# Maryland Voluntary State Curriculum for Mathematics, Grade 6, Correlated to *Maryland Math Connects*, Course 1

Lessons in which the indicator(s) and/or objective(s) is the primary focus are indicated in **bold**.
Highlighted assessment limits will be tested in the no calculator section of MSA.
All content standards are tested in MSA but not all objectives. Objectives that have an assessment limit are tested on MSA. Objectives without an assessment limit are not tested on MSA.

| Standards, Indicators, and Objectives | | Lesson(s) | Page Number(s) |
|---|---|---|---|
| **Standard 1.0 Knowledge of Algebra, Patterns, and Functions:** Students will algebraically represent, model, analyze, or solve mathematical or real-world problems involving patterns or functional relationships. | | | |
| **A. Patterns and Functions** | | | |
| **1.A.1.** | **Identify, describe, extend, and create numeric patterns and functions** | **1-1, 6-2, Explore 1-6, 1-6, 6-6** | **24-27, 47-53, 322-326, 343-348** |
| **1.A.1.a.** | Identify and describe sequences represented by a physical model or in a function table | **1-1, Explore 1-6, 6-6** | **24-27, 47-48, 343-348** |
| **1.A.1.b.** | Interpret and write a rule for a one-operation (+, -, x, ÷ ) function table<br>• **Assessment limit:** Use whole numbers or decimals with no more than two decimal places (0 – 10,000) | **1-6, 6-6, 6-7, Extend 6-7** | **49-53, 343-354** |
| **1.A.1.c.** | Complete a function table with a given two-operation rule<br>• **Assessment limit:** Use the operations of (+, -, x), numbers no more than 10 in the rule, and whole numbers (0 – 50) | **6-6** | **343-348** |
| **B. Expressions, Equations, and Inequalities** | | | |
| **1.B.1.** | **Write and evaluate expressions** | **1-5, 12-2** | **42-46, 636-641** |
| **1.B.1.a.** | Write an algebraic expression to represent unknown quantities<br>• **Assessment limit:** Use one unknown and one operation (+, -) with whole numbers, fractions with denominators as factors of 24, or decimals with no more than two decimal places (0-200) | **1-5, 12-2** | **42-46, 636-641** |
| **1.B.1.b.** | Evaluate an algebraic expression<br>• **Assessment limit:** Use one unknown and one operation (+, -) with whole numbers (0 – 200), fractions with denominators as factors of 24 (0 – 50), or decimals with no more than two decimal places (0 – 50) | **1-5,** 3-5, 3-6, 3-7, 5-4, 5-7, 5-8, 5-10, 11-2, 11-3, 11-4, 11-6, **12-2** | **42-46,** 158-159, 164-165, 170-171, 265-266, 283-285, 288-289, 299-300, 579, 585, 589, 596, **636-641** |
| **1.B.1.c.** | Evaluate numeric expressions using the order of operations<br>• **Assessment limit:** Use no more than 4 operations (+, -, x, ÷ with no remainders) with or without 1 set of parentheses or a division bar and whole numbers (0-100) | **1-4, 1-8**, 5-7, 5-8, 5-10, 11-6 | **37-40, 57-60**, 285, 289, 300, 596, 629 |
| **1.B.1.d.** | Represent algebraic expressions using physical models, manipulatives, and drawings | **Explore 1-9, 1-9, Explore 12-1, 12-1** | **61-67, 630-643** |

