RCS 5th Grade Math Curriculum Map

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 5

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters   ☐ Supporting Clusters   ⭕ Additional Clusters

Timeline	Standard	Resources	Prerequisite Standard
August/September	**M.5.18** 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.	Page 11, & 33 Educator's Guide GoMath lessons 585A–585B, 585–588, 591A–591B, 591–594, 597A–597B, 597–600, 603A–603B, 603–606, 611A–611B, 611–614, 617A–617B, 617–620, 623A–623B, 623–626 WVGSA Blueprint 0-2 questions (5.18) i-Ready Unit 4 L21-22	
August/September	**M.5.19** 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. (e.g., Given different measurements of liquid in identical beakers, find the	Page 32 & 34 Educator's Guide GoMath lessons 533A–533B, 533–536 WVGSA Blueprint 0-2 questions (5.19) i-Ready Unit 4 L23	

	amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally)		
August/September	**M.5.20** Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume and can be used to measure volume. b. A solid figure which can be packed without gaps or overlaps using b unit cubes is said to have a volume of b cubic units	Page 35 Educator's Guide GoMath lessons 655A–655B, 655–658 663A–663B, 663–666 669A–669B, 669–672 See Also: 675A–675B, 675–678 WVGSA Blueprint 0-5 questions (5.20-5.22) i-Ready Unit 4 L24	
August/September	**M.5.21** Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Page 35 & 36 Educator's Guide GoMath lessons 669A–669B, 669–672, 675A–675B, 675–678 WVGSA Blueprint 0-5 questions (5.20-5.22) i-Ready Unit 4 L25	
August/September	**M.5.22** Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes and show that the volume is the same as would be found by	Page 35, 36, & 37 Educator's Guide GoMath lessons 11.8, 11.9, 11.10 WVGSA Blueprint 0-5 questions (5.20-5.22) i-Ready Unit 4 L26 & 27	GoMath **Gd. 4** 13.1-13.5

	multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes (e.g., to represent the associative property of multiplication). b. Apply the formulas V = l × w × h and V = b × h for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real-world and mathematical problems. c. Recognize volume as additive and find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the nonoverlapping parts, applying this technique to solve real-world problems		
October/November	**M.5.4** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Page 9, 10, 11 & 33 Educator's Guide	
October/November	**M.5.5** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10	Page 9, 11 & 12 Educator's Guide GoMath lessons 23A–23B, 23–26, 29A–29B, 29–32, 233A–233B, 233–236, 291A–291B, 291–294 See Also: 245A–245B, 245–248, 251A–251B, 251–254, 271A–271B, 271–274,	

		277A–277B, 277–280, 323A–323B, 323–326	
		WVGSA Blueprint 0-5 questions (5.4-5.7)	
		i-Ready Unit 1 L2	
October/November	**M.5.6** Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names and expanded form (e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000)). b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, = and < symbols to record the results of comparisons	Page 12 & 14 Educator's Guide GoMath lessons 157A–157B, 157–160 See Also: 151A–151B, 151–154 163A–163B, 163–166 WVGSA Blueprint 0-5 questions (5.4-5.7) i-Ready Unit 1 L3 & L4	
October/November	**M.5.7** Use place value understanding to round decimals to any place	Page 10 & 14 Educator's Guide GoMath lessons 169A–169B, 169–172 WVGSA Blueprint 0-5 questions (5.4-5.7) i-Ready Unit 1 L4	
October/November	**M.5.8** Fluently multiply multi-digit whole numbers using the standard algorithm	Page 15 & 16 Educator's Guide GoMath lessons 1.6, 1.7 37A–37B, 37–40, 43A–43B, 43–46	GoMath **Gd. 4** 2.3, 2.5, 2.6, 2.7, 2.10, 2.11, 3.1, 3.3, 3.4, 3.5, 3.6

		WVGSA Blueprint 0-5 questions (5.8-5.10) i-Ready Unit 1 L5	
October/November	**M.5.9** 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.	Page 15, 17, & 18 Educator's Guide GoMath lessons 1.8, 1.9, 2.1, 2.2, 2.3, 2.4, 2.5, 2.8, 2.9 WVGSA Blueprint 0-5 questions (5.8-5.10) i-Ready Unit 1 L6	GoMath **Gd. 4** 4.1, 4.2, 4.4, 4.5, 4.6, 4.8, 4.9, 4.10, 4.11
October/November	**M.5.10** Add, subtract, multiply and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between related operations, relate the strategy to a written method and explain the reasoning used.	Page 15, 18 & 19 Educator's Guide GoMath lessons 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8 WVGSA Blueprint 0-5 questions (5.8-5.10) i-Ready Unit 1 L7-L9	GoMath **Gd. 4** 1.6, 1.7, 2.6, 2.7, 2.10, 2.11, 3.7, 4.8, 4.9, 4.10, 4.11
November/December	**M.5.1** Use parentheses, brackets or braces in numerical expressions and evaluate expressions with these symbols.	Page 6, & 7 Educator's Guide GoMath lessons 17A–17B, 17–20, 61A–61B, 61–64, 67A–67B, 67–70, 73A–73B, 73–76 See Also: 533A–533B, 533–536 1.11, 1.12	

