**RCS 4th Grade Math Curriculum Map**

Text

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| **Timeline** | **Standard** | **Resources** | **Prerequisite Standard** |
| **August/September** | **M.4.19** Know relative sizes of measurement units within a system of units, including the metric system (km, m, cm; kg, g; l, ml), the standard system (lb, oz), and time (hr, min, sec.). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. (e.g., Know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...) | Page 29 & 30 Educator’s Guide  GoMath lessons- Teacher Edition: 641A-641B, 641–644, 647A-647B, 647–650, 653A–653B, 653–656, 659A–659B, 659–662, 673A–673B, 673–676, 679A–679B, 679–682, 685A–685B, 685–688, 703A–703B, 703–706 See Also: 691A–691B, 691–694, 697A–697B, 697–700  GoMath Lessons:  12.1, 12.2, 12.3, 12.4, 12.6, 12.7, 12.8, 12.11  WVGSA Blueprint 0-4 questions (4.19-4.21)  i-Ready Unit 5 L23-25 |  |
| **August/September** | **M.4.20** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | Page 29 & 30 Educator’s Guide  GoMath lessons- Teacher Edition: 519A–519B, 519–522, 691A–691B, 691–694, 697A–697B, 697–700 See Also: 647A–647B, 647–650, 653A–653B, 653–656, 659A–659B, 659–662, 665A–665B, 665–668, 673A–673B, 673–676, 679A–679B, 679–682, 685A–685B, 685–688  GoMath Lessons:  9.5, 12.9, 12.10  WVGSA Blueprint 0-4 questions (4.19-4.21)  i-Ready Unit 5 L25, 30 |  |
| **August/September** | **M.4.21** Apply the area and perimeter formulas for rectangles in real world and mathematical problems by viewing the area formula as a multiplication equation with an unknown factor. (e.g., find the width of a rectangular room given the area of the flooring and the length.) | Page 19, 30 & 31 Educator’s Guide  GoMath Lessons:  13.1, 13.2, 13.3, 13.4, 13.5  WVGSA Blueprint 0-4 questions (4.19-4.21)  i-Ready Unit 5 L26  IMA Math G4 - Measurement, Data and Geometry A, B | **GoMath Gd. 3** 11.6, 11.8 |
| **August/September** | **M.4.22** Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots (e.g., from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection). | Page 31 Educator’s Guide  GoMath Lessons:  12.5  WVGSA Blueprint 0-2 questions  (4.22)  i-Ready Unit 5 L27  IMA Math G4 - Measurement, Data and Geometry A, B, C | **GoMath Gd. 3** 2.7, 10.6, 10.7, 10.8, 10.9 |
| **August/September** | **M.4.23** Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a “one-degree angle,” and can be used to measure angles. b. An angle that turns through b one-degree angles is said to have an angle measure of b degrees. | Page 32 & 33 Educator’s Guide  GoMath lessons- Teacher Edition: 601A–601B, 601–604, 607A–607B, 607–610 607A–607B, 607–610  GoMath Lessons:  11.1, 11.2  WVGSA Blueprint 0-5 questions (4.23-4.25)  i-Ready Unit 5 L28 |  |
| **August/September** | **M.4.24** Measure angles in whole-number degrees using a protractor and sketch angles of specified measure. | Page 32 & 33 Educator’s Guide  GoMath lessons- Teacher Edition: 613A–613B, 613–616  Go Math Lessons:  11.3  WVGSA Blueprint 0-5 questions (4.23-4.25)  i-Ready Unit 5 L29 |  |
| **August/September** | **M.4.25** Recognize angle measure as additive. When an angle is decomposed into nonoverlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems (e.g., by using an equation with a symbol for the unknown angle measure). | Page 32 & 33 Educator’s Guide  GoMath lessons- Teacher Edition: 621A–621B, 621–624, 627A–627B, 627–630  GoMath Lessons:  11.4, 11.5  WVGSA Blueprint 0-5 questions (4.23-4.25)  i-Ready Unit 5 L30 |  |
| **October/November** | **M.4.6** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right (e.g., recognize that 700 ÷ 70 = 10 by applying concepts of place value and division). | Page 11, & 36 Educator’s Guide  GoMath lessons- Teacher Edition: 5A–5B, 5–8, 31–34 See Also: 75A–75B, 75–78, 145A–145B, 145–148, 215A–215B, 215–218  Go Math Lessons:  1.1  WVGSA Blueprint 0-6 questions (4.6-4.8)  i-Ready Unit 1 L1 |  |
| **October/November** | **M.4.7** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, = and < symbols to record the results of comparisons. | Page 11 Educator’s Guide  GoMath Lessons:  1.2, 1.3  WVGSA Blueprint 0-6 questions (4.6-4.8)  i-Ready Unit 1 L1-2  IMA Math G4 Number and Operations Base 10 B, C | **GoMath Gd. 3** 1.1, 1.2, 1.8 |
| **October/November** | **M.4.8** Use place value understanding to round multi-digit whole numbers to any place. | Page 11, 12, 14 & 36 Educator’s Guide  GoMath lessons – Teacher Edition: 23A–23B, 23–26 See Also: 37A–37B, 37–40, 43A–43B, 43–46, 81A–81B, 81–84, 151A–151B, 151–154  GoMath Lessons:  1.6, 1.7, 2.4, 3.2  WVGSA Blueprint 0-6 questions (4.6-4.8)  i-Ready Unit 1 L4 |  |
| **October/November** | **M.4.9** Fluently add and subtract multi-digit whole numbers using the standard algorithm. | Page 10, 11, 12, 13, & 36 Educator’s Guide  GoMath Lessons:  1.6, 1.7, 1.8  WVGSA Blueprint 0-5 questions (4.9-4.11)  i-Ready Unit 1 L3 | **GoMath Gd. 3** 1.4, 1.5, 1.6, 1.7, 1.9, 1.10, 1.11 |
