Alloway Township School
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Amy Morley
Chief School Administrator

Kimberly Fleetwood
Business Administrator

Grade 5 Unit 4 — Dates: 3/10/2025 - 4/15/2025

Rationale for Unit 4 Expectations

In Unit 4, learners use what they know about place value understanding from previous units and apply that knowledge to convert measurement units within a given system of measurement. They use these conversions to solve word problems and create line plots involving fractional measurements. After working with measurement and data, learners extend their understanding of classifying geometric figures into categories to understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. They use this new understanding of categories and subcategories to classify two-dimensional figures in a hierarchy based on their properties.

Unit 4 Description & Expectations

Days of Instruction: 26 days (Math In Action, Unit Reviews, Unit Assessments, Prerequisites)
Unit Completion Date: 4/15
Unit Topics/Themes: Measurement and Geometry

Topic: Lesson 25 - Convert Measurement Units
Topic: Lesson 26 - Solve Word Problems Involving Conversions
Topic: Lesson 27 - Make Line Plots and Interpret Data
Topic: Mid-Unit Assessment
Topic: Lesson 28 - Understand Categories of Two-Dimensional Figures
Topic: Lesson 29 - Classify Two-Dimensional Figures

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Topic: Lesson - Math In Action

Topic: Lesson - Unit Review & Unit Assessment

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 <u>common unique needs and common misconceptions</u>. 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 5

○ Gr 5 ● Achieve the Core Coherence Map ● Illustrative Mathematics ● Mindset Mathematics (Gr 3-6) by Jo Boaler ● You Cubed ● San Francisco Unified School District (SFUSD) ○ Gr 5 ● 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) ○ Math Visuals (Berkley Everett)	● Virtual Manipulatives: ○ Brainingcamp - counters, base ten blocks, number line, 100s chart, graphs, fractions, measurement ○ TheMathLearningCenter - ten frames, counters, time, number line, math rack, geoboards ○ SplatSquare-InteractiveHundredsChart ○ NumberLine - allows for multiple jumps to introduce open number line concept, decomposing numbers ○ virtual Rekenrek ○ Dreambox Teacher Tools	

○ 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)		
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	Examples of accountability measures: Recording sheets, Fluency Practice Pages, exit tickets, rubrics, reflections, etc.

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	● RCM Tools for Instruction Lessons ● Exit Tickets ● Achieve the Core Coherence Map ● Illustrative Mathematics	
Standards		
5.M.A.1 (old 5.MD.A.1)Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. 5.DL.A.1 (new)Understand how different visualizations can highlight different aspects of data. Ask questions and interpret data visualizations to describe and analyze patterns. 5.DL.A.2 (new)Develop strategies to collect, organize and represent data of various types and from various sources. Communicate results digitally through a data visual (e.g. chart, storyboard, video presentation). 5.DL.A.3 (new)Collect and clean data to be analyzable (e.g., make sure each entry is formatted correctly, deal with missing or incomplete data). 5.DL.A.4 (new)Using appropriate visualizations (i.e. double line plot, double bar graph), analyze data across samples. 5.DL.B.5 (old 5.MD.B.2)Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different*	In addition to Whole Group Standards, you may choose to focus on grade level fluency standards or other priority standards listed below: ****Unit 4 Center Focuses:** **5.NBT.B.5** With accuracy and efficiency multiply multi-digit whole numbers using the standard algorithm. **5.NBT.B.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. **5.NF.B.6** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models	

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measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally. 5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.* 5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties.	or equations to represent the problem. * Visual fraction models include tape diagrams, number lines, and area models (See Glossary). Set models, including those defined as the whole, are excluded at this grade. **5.NF.B.7** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. * Visual fraction models include tape diagrams, number lines, and area models (See Glossary). Set models, including those defined as the whole, are excluded at this grade.

Unit 4 Math Pacing Guide

Topic: Lesson 25 - Convert Measurement Units and Lesson 26 - Solve Word Problems Involving Conversions		
Student Learning Standard(s):	**5.M.A.1** (old 5.MD.A.1)	Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
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.7 Look for and make use of structure.	• MP.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.
Days: 8 3/10 - 3/19	**Focus**: (Supporting Content)	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills		

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Objective:	**We are learning to**: Lesson 25 • Convert from a larger unit of measurement to a smaller unit of measurement within the same measurement system. • Convert from a smaller unit of measurement to a larger unit of measurement within the same measurement system. Lesson 26 • Convert units of measurement within a given measurement system to solve multi-step word problems. • Solve multi-step word problems that require converting one measurement to a specified unit. • Solve multi-step word problems that require writing two measurements given in different units in the same unit.
Essential Question(s):	When is estimation more appropriate than finding the 'right' answer? What are strategies to make a reasonable estimate?

Core Resources	
Core Whole Group Resources	**Core Formative Assessment**
Ready Classroom Math Lessons **Lesson 25** Session 1 - Try It and Connect It WB pgs Session 2 - Try It, Model It, and Connect It WB pgs Session 3 - Try It, Model It, and Connect It WB pgs	- RCM Lesson Quizzes - RCM Comprehension Checks - CFAs

Session 4 - Apply It Ques 1-3 **Lesson 26** Session 1 - Try It and Connect It WB pgs Session 2 - Try It, Picture It, Model It, and Connect It WB pgs Session 3 - Try It, Model It, and Connect It WB pgs Session 4 - Apply It Ques 1-3 Materials: yard stick, rulers, meter stick, cups, pints, etc.	

Additional Leveled Resources

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links -Number Sense Lessons/Resources -Interactive Tools **RCM** **Lesson 25** -Session 1 - Additional Practice WB pgs -Session 2 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: N/A -RCM Center Activities -RCM Enrichment Activities -RCM WB pgs listed under Additional Whole Group Resources - Howard County Tasks (Preferred Resources Tab) ● Working by the Yard ● Going the Distance ● How Much Tile?	-RCM Prerequisite Lessons -RCM Tools for Instruction -RCM WB pgs listed under Additional Whole Group Resources - Georgia Framework ● Estimate, Measure, Estimate ● Water, Water - Illustrative Math Tasks - Exit Tickets ● Howard County (Assessment Tab)

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-Session 3 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS -Session 4 - Apply It Questions 4-6 **Lesson 26** -Session 1 - Additional Practice WB pgs -Session 2 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS -Session 3 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS -Session 4 - Apply It Questions 4-6 Virtual Math Manipulatives ● -3 Act Task: Let it Flow	- Howard County Printable Center Activities (Independent Work Tab) ● Exploring Metric Measurements ● Metric Longs ● Measurement Mania ● Unable to provide Direct Links to the Below Activities -K-5 Math Teaching Resources ● Comparing Metric Units	

Vocabulary for Students			Mentor Text List
Convert	Customary/Standard System	Metric System	
Unit of measure			

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Topic: Lesson 27 - Make Line Plots and Interpret Data ***see Educator Note** -Teacher Tool Box		
Student Learning Standard(s):	**5.DL.A.1** (new) **5.DL.A.2** (new)	-Understand how different visualizations can highlight different aspects of data. Ask questions and interpret data visualizations to describe and analyze patterns. -Develop strategies to collect, organize and represent data of various types and from various sources. Communicate results digitally through a data visual (e.g. chart, storyboard, video presentation).

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	5.DL.A.3 (new) **5.DL.A.4** (new) **5.DL.B.5** (old 5.MD.B.2)	-Collect and clean data to be analyzable (e.g., make sure each entry is formatted correctly, deal with missing or incomplete data). -Using appropriate visualizations (i.e. double line plot, double bar graph), analyze data across samples.) -Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*
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: 6 3/20 - 3/28	**Focus**: (Supporting Content)	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills		
Objective:	**We are learning to**: • Make a line plot that displays measurement data given in fractions of a unit with unlike denominators. • Use a line plot to solve word problems about measurement data given in fractions of a unit with unlike denominators.	
Essential Question(s):	What makes a data representation useful?	