		WVGSA Blueprint 0-8 questions (5.1 &5.2) i-Ready Unit 3 L19	
November/December	**M.5.2** Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them. (e.g., Express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.)	Page 6 Educator's Guide GoMath lessons 61A–61B, 61–64 See Also: 369A–369B, 369–372 WVGSA Blueprint 0-8 questions (5.1 &5.2) i-Ready Unit 3 L19	
November/December	**M.5.3** Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. (e.g., Given the rule "Add 3" and the starting number 0 and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.)	Page 8, 10, & 40 Educator's Guide GoMath lessons 9.5, 9.6, 9.7 559A–559B, 559–562, 565A–565B, 565–568, 571A–571B, 571–475 WVGSA Blueprint 0-4 questions (5.3) i-Ready Unit 3 L20	GoMath **Gd. 4** lesson 5.6, 10.7, 12.5
January/March	**M.5.11** Add and subtract fractions with unlike denominators, including	Page 22, & 23 Educator's Guide	

	mixed numbers, by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators (e.g., 2/3 + 5/4 = 8/12 + 15/12 = 23/12). Instructional Note: In general, a/b + c/d = (ad + bc)/bd	GoMath lessons 5A–5B, 5–8, 11A–11B, 11–14, 151A–151B, 151–154 See Also: 157A–157B, 157–160

WVGSA Blueprint 0-4 questions (5.11 &5.12)

i-Ready Unit 2 L10 | |
| **January/March** | **M.5.12** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers (e.g., recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2) | Page 22, 23 & 24 Educator's Guide

GoMath lessons 6.1, 6.2, 6.3, 6.9

WVGSA Blueprint 0-4 questions (5.11 & 5.12)

i-Ready Unit 2 L11 | GoMath **Gd. 4** 7.3, 7.4, 7.5, 7.7, 7.8, 7.9, 7.10 |
| **January/March** | **M.5.13** Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers by using visual fraction models or equations to represent the problem. (e.g., Interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3 and that when 3 wholes are shared equally among 4 people each person has a | Page 24 & 25 Educator's Guide

GoMath lessons 125A–125B, 125–128, 503A–503B, 503–506 See Also: 329A–329B, 329–332

WVGSA Blueprint 0-6 questions (5.13-5.17)

i-Ready Unit 2 L12 | |

	share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?)		
January/March	**M.5.14** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a × q ÷ b. (e.g., Use a visual fraction model to show (2/3) × 4 = 8/3 and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15.) Instructional Note: In general, (a/b) × (c/d) = ac/bd. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles and represent fraction products as rectangular areas.	Page 11, 20, 24, 25, 26, 27 & 28 Educator's Guide GoMath lessons 7.4, 7.7, 7.10 WVGSA Blueprint 0-6 questions (5.13-5.17) i-Ready Unit 2 L13 & 14	GoMath **Gd. 4** 8.2, 8.3, 8.4, 8.5
January/March	**M.5.15** Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. b. Explaining	Page 30 & 31 Educator's Guide GoMath lessons 7.5, 7.6, 7.8 WVGSA Blueprint 0-6 questions (5.13-5.17)	GoMath **Gd. 4** 8.2-8.5

	why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b = (n×a)/(n×b) to the effect of multiplying a/b by 1.	i-Ready Unit 2 L15	
January/March	**M.5.16** Solve real-world problems involving multiplication of fractions and mixed numbers by using visual fraction models or equations to represent the problem.	Page 30 & 31 Educator's Guide GoMath lessons 7.9, 7.10 WVGSA Blueprint 0-6 questions (5.13-5.17) i-Ready Unit 2 L16	GoMath **Gd. 4** 8.2-8.5
January/March	**M.5.17** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. Instructional Note: Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division, but division of a fraction by a fraction is not a requirement at this grade. a. Interpret division of a unit fraction by a non-zero whole number and compute such quotients.	Page 31, 32 & 34 Educator's Guide GoMath lesson 8.4 WVGSA Blueprint 0-6 questions (5.13-5.17) i-Ready Unit 2 L17 & 18	GoMath **Gd. 4** 8.4, 8.5

	(e.g., Create a story context for (1/3) ÷ 4 and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.) b. Interpret division of a whole number by a unit fraction and compute such quotients. (e.g., Create a story context for 4 ÷ (1/5) and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.) c. Solve real-world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions by using visual fraction models and equations to represent the problem. (e.g., How much chocolate will each person get if 3 people share 1/2 lb. of chocolate equally? How many1/3-cup servings are in 2 cups of raisins?)		
March/May	<mark>M.5.23</mark> Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines, the origin, arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the	Page 8, 37, 38 & 40 Educator's Guide

GoMath lessons 539A–539B, 539–542

WVGSA Blueprint 0-2 questions (5.23-5.24)

i-Ready Unit 5 L28 | |

	origin in the direction of one axis and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate)		
March/May	M.5.24 Represent real-world mathematical problems by graphing points in the first quadrant of the coordinate plane and interpret coordinate values of points in the context of the situation.	Page 8, 38, 39 & 40 Educator's Guide GoMath lessons 9.3, 9.4 WVGSA Blueprint 0-2 questions (5.23 & 5.24) i-Ready Unit 5 L29	GoMath **Gd. 4** 5.6, 10.7, 12.5
March/May	M.5.25 Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category (e.g., all rectangles have four right angles and squares are rectangles, so all squares have four right angles).	Page 40 Educator's Guide GoMath lessons 637A–637B, 637–640, 643A–643B, 643–646, 649A–649B, 649–652 WVGSA Blueprint 0-2 questions (5.25-5.26) i-Ready Unit 5 L31	
March/May	M.5.26 Classify two-dimensional figures in a hierarchy based on properties	Page 40 Educator's Guide GoMath lessons 637A–637B, 637–640, 643A–643B, 643–646, 649A–649B, 649–652	

		WVGSA Blueprint 0-2 questions (5.25-5.26) i-Ready Unit 5 L30	

Links

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