

Curriculum Map

Course Title: Math

Grade: 3rd

Unit (Name/Number): Measurement, Data and Probability	Pacing: Refer to RCC Pacing Guide
Essential Question(s): How do we solve problems with measurement and estimation for; time, liquid volume, mass, length, perimeter and area? How do you represent and interpret data?	

Content/Key Concepts (Eligible Content)	Standards	Key Vocabulary	Learning Activities/Resources	Evidence of Learning (Assessments; Performance Tasks)
<p>Solve problems involving measurement and estimation of intervals of time, money, liquid volumes, masses, and lengths of objects.</p> <p>Determine or calculate time and elapsed time</p> <p>M03.D-M.1.1.1 Tell, show, and/or write time (analog) to the nearest minute. *</p> <p>M03.D-M.1.1.2 Calculate elapsed time to the minute in a given situation (total elapsed time limited to 60 minutes or less). *</p> <p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p> <p>M03.D-M.4.1.1 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side</p>	<p><u>Common Core</u> 3.MD.1</p> <p><u>PA Core Standards</u> CC.2.4.3.A.2</p> <p><u>Common Core</u> 3.MD.8</p> <p><u>PA Core Standards</u> CC.2.4.3.A.6</p>	<p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> • elapsed time • minute • hour • half hour • quarter hour <p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> • perimeter • side • length 	<p>Lesson 20: Tell and Write Time (M) Lesson 21: Solve problems about time (M)</p> <p>Lesson 30: Connect Area and Perimeter</p> <p>Unit 5: Math in Action: Solve Measurement Problems</p>	<p><u>Assessment Options:</u> RCC Quizzes RCC Mid-Unit Assessments RCC Interim Assessment</p> <p><u>District Requirement:</u> RCC Unit Assessments</p> <p><u>Extension Activities:</u> Math in Action</p> <p><u>Practice Standards:</u> Tell and Write Time 1,3,4,6</p> <p>Solve Problems About Time 1,3,4,5,6</p> <p>Connect Area and Perimeter 1,2,3,4,5,6,7</p> <p>Understand Area 2,3,5</p> <p>Multiply to Find Area 4,6,7,8</p> <p>Add Areas 3,5,7</p>

<p>length, exhibiting rectangles with the same perimeter and different areas, and exhibiting rectangles with the same area and different perimeters. Use the same units throughout the problem. *</p> <p>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</p> <p>M03.D-M.3.1.1 Measure areas by counting unit squares (square cm, square m, square in., square ft, and non-standard square units). *</p> <p>M03.D-M.3.1.2 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> <p>M03.D-M.4.1.1 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, exhibiting rectangles with the same perimeter and different areas, and exhibiting rectangles with the same area and different perimeters. Use the same units throughout the problem. *</p>	<p><u>Common Core</u> 3.MD.5, 3.MD.5a, 3.MD.6, 3.MD.7a, 3.MD.7b, 3.MD.7d</p> <p><u>PA Core Standards</u> CC.2.4.3.A.6, CC.2.4.3.A.5</p>	<p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> • area • square units • plane • perimeter • side • length 	<p>Lesson 27: Understand Area Lesson 28: Multiply to Find Area Lesson 29: Add Areas Unit 5: Math in Action: Solve Measurement Problems</p>	<p>Liquid Volume 2,4,6</p> <p>Mass 1,2,4,5,6</p> <p>Solve Problems using Scaled Graphs 1,2,4,6,7</p> <p>Draw Scaled Graphs 1,2,4,6,7</p> <p>Measure Length and Plot Data on Line Plot 1,4,5,6</p>
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<p>Use the attributes of liquid volume, mass, and length of objects</p> <p>M03.D-M.1.2.1 Measure and estimate liquid volumes and masses of objects using standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [l], grams [g], and kilograms [kg]). *</p> <p>M03.D-M.1.2.2 Add, subtract, multiply, and divide to solve one step word problems involving masses or liquid volumes that are given in the same units.</p> <p>M03.D-M.1.2.3 Use a ruler to measure lengths to the nearest quarter inch or centimeter. *</p>	<p><u>Common Core</u> 3.MD.2 <u>PA Core Standards</u> CC.2.4.3.A.1</p>	<p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> ● volume ● cup ● pint ● quart ● gallon ● liter ● mass ● ounce (oz) ● pound (lb) ● gram (g) ● kilogram (kg) ● inch (in) ● centimeter (cm) 	<p>Envision 15-1: Customary Units of Capacity Envision 15-4: Units of Weight Lesson 22: Liquid volume Lesson 23: Mass Unit 5: Math in Action: Solve Measurement Problems</p> <p>Sample Assessment Questions</p>	
<p><u>Represent and Interpret Data</u></p> <p>M03.D-M.2.1.1 Complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10). *</p> <p>M03.D-M.2.1.2 Solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10). *Example 1: (One-step) “Which category is the largest?” Example 2: (Two-step) “How many more are in category A than in category B?”</p>	<p><u>Common Core</u> 3.MD.3, 3.MD.4 <u>PA Core Standards</u> CC.2.4.3.A.4</p>	<p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> ● line plot ● pictograph ● key ● bar graph ● bar ● labels ● title ● scale (horizontal/vertical) ● tally chart ● table 	<p>Lesson 24: Solve Problems using Scaled Graphs Lesson 25: Draw Scaled Graphs Lesson 26: Measure Length and Plot Data on Line Plots</p>	

<p>M03.D-M.2.1.3 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line plot, where the horizontal scale is marked in appropriate units—whole numbers, halves, or quarters.</p> <p>M03.D-M.2.1.4 Translate information from one type of display to another. Limit to pictographs, tally charts, bar graphs, and tables. *Example: Convert a tally chart to a bar graph.</p> <p><u>Count, compare, and make change using a collection of coins and one-dollar bills.</u></p> <p>M03.D-M.1.3.1 Compare total values of combinations of coins (penny, nickel, dime, and quarter) and/or dollar bills less than \$5.00. *</p> <p>M03.D-M.1.3.2 Make change for an amount up to \$5.00 with no more than \$2.00 change given (penny, nickel, dime, quarter, and dollar).</p> <p>M03.D-M.1.3.3 Round amounts of money to the nearest dollar. *</p> <p><i>*Link provided to SAS assessment questions</i></p>	<p><u>Common Core</u> 3.OA.3 <u>PA Core Standards</u> CC.2.4.3.A.3</p>	<p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> ● dollar ● cents ● penny ● nickle ● dime ● quarter ● change 	<p>i-Ready Common Core: Counting Coin Values and Counting Money in Bills and Coins</p>	
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M = lessons that have a **major emphasis** in the Common Core Standards

S/A = lessons that have **supporting/additional** emphasis in the Common Core Standards