Core Resources

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Core Whole Group Resources	Core Formative Assessment
Ready Classroom Math Lessons **Lesson 27** Session 1 - Try It and Connect It WB pgs Session 2 - Try It, Model It, and Connect It WB pgs Session 3 - Try It, Picture It, Model It WB pgs Session 4 - Apply It Ques 1-3 Materials: rulers, fraction strips	- RCM Lesson Quizzes - RCM Comprehension Checks - CFAs

Additional Leveled Resources

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links -Number Sense Lessons/Resources -Interactive Tools **RCM** -Session 1 - Additional Practice WB pgs -Session 2 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: N/A -RCM Center Activities -RCM Enrichment Activities -RCM WB pgs listed under Additional Whole Group Resources Howard County Tasks (Preferred Resources Tab) ● Plotting Pencils ● Baby Weights - Howard County Printable Center Activities (Independent Work Tab)	-RCM Prerequisite Lessons -RCM Tools for Instruction -RCM WB pgs listed under Additional Whole Group Resources - Georgia Framework ● Sing a Song ● Survival Badge - Illustrative Math Tasks - Exit Tickets ● Howard County (Assessment Tab)

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-Session 3 - Connect It, Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS -Session 4 - Apply It Questions 4-5 Virtual Math Manipulatives ●	● Plotting Fractions ● Create Your Own Line Plot ● Create Your Own Line Plot ● Line Plots with Fractions Unable to provide Direct Links to the Below Activities -K-5 Math Teaching Resources ● Measuring Classroom Objects (v.1)	

Vocabulary for Students - Unit 4 Word Wall			**Mentor Text List**
Scale	Line plot	Intervals	

Topic: Mid-Unit Assessment	
Days: 2	**Review Date**: 3/31 **Mid-Unit Assessment Date**: 4/1
Scoring Submission in LinkIt:	**Data Review Date**:

Topic: Lesson 28 - Understand Categories of Two-Dimensional Figures

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Student Learning Standard(s):	**5.G.B.3**	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*
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 4/2 - 4/7 (1 Extra Day for Prerequisite)	**Focus**: (Additional Content)	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills		
Objective:	**We are learning to**: • Recognize that two-dimensional figures can be categorized based on their attributes. • Recognize that when one category is a subcategory of another, figures in the subcategory have all the attributes of figures in the more general category. • Understand how Venn diagrams and tree diagrams show relationships among categories of polygons.	
Essential Question(s):	How does sorting objects help us shape our understanding of mathematics?	

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

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[Ready Classroom Math Lessons] **Lesson 28 Prerequisites:** **Grade 4 Lesson 30** Understand Categories of Shapes - **Session 1** (*also include acute & obtuse angles) **Grade 4 Lesson 30** Understand Categories of Shapes - **Session 2** (*also include acute & obtuse angles) **Lesson 28** Session 1: Model It WB pgs Session 2: Model It and Connect It WB pgs Session 3: Apply It ques 1-3 Materials: ruler, geoboards, shapes	- RCM Lesson Quizzes - RCM Comprehension Checks - CFAs

Additional Leveled Resources

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links -Number Sense Lessons/Resources -Interactive Tools **RCM** -Session 1: Additional Practice WB pgs -Session 2: Additional Practice WB pgs, Fluency and Skills WS	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: N/A -RCM Center Activities -RCM Enrichment Activities -RCM WB pgs listed under Additional Whole Group Resources - *RCM: 4th Grade Missed Lesson Resources: 31, 32, 33, 34*	-RCM Prerequisite Lessons -RCM Tools for Instruction -RCM WB pgs listed under Additional Whole Group Resources - Georgia Framework - Illustrative Math Tasks - Exit Tickets ● Howard County (Assessment Tab)