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| **1.B.2.** | **Identify, write, solve, and apply equations and inequalities** | **1-8, Explore 1-9, 1-9, 6-4, 6-7** | **57-67, 334-339, 349-353** |
| **1.B.2.a.** | Identify and write equations and inequalities to represent relationships<br>• **Assessment limit:** Use a variable, the appropriate relational symbols (>, <, =), and one operational symbol (+, -, ×, ÷) on either side and use fractions with denominators as factors of 24 (0 – 50) or decimals with no more than two decimal places (0 – 200) | **1-8, Explore 1-9, 1-9, 6-4, 6-7** | **57-67, 334-339, 349-353** |
| **1.B.2.b.** | Determine the unknown in a linear equation<br>• **Assessment limit:** Use one operation (+, -, ×, ÷ with no remainders) and use positive whole number coefficients using decimals with no more than two decimal places (0 – 100) | **1-8, 6-4, Explore 12-3, 12-3, Explore 12-4, 12-4, 12-5** | **57-60, 334-339, 642-648, 650-654, 657-660** |
| **1.B.2.c.** | Solve for the unknown in a one-step inequality | **Extend 12-4, CSB11** | **655-656, 749-750** |
| **1.B.2.d.** | Identify or graph solutions of a one-step inequality on a number line | **CSB11** | **749-750** |
| **1.B.2.e.** | Apply given formulas to a problem solving situation | **Explore 1-9, 1-9, 10-2, 10-3, 10-4, 10-6, 10-7, Extend 10-7** | **61-67, 528-544, 548-560** |
| **C. Numeric and Graphic Representations of Relationships** | | | |
| **1.C.1.** | **Locate points on a number line and in a coordinate plane** | **2-5, 4-9, 11-7, 11-8, 11-9, 11-10** | **96-100, 233-237, 599-619** |
| **1.C.1.a.** | Represent rational numbers on a number line<br>• **Assessment limit:** Use integers (-20 to 20) | 2-5, 3-2, 4-6, 11-1, 11-2, 11-3, 11-4 | 96-100, 142-145, 221, 572-588 |
| **1.C.1.b.** | Graph ordered pairs in a coordinate plane.<br>• **Assessment limit:** Use no more than 3 ordered pairs of integers (-20 to 20) or no more than 3 ordered pairs of fractions/mixed numbers with denominators of 2 (-10 to 10) | **4-9, 11-7, 11-8, 11-9, 11-10** | **233-237, 599-619** |
| **1.C.1.c.** | Graph linear data from a function table | **Extend 6-7** | **354** |
| **1.C.2.** | **Analyze linear relationships** | **2-3** | **88-91** |
| **1.C.2.a.** | Identify and describe the change represented in a graph<br>• **Assessment limit:** Identify increase, decrease, or no change | **2-3** | **88-91** |

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| **1.C.2.b.** | Translate the graph of a linear relationship onto a table of values that illustrates the type of change | **Explore 1-6, 1-6, 6-7, Extend 6-7** | **47-53, 349-354** |
| **Standard 2.0 Knowledge of Geometry:** Students will apply the properties of one-, two-, or three-dimensional geometric figures to describe, reason, or solve problems about shape, size, position, or motion of objects. | | | |
| **A. Plane Geometric Figures** | | | |
| **2.A.1.** | Analyze the properties of plane geometric figures | **9-1, 9-2, 9-3, Explore 9-4, 9-4, Explore 9-5, 9-5, 9-7, Extend 9-7, 10-2** | **470-499, 502-508, 528-533** |
| **2.A.1.a.** | Identify, describe, and label points, lines, rays, line segments, vertices, angles, and planes using correct symbolic notation | **9-1, 9-2, 9-3** | **470-484** |
| **2.A.1.b.** | Identify and describe line segments<br>• **Assessment limit:** Use diagonal line segments | 9-4, CSB12 | 486-491, 751-752 |
| **2.A.1.c.** | Identify and describe the parts of a circle<br>• **Assessment limit:** Use radius, diameter, or circumference | **10-2** | **528-533** |
| **2.A.2.** | Analyze geometric relationships | **Explore 9-4, 9-4, Explore 9-5, 9-5, 9-7, Extend 9-7, Explore 10-2, 10-2** | **485-491, 502-508, 527-533** |
| **2.A.2.a.** | Compare and classify triangles by sides<br>• **Assessment limit:** Use scalene, equilateral, or isosceles | **9-4** | **486-491** |
| **2.A.2.b.** | Compare and classify triangles by angle measure<br>• **Assessment limit:** Use equiangular, obtuse, acute, or right decimal places (0 – 100) | Explore 9-4**, 9-4** | 485**, 486-491** |
| **2.A.2.c.** | Determine a third angle measure of a triangle given two angle measures<br>• **Assessment limit:** Use the concept of the sum of angles in any triangle is 180° without using a diagram | **9-4** | **486-491** |
| **2.A.2.d.** | Identify and compare the relationship between parts of a circle<br>• **Assessment limit:** Use radius, diameter and circumference ($\pi$=3.14) | Explore 10-2**, 10-2** | 527**, 528-533** |
| **B. Solid Geometric Figures- *Not Assessed at Grade 6*** | | | |
| **C. Representation of Geometric Figures** | | | |
| **2.C.1.** | Represent plane geometric figures | **Explore 9-4, 9-4, Explore 9-5, 9-5, Explore 10-2, LA 3** | **485-499, 527-533, LA10-LA14** |
| **2.C.1.a.** | Draw geometric figures using a variety of tools<br>• **Assessment limit:** Draw triangles | *Maryland Tip-In* | *xxx* |

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| | given the measures of 2 sides and one angle or 2 angles and 1 side using whole numbers (0-20) and angle measures (0°-179°) | | |
| **2.C.1.b.** | Identify, describe, or draw a polygon<br>• **Assessment limit:** Use the first quadrant given no more than six coordinates | **Explore 9-4, 9-4, 9-5** | **485-492, 494-499** |
| **2.C.1.c.** | Identify or describe angle relationships<br>• **Assessment limit:** Use perpendicular bisectors or angle bisectors | 9-1, 9-3, **LA 3** | 470-473, 479-483, **LA10-LA14** |
| **D. Congruence and Similarity** | | | |
| **2.D.1.** | Represent plane geometric figures | **9-7** | **502-507** |
| **2.D.1.a.** | Identify and describe congruent polygons and their corresponding parts | **9-7** | **502-507** |
| **E. Transformations** | | | |
| **2.E.1.** | Analyze a transformation on a coordinate plane | **Extend 9-7, 11-7, 11-8, 11-9, 11-10** | **508, 599-619** |
| **2.E.1.a.** | Plot the result of one transformation (translation, reflection, rotation) on a coordinate plane | **Extend 9-7, 11-8, 11-9, 11-10** | **508, 604-619** |
| **Standard 3.0 Knowledge of Measurement:** Students will identify attributes, units, or systems of measurements or apply a variety of techniques, formulas, tools or technology for determining measurements. | | | |
| **A. Measurement Units- *Not Assessed at Grade 6*** | | | |
| **B. Measurement Tools** | | | |
| **3.B.1.** | Measure in customary and metric units | **8-1, 8-2, Explore 8-3, 8-3, 8-4, 8-5, 8-6, 8-7, 8-8, Extend 8-8** | **418-460** |
| **3.B.1.a.** | Select and use appropriate tools and units<br>• **Assessment limit:** Measure length to the nearest 1/16 inch with a ruler | **8-1, 8-2, Explore 8-3, 8-3, 8-4, 8-7, 8-8, Extend 8-8** | **418-441, 450-459** |
| **C. Applications in Measurement** | | | |
| **3.C.1.** | **Estimate and apply measurement formulas** | **Explore 10-1, 10-1, 10-2, 10-3, Explore 10-4, 10-4, 10-6, 10-7** | **520-526, 534-545, 548-560** |
| **3.C.1.a.** | Estimate and determine the area of a polygon<br>• **Assessment limit:** Use triangles and whole number dimensions (0 – 200) | **10-3**, **Explore 10-4, 10-4,** Explore 10-7, 10-7, Extend 10-7 | **534-545,** 554-560 |
| **3.C.1.b.** | Estimate and determine the volume of a rectangular prism<br>• **Assessment limit:** Use rectangular prisms and whole number dimensions (0 – 1000) | **10-6** | **548-553** |
| **3.C.1.c.** | Estimate and determine the area of a composite figure<br>• **Assessment limit:** Use composite figures with no more than four | **CSB13** | **753-754** |

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| | polygons (triangles or rectangles) and whole number dimensions (0 – 500) | | |
| **3.C.1.d.** | Determine missing dimension of a quadrilateral given the perimeter length<br>• **Assessment limit:** Find length in a quadrilateral given the perimeter with whole number dimensions (0 – 200) | **Explore 10-1** | **520-521** |
| **3.C.1.e.** | Determine the missing dimension of rectangles<br>• **Assessment limit:** Find length in a square or rectangle given the area and whole number dimensions (0 – 200) | **Explore 10-1** | **520-521** |
| **Standard 4.0 Knowledge of Statistics:** Students will collect, organize, display, analyze, or interpret data to make decisions or predictions. | | | |
| **A. Data Displays** | | | |
| **4.A.1.** | Organize and display data | **2-1, 2-2, Extend 2-2, 2-3, 2-4, 2-5, 2-8** | **78-79, 81-100, 114-118** |
| **4.A.1.a.** | Organize and display data to make frequency tables<br>• **Assessment limit:** Use no more than 5 categories or ranges of numbers and total frequencies of no more than 25 | **2-1** | **78-79** |
| **4.A.1.b.** | Organize and display data to make stem-and-leaf plots<br>• **Assessment limit:** Use no more than 20 data points and whole numbers (0–999) | **2-4** | **92-95** |
| **4.A.1.c.** | Organize and display data using a back-to-back stem-and-leaf plot | **2-4** | **92-95** |
| **B. Data Analysis** | | | |
| **4.B.1.** | Analyze data | **2-1, 2-4, 2-6, Extend 2-6, 2-7, 7-2** | **78-79, 92-95, 102-113, 370-375** |
| **4.B.1.a.** | Interpret frequency tables<br>• **Assessment limit:** Use no more than 5 categories or ranges of numbers and frequencies of no more than 25 | **2-1** | **78-79** |
| **4.B.1.b.** | Read and analyze circle graphs<br>• **Assessment limit:** Use no more than 5 categories using data in whole numbers or percents (0 – 1000) | **7-2** | **370-375** |
| **4.B.1.c.** | Interpret data from a stem-and-leaf plot | **2-4** | **92-95** |
| **4.B.2.** | Describe a set of data | **2-6, Extend 2-6, 2-7** | **102-107 108-113** |
| **4.B.2.a.** | Apply measures of central tendency (mean, median, mode) | **2-6, Extend 2-6, 2-7** | **102-107 108-113** |

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| **Standard 5.0 Knowledge of Probability:** Students will use experimental methods or theoretical reasoning to determine probabilities to make predictions or solve problems about events whose outcomes involve random variation. | | | |
| **B. Theoretical Probability** | | | |
| **5.B.11.** | Determine the probability of one simple event comprised of equally likely outcomes | **7-4, Extend 7-4** | **381-387** |
| **5.B.1.a.** | Express the probability of an event as a fraction. | **7-4** | **381-386** |
| **5.B.1.b.** | Express the probability of an event as a decimal<br>• **Assessment limit:** Use a sample space of 10, 20, 25, or 50 outcomes | **7-4** | **381-386** |
| **5.B.1.c.** | Express the probability of an event as a percent | **7-4** | **381-386** |
| **C. Experimental Probability** | | | |
| **5.C.1.** | Analyze the results of a probability experiment | **7-4, Extend 7-4, 7-5, 7-6** | **381-387, 389-393, 394-398** |
| **5.C.1.a.** | Express the probability of an event as a fraction. | **7-4, 7-5** | **381-386, 389-393** |
| **5.C.1.b.** | Make predictions and express the experimental probability as a fraction, a decimal, or a percent<br>• **Assessment limit:** Use no more than 30 results in the sample space | **7-6** | **394-398** |
| **5.C.1.c.** | Express the probability of an event as a percent | **7-4, 7-5** | **381-386, 389-393** |
| **5.C.2.** | Conduct a probability experiment | **Extend 7-4** | **387** |
| **5.C.3.** | Compare outcomes of theoretical probability with the results of experimental probability | Extend 7-4 | 387 |
| **5.C.4.** | Describe the difference between theoretical and experimental probability | Extend 7-4 | 387 |
| **Standard 6.0 Knowledge of Number Relationships and Computation/Arithmetic:** Students will describe, represent, or apply numbers or their relationships or will estimate or compute using mental strategies, paper/pencil or technology. | | | |
| **A. Knowledge of Number and Place Value** | | | |
| **6.A.1.** | Apply knowledge of rational numbers and place value | **1-3, 2-9, 3-1,** 4-7, **Explore 11-2, LA 1**, CSB2, CSB3, CSB4 | **32-36, 121-125, 138-141,** 225-228, **536, LA2-LA6**, 738-742 |
| **6.A.1.a.** | Read, write, and represent whole numbers<br>• **Assessment limit:** Use exponential form with powers of 10 (0 - 100,000) | **1-3, 3-3**, CSB2, CSB3, CSB4 | **32-36, 146-149**, 738-742 |
| **6.A.1.b.** | Read, write, and represent integers<br>• **Assessment limit:** Use integers from (-100 to 100) | **2-9, 11-1** | **121-125, 572-575** |

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| **6.A.1.c.** | Identify and determine equivalent forms of fractions as decimals, as percents, and as ratios<br>• **Assessment limit:** Use proper fractions with denominators as factors of 100, decimals, percents, or ratios (0 – 1000) | **Explore 4-2, 4-2, 4-3, 4-7, 4-8**, 6-2, Extend 6-2, 6-3, 7-1, 7-2, 7-3 | **202-212, 225-232**, 322-333, 365-375, 377-380 |
| **6.A.1.d.** | Compare and order fractions, decimals alone or mixed together, with and without relational symbols (<, >, =)<br>• **Assessment limit:** Include no more than 4 fractions with denominators with factors of 100 or decimals with up to 2 decimal places (0 – 100) | **3-2, 4-6** | **142-145, 220-224** |
| **6.A.1.e.** | Compare and order integers | **2-9** | **121-125** |
| **B. Number Theory** | | | |
| **6.B.1.** | Apply number relationships | **1-2, 4-1, 4-5** | **28-31, 197-201, 216-218** |
| **6.B.1.a.** | Determine prime factorizations for whole numbers and express them using exponential form | **1-2** | **28-31** |
| **C. Number Computation** | | | |
| **6.C.1.** | Analyze number relations and compute | *Used throughout the text*. For example, Explore 3-5, 3-5, Explore 5-9, 5-9 | *Used throughout the text*. For example, 155-160, 291-301 |
| **6.C.1.a.** | Add and subtract fractions and mixed numbers and express answers in simplest form<br>• **Assessment limit:** Use proper fractions and denominators as factors of 60 (0–20) | **5-3, Explore 5-4, 5-4, 5-5** | **256-268, 270-274** |
| **6.C.1.b.** | Multiply fractions and mixed numbers and express in simplest form<br>• **Assessment limit:** Use denominators as factors of 24 not including 24 (0 – 20) | **Explore 5-7, 5-7, 5-8** | **280-290** |
| **6.C.1.c.** | Multiply decimals<br>• **Assessment limit:** Use a decimal with no more than 3 digits multiplied by a 2-digit decimal (0 – 1000) | **Explore 3-6, 3-6, Explore 3-7, 3-7** | **162-172** |
| **6.C.1.d.** | Divide decimals<br>• **Assessment limit:** Use a decimal with no more than 5 digits divided by a whole number with no more than 2 digits without annexing zeros (0 – 1000) | **3-8, Explore 3-9, 3-9** | **173-183** |
| **6.C.1.e.** | Determine a percent of a whole number<br>• **Assessment limit:** Use 10%, 20%, 25% or 50% of a whole number (0 – 1000) | **7-1, 7-3** | **365-369, 377-380** |

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| **6.C.1.f.** | Simplify numeric expressions using the properties of addition and multiplication<br>• **Assessment limit:** Use the distributive property to simplify numeric expressions and whole numbers (0 – 1000) | **1-4, 1-8, Explore 12-1, 12-1** | **37-40, 57-60, 630-635** |
| **6.C.2.** | Estimation | **3-4,** 3-5, 3-10, **5-6,** 5-8, 7-2, **7-8** | **150-154,** 156-160, 184-185, **276-279,** 287-288, 370-371, **401-405** |
| **6.C.2.a.** | Determine the approximate products and quotients of decimals<br>• **Assessment limit:** Use a decimal with no more than a 3 digits multiplied by a 2-digit whole number, or the quotient of a decimal with no more than 4 digits in the dividend divided by a 2-digit whole number (0 – 1000) | **3-6, 3-7, 3-8, 3-9** | **161-183** |
| **6.C.3.** | Analyze ratios, proportions, and percents | **6-1, Extend 6-1, 6-3, 6-4** | **314-321, 329-339** |
| **6.C.3.a.** | Represent ratios in a variety of forms | **6-1, Extend 6-1** | **314-321** |
| **6.C.3.b.** | Use ratios and unit rates to solve problems | **6-1, 6-2, Extend 6-2**, 6-3 | **322-328**, 329-333 |
| **Standard 7.0 Processes of Mathematics:** Students demonstrate the processes of mathematics by making connections and applying reasoning to solve problems and to communicate their findings. | | | |
| **A. Problem Solving**<br>*Maryland Math Connects addresses problem solving throughout the text and in Problem-Solving Investigation lessons.* | | | |
| **7.A.1.** | Apply a variety of concepts, processes, and skills to solve problems | *Used throughout the text*. For example, 1-7, 2-1, 5-3, 7-7 | *Used throughout the text*. For example, 54-55, 78-79, 254-255, 399-401 |
| **7.A.1.a.** | Identify the question in the problem | *Used throughout the text*. For example, 1-1, 6-5, 7-7, 9-6 | *Used throughout the text*. For example, 24-27, 341-342, 399-401, 500-501 |
| **7.A.1.b.** | Decide if enough information is present to solve the problem | *Used throughout the text*. For example, 1-1, 3-10, 7-7 | *Used throughout the text*. For example, 24-27, 184-185, 399-400 |
| **7.A.1.c.** | Make a plan to solve a problem | *Used throughout the text*. For example, 1-1, 7-7, 8-5, 11-5 | *Used throughout the text*. For example, 24-27, 399-400, 442-443, 592-593 |
| **7.A.1.d.** | Apply a strategy, i.e., draw a picture, guess and check, finding a pattern, writing an equation | *Used throughout the text*. For example, 1-7, 4-4, 6-5, 9-6 | *Used throughout the text*. For example, 54-55, 214-215, 341-342, 500-501 |
| **7.A.1.e.** | Select a strategy, i.e., draw a picture, guess and check, finding a pattern, writing an equation | *Used throughout the text*. For example, 1-7, 4-4, 6-5, 9-6 | *Used throughout the text*. For example, 54-55, 214-215, 341-342, 500-501 |

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| **7.A.1.f.** | Identify alternative ways to solve a problem | *Used throughout the text*. For example, 2-1, 3-6, 6-6, 8-2 | *Used throughout the text*. For example, 78-79, 163-166, 347, 428 |
| **7.A.1.g.** | Show that a problem might have multiple solutions or no solution | *Used throughout the text*. For example, 7-5, 12-3, Extend 12-4 | *Used throughout the text*. For example, 389-393, 647, 655-656 |
| **7.A.1.h.** | Extend the solution of a problem to a new problem situation | *Used throughout the text*. For example, Explore 10-7, 10-7, Explore 12-1, Extend 12-4, | *Used throughout the text*. For example, 554-559, 630-631, 655-656 |
| **B. Reasoning**<br>*Maryland Math Connects addresses reasoning in every lesson. See H.O.T. Problems: Challenge, Find the Error, Number Sense, Open Ended, Reasoning, Which One Doesn't Belong* | | | |
| **7.B.1.** | Justify ideas or solutions with mathematical concepts or proofs | *Used throughout the text*. For example, Explore 1-6, Explore 3-5, Explore 8-3, 9-5 | *Used throughout the text*. For example, 47-48, 155, 430-431, 494-499 |
| **7.B.1.a.** | Use inductive or deductive reasoning | *Used throughout the text*. For example, Explore 4-2, Explore 8-3, Explore 9-4, 9-5 | *Used throughout the text*. For example, 202-203, 430-431, 485, 494-499 |
| **7.B.1.b.** | Make or test generalizations | *Used throughout the text*. For example, Explore 1-6, Explore 1-9, Explore 3-5, Explore 3-7 | *Used throughout the text*. For example, 47-48, 61-62, 155, 167-168 |
| **7.B.1.c.** | Support or refute mathematical statements or solutions | *Used throughout the text*. For example, 1-2, 2-8, 3-5, 4-1 | *Used throughout the text*. For example, 31, 118, 160, 201 |
| **7.B.1.d.** | Use methods of proof, i.e., direct, indirect, paragraph, or contradiction | *Used throughout the text*. For example, 3-5, 4-1, 7-1, 8-4 | *Used throughout the text*. For example, 160, 201, 369, 441 |
| **C. Communication**<br>*Maryland Math Connects addresses communication in every lesson. See H.O.T. Problems: Challenge, Find the Error, Number Sense, Open Ended, Reasoning, Which One Doesn't Belong, Writing in Math* | | | |
| **7.C.1.** | Present mathematical ideas using words, symbols, visual displays, or technology | *Used throughout the text*. For example, Explore 1-6, Extend 6-7, 9-6, | *Used throughout the text*. For example, 47-48, 500-501, 354, 636-641 |