| **October/November** | **M.4.10** Multiply a whole number of up to four digits by a one-digit whole number, multiply two two-digit numbers, using strategies based on place value and the properties of operations and illustrate and explain the calculation by using equations, rectangular arrays and/or area models. | Page 12, 13, 14, 16 & 19 Educator’s Guide  GoMath lessons- Teacher Edition: 75A-75B, 75–78, 81A-81B, 81–84, 87A-87B, 87–90, 93A-93B, 93–96, 99A-99B, 99–102, 107A-107B, 107–110, 119A-119B, 119–122, 125A-125B, 125–128, 145A–145B, 145–148, 151A–151B, 151–154, 157A–157B, 157–160, 163A–163B, 163–166, 171A–171B, 171–174, 177A–177B, 177–180 See Also: 183A–183B, 183–186  Go Math Lessons:  2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 3.1, 3.2, 3.3, 3.4, 3.5  WVGSA Blueprint 0-5 questions (4.9-4.11)  i-Ready Unit 3 L11 |  |
| **October/November** | **M.4.11** Find whole-number quotients and remainders with up to four-digit dividends and one-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 12, 13, 17, 18 & 36 Educator’s Guide  GoMath Lessons:  4.1, 4.2, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11  WVGSA Blueprint 0-5 questions (4.9-4.11)  i-Ready Unit 3 L12  IMA Math G4 Number and Operations Base 10 C | **GoMath Gd. 3** 3.4, 6.2, 6.3, 6.4, 6.7, 7.10, 7.11 |
| **November/January** | **M.4.1** Interpret a multiplication equation as a comparison (e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative comparisons as multiplication equations. | Page 5, 9, 30, & 36 Educator’s Guide  GoMath lessons- Teacher Edition: 63A–63B, 63–66  Go Math Lessons:  2.1  WVGSA Blueprint 2-6 questions (4.1-4.3)  i-Ready Unit 2 L5 |  |
| **November/January** | **M.4.2** Multiply or divide to solve word problems involving multiplicative comparison (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem) and distinguish multiplicative comparison from additive comparison | Page 5, 6. 7, & 8 Educator’s Guide  GoMath lessons- Teacher Edition: 69A–69B, 69–72 See Also: 63A-63B, 63-66  GoMath Lessons:  2.2  WVGSA Blueprint 2-6 questions (4.1-4.3)  i-Ready Unit 2 L6 |  |
| **November/January** | **M.4.3** Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | Page 5, 8, 9, 30 & 36 Educator’s Guide  WVGSA Blueprint 2-6 questions (4.1-4.3)  GoMath Lessons:  2.9, 2.12, 3.7, 4.3  i-Ready Unit 2 L9-10  IMA Math G4 Number and Operations Base 10 A  IMA Math G4 Operations and Algebraic Thinking A, B, C | **GoMath Gd. 3** 1.12, 3.4, 4.10, 6.4, 7.11 |
| **November/January** | **M.4.4** Find all factor pairs for a whole number in the range 1–100, recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite. | Page 9 & 10 Educator’s Guide  GoMath lessons- Teacher Edition: 279A–279B, 279–282, 285A–285B, 285–288, 291A-291B, 291–294, 299A–299B, 299–302 305A–305B, 305–308  GoMath Lessons:  5.1, 5.2, 5.3, 5.4, 5.5  WVGSA Blueprint 0-3 questions (4.4)  i-Ready Unit 2 L7 |  |
| **November/January** | **M.4.5** Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. (e.g., Given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.) | Page 10 & 11 Educator’s Guide  GoMath lessons- Teacher Edition: 311A–311B, 311–314, 587A–587B, 587–590  GoMath Lessons:  5.6, 10.7  WVGSA Blueprint 0-3 questions (4.5)  i-Ready Unit 2 L8 |  |
| **February/March** | **M.4.12** Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. | Page 20, 21, 30 & 36 Educator’s Guide  GoMath lessons- Teacher Edition: 327A–327B, 327–330, 333A–333B, 333–336, 339A–339B, 339–342, 345A–345B, 345–348, 351A–351B, 351–354  GoMath Lessons:  6.1, 6.2, 6.3, 6.4, 6.5  WVGSA Blueprint 0-3 questions (4.12-4.13)  i-Ready Unit 4 L13 |  |
| **February/March** | **M.4.13** Compare two fractions with different numerators and different denominators (e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½). Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, = or | Page 20, 22, & 36 Educator’s Guide  GoMath Lessons:  6.6, 6.7, 6.8  WVGSA Blueprint 0-3 questions (4.12-4.13)  i-Ready Unit 4 L14  IMA Module Math G4 Number and Operations Fractions A, B, C | **GoMath Gd. 3** 9.1, 9.2, 9.3, 9.4, 9.5 |
| **February/March** | **M.4.14** Understand the fraction a/b, with a > 1, as the sum of a of the fractions 1/b. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation and justify decompositions by using a visual fraction model (e.g., 3/8 = 1/8 + 1/8 + 1/8; 3/8 = 1/8 + 2/8; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8). c. Add and subtract mixed numbers with like denominators by replacing each mixed number with an equivalent fraction and/or by using properties of operations and the relationship between addition and subtraction. d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators by using visual fraction models and equations to represent the problem. | Page 22, 23, 24, 25, 26, 33 & 36 Educator’s Guide  GoMath Lessons:  7.3, 7.4, 7.5, 7.10  WVGSA Blueