. CRP10. Plan education and career paths aligned to personal goals. CRP11. Use technology to enhance productivity. CRP12. Work productively in teams while using cultural global competence.	9.4.2.CI.1: Demonstrate openness to new ideas and perspectives 9.4.2.CI.2: Demonstrate originality and inventiveness in work 9.4.2.CT.2: Identify possible approaches and resources to execute a plan 9.4.2.CT.3: Use a variety of types of thinking to solve problems 9.4.2.TL.1: Identify the basic features of a digital tool and explain the purpose of the tool 9.4.2.IML.3: Use a variety of sources including multimedia sources to find information about topics such as climate change, with guidance and support from adults 9.4.2.DC.1: Explain differences between ownership and sharing of information. 9.4.2.DC.2: Explain the importance of respecting digital content of others. 9.4.2.DC.3: Explain how to be safe online and follow safe practices when using the internet 9.4.2.DC.4: Compare information that should be kept private to information that might be made Public 9.4.2.DC.5: Explain what a digital footprint is and how it is created.

9.4.2.DC.6: Identify respectful and responsible ways to communicate in digital environments.
9.4.2.DC.7: Describe actions peers can take to positively impact climate change
9.4.2.GCA:1: Articulate the role of culture in everyday life by describing one's own culture and comparing it to the cultures of other individuals
9.4.2.TL.2: Create a document using a word processing application.
9.4.2.TL.3: Enter information into a spreadsheet and sort the information.
9.4.2.TL.4: Navigate a virtual space to build context and describe the visual content.
9.4.2.TL.5: Describe the difference between real and virtual experiences.
9.4.2.TL.6: Illustrate and communicate ideas and stories using multiple digital tools
9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts

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)

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	Strand C	Career Preparation (by end of Grade 12)

Cross-Curricular Connections	
Interdisciplinary Connections	**Technology Integration and Literacy**
● Literature connections (math mentor texts identified in "Resources and Activities") ● Math journals ● Math word wall ● Literacy Connections & Activities Ready Classroom Math	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.

Possible Modifications and Accommodations			
Special Education/504 Plans	**At-Risk**	**Gifted**	**English Language Learners**
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.* **Possible Modifications/Accommodations ● Number line on desk ● Extra time on timed calculation assessments	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.	**Teachers should select the appropriate modifications and/or accommodations for Gifted and Talented according to the following suggestions.* Differentiating instruction based on: ● **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 To differentiate **content** consider:	● 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

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Amy Morley
Chief School Administrator

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Business Administrator

● 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
● 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
	Refer to the individual student Math Plan for **specific interventions.*	● 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)
		  ○ **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 *individualized* and allow students to participate in designing their own learning which is motivating for gifted students)
		● Using jigsaws
		● 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)
		
		To differentiate the **process** consider:
		● How students are grouped
		● Tiering materials used (e.g., graphic organizers varying in complexity, types of questions asked - DOK level)
		  ○ **For Example**:
		  Below-Grade-Level Question: ●●●●●● **+ ? =** ●●●●●●●●●●
		  On-Grade-Level Question (Grade 1): 6 **+ ? =** 10
		  Above-Grade-Level Question: Jon has 6 puppies. He wants to have 10 puppies. How many more puppies does he need to buy?
		
		To differentiate the **product** consider:
			● 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
			● RCM Unit Connect Language Development to Mathematics

● Tiered lessons and assignments		● 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) o **For Example**: (Grade 2) Use the digits 0 to 9, at most one time each, to make a true statement. ⬜⬜ – ⬜⬜ = ⬜⬜ + ⬜⬜ (Open Middle Link) o **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 close to 1000 as possible. ⬜⬜⬜ + ⬜⬜⬜ + ⬜⬜⬜ (GeoGebra Link)	
Individualized Learning Opportunities			
Possible independent study and online learning opportunities are embedded within the “Possible Resources and Activities” column for each Topic area. iReady			