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| **7.C.1.a.** | Use multiple representations to express concepts or solutions | *Used throughout the text*. For example, Explore 1-9, Explore 3-5, Extend 6-7, 10-5 | *Used throughout the text*. For example, 61-62, 155, 354, 546-547 |
| **7.C.1.b.** | Express mathematical ideas orally | *Used throughout the text*. For example, 5-2, Extend 7-4, Explore 10-1, Explore 11-2 | *Used throughout the text*. For example, 254-255, 387, 520-521, 576 |
| **7.C.1.c.** | Explain mathematically ideas in written form | *Used throughout the text*. For example, 2-9, 4-1, 4-7, 5-4 | *Used throughout the text*. For example, 124, 201, 228, 267-268 |
| **7.C.1.d.** | Express solutions using concrete materials | *Used throughout the text*. For example, Explore 11-2, Explore 12-1, Explore 12-3, Explore 12-4 | *Used throughout the text*. For example, 576, 630-631, 642-643, 650 |
| **7.C.1.e.** | Express solutions using pictorial, tabular, graphical, or algebraic methods | *Used throughout the text*. For example, 2-2, 9-6, 11-8, 12-2 | *Used throughout the text*. For example, 81-85, 500-501, 604-609, 636-641 |
| **7.C.1.f.** | Explain solutions in written form | *Used throughout the text*. For example, 2-9, 4-1, 4-7, 5-4 | *Used throughout the text*. For example, 124, 201, 228, 267-268 |
| **7.C.1.g.** | Ask questions about mathematical ideas or problems | *Used throughout the text*. For example, Extend 8-8, Explore 10-1, Extend 10-7, LA 6 | *Used throughout the text*. For example, 459-460, 520-521, 560, LA25-LA28 |
| **7.C.1.h.** | Give or use feedback to revise mathematical thinking | *Used throughout the text*. For example, 1-7, Explore 10-1, Extend 10-7, LA 2 | *Used throughout the text*. For example, 54-55, 520-521, 560, LA7-LA9 |

LA = Looking Ahead to Next Year; CSB = Concepts and Skills Bank; RSP = Reading to Solve Problems

| **D. Connections**<br>*Maryland Math Connects addresses connections by including real-world application problems in every lesson. Career features are found in each chapter.* | | | |
|---|---|---|---|
| **7.D.1.** | Relate or apply mathematics within the discipline, to other disciplines, and to life | *Used throughout the text*. For example, 3-10, 4-4, 11-7, 12-6 | *Used throughout the text*. For example, 184-185, 214-215, 599-603, 661-662 |
| **7.D.1.a.** | Identify mathematical concepts in relationship to other mathematical concepts | *Used throughout the text*. For example, 3-10, Extend 6-7, 7-2, 11-8 | *Used throughout the text*. For example, 184-185, 354, 370-375, 604-609 |
| **7.D.1.b.** | Identify mathematical concepts in relationship to other disciplines | *Used throughout the text*. For example, Ch. 1 RSP, 2-2, Extend 9-7, 12-6 | *Used throughout the text*. For example, 56, 81-85, 508, 661-662 |
| **7.D.1.c.** | Identify mathematical concepts in relationship to life | *Used throughout the text*. For example, 4-4, 5-2, 8-5, 10-5 | *Used throughout the text*. For example, 214-215, 254-255, 442-443, 546-547 |
| **7.D.1.d.** | Use the relationship among mathematical concepts to learn other mathematical concepts | *Used throughout the text*. For example, 3-10, Extend 6-7, 7-2, 11-7 | *Used throughout the text*. For example, 184-185, 354, 370-375, 599-603 |

# New Maryland Photo to Come