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-Session 3: Apply It ques 4-5 -3 Act Task: For the Win Virtual Math Manipulatives •	- *Howard County 4th Grade Tasks, Centers, Assessments* • *4.g.1* • *4.g.2* • *4.g.3* • *4.md.5* • *4.md.6* • *4.md.7* - Howard County Tasks (Preferred Resources Tab) • Polygon Attributes - Howard County Printable Center Activities (Independent Work Tab) • Quadrilateral ComparePreview the document • Tangram Quadrilaterals • Quadrilateral Qualities • Quadrilateral Construction • Polygon Sort • Triangle Sort • Quadrilateral Shoot Unable to provide Direct Links to the Below Activities -K-5 Math Teaching Resources • Triangles on the Geoboard (V. 1) • Naming Quadrilaterals • Quadrilateral Criteria	
Vocabulary for Students - Unit 4 Word Wall		**Mentor Text List**

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Attribute	Category	Hierarchy
Subcategory	Tree diagram	Venn diagram
Equilateral triangle	Isosceles Triangle	Scalene Triangle
Quadrilateral	Parallelogram	Rectangle
Rhombus	Square	Trapezoid
Polygon	Most General/ Least Specific	

Shape Up!: Fun with Triangles and Other Polygons 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
Circles, Triangles, and Squares by Tana Hoban

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Topic: Lesson 29 - Classify Two-Dimensional Figures			
Student Learning Standard(s):	**5.G.B.4**	Classify two-dimensional figures in a hierarchy based on properties.	
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.7 Look for and make use of structure.		• MP.2 Reason abstractly and quantitatively. • MP.4 Model with Mathematics. • MP.6 Attend to precision.
Days: 4 4/8 - 4/11		**Focus**: (Additional Content)	**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills			
Objective:	**We are learning to**: • Classify two-dimensional figures in a Venn diagram or tree diagram based on properties of the figures. • Draw and use Venn diagrams and tree diagrams to show the relationships among categories of two-dimensional figures.		
Essential Question(s):	How does sorting objects help us shape our understanding of mathematics?		

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

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Ready Classroom Math Lessons **Lesson 29** Session 1 - Try It and Connect It WB pgs Session 2 - Try It, Model It, and Connect It WB pgs Session 3 - Try It, Model It, and Connect It WB pgs Session 4 - Apply It Ques 1-3 Materials: rulers, geoboards, grid paper	- RCM Lesson Quizzes - RCM Comprehension Checks - CFAs

Additional Leveled Resources

Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links -Number Sense Lessons/Resources -Interactive Tools **RCM** -Session 1 - Additional Practice WB pgs -Session 2 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS -Session 3 - Apply It WB and Additional Practice WB pgs, Fluency & Skills Practice WS	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: N/A -RCM Center Activities -RCM Enrichment Activities -RCM WB pgs listed under Additional Whole Group Resources - Howard County Tasks (Preferred Resources Tab) ● Quadrilateral Diagram ● How Many Quadrilaterals? - Howard County Printable Center Activities (Independent Work Tab) ● Triangle Diagram Sides	-RCM Prerequisite Lessons -RCM Tools for Instruction -RCM WB pgs listed under Additional Whole Group Resources - Georgia Framework - Illustrative Math Tasks - Exit Tickets ● Howard County (Assessment Tab)

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-Session 4 - Apply It Questions 4-6 Virtual Math Manipulatives ●	● Triangle Diagram Angles ● Quadrilateral Diagram ● Triangle Sort ● Shape Sort Unable to provide Direct Links to the Below Activities -K-5 Math Teaching Resources ● Quadrilateral Hierarchy	

Vocabulary for Students - Unit 4 Word Wall			**Mentor Text List**
Attribute	Category	Hierarchy	*Shape Up!: Fun with Triangles and Other Polygons* 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 *Circles, Triangles, and Squares* by Tana Hoban
Subcategory	Tree diagram	Venn diagram	
Equilateral triangle	Isosceles Triangle	Scalene Triangle	
Quadrilateral	Parallelogram	Rectangle	
Rhombus	Square	Trapezoid	
Polygon	Most General/ Least Specific		

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Topic: Unit Review and Unit Assessment	
Days: 2	**Review Date**: 4/14 **Unit Assessment Date**: 4/15
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: Lesson - Math In Action		
Student Learning Standard(s):		**Clusters**
	5.G.B.3 **5.G.B.4**	5.G.B Classify two-dimensional figures into categories based on their properties.
	5.M.A.1	5.M.A Convert like measurement units within a given measurement system.
	5.DL.A.1 **5.DL.A.2** **5.DL.A.3** **5.DL.A.4**	5.DL.A Understand and analyze data visualizations.
	5.DL.B.5	5.DL.B Represent and interpret data.
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.

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	• MP.7 Look for and make use of structure. reasoning.	• MP.8 Look for and express regularity in repeated	
Days: 1 4/14 if have time	**Focus**: (Supporting/Additional Content)		**Benchmarked Standard:** N **Fluency Standard**: N
Critical Knowledge & Skills			
Objective:	**We are learning to**: Apply skills from the unit to solve real-world problems involving converting units, illustrating and interpreting data on line plots, and classifying 3D shapes.		
Essential Question(s):	What makes a data representation useful? How does sorting objects help us shape our understanding of mathematics?		

Core Resources	
Core Whole Group Resources	**Core Formative Assessment**
Additional Leveled Resources	

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Activities and Additional Resources for Whole Group	Differentiated Independent Activities/Center Ideas	Teacher Table Differentiated Resources
-Anchor Chart Links -Number Sense Lessons/Resources -Interactive Tools Ready Classroom Math Lessons **Math In Action** ● Salad Dressing ● Desserts ● Backyard Barbeque ● Hierarchy Hit -3 Act Tasks from Lessons in this Unit -Illustrative Math Tasks in this Unit	-iReady Individual Path -iReady Teacher Assigned Lessons -RCM Interactive Practice: N/A -RCM Center Activities -RCM Enrichment Activities -RCM Unit WB pgs listed under Additional Whole Group Resources	-RCM Prerequisite Lessons -RCM Tools for Instruction -RCM Unit WB pgs listed under Additional Whole Group Resources -Unit Resources for Review

Vocabulary for Students - Unit 4 Word Wall	Mentor Text List
Unit Vocabulary	

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

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.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	
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.	9.1.5.CR.1: Compare various ways to give back and relate them to your

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.	strengths, interests, and other personal factors 9.1.5.CP.1: Identify the advantages of maintaining a positive credit history 9.1.5.EG.1: Explain and give examples of what is meant by the term "tax." 9.1.5.EG.2: Describe how tax monies are spent 9.1.5.EG.3: Explain the impact of the economic system on one's personal financial goals. 9.1.5. EG.4: Describe how an individual's financial decisions affect society and contribute to the overall economy 9.1.5. EG.5: Identify sources of consumer protection and assistance. 9.1.5.FI.1: Identify various types of financial institutions and the services they offer including banks, credit unions, and credit card companies. 9.1.5.FP.1: Illustrate the impact of financial traits on financial decisions. 9.1.5.FP.2: Identify the elements of being a good steward of money. 9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences. 9.1.5.FP.4: Explain the role of spending money and how it affects wellbeing and happiness (e.g., "happy money," experiences over things, donating to causes, anticipation, etc.). 9.1.5.FP.5: Illustrate how inaccurate information is disseminated through various external influencers including the media, advertisers/marketers, friends, educators, and family members. 9.1.5.PB.1: Develop a personal budget and explain how it reflects spending, saving, and charitable contributions. 9.1.5.PB.2: Describe choices consumers have with money (e.g., save, spend, donate).

	9.1.5.RMI.1: Identify risks that individuals and households face. 9.1.5.RMI.2: Justify reasons to have insurance.

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)

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.

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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 ● 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	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. **Refer to the individual student Math Plan for **specific interventions**.*	**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: ● 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) o **For Example**: tiering problem solving scenarios making a gifted learner's scenario more complex o **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	● 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

● 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		● 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: ● 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	● RCM Unit Connect Language Development to Mathematics

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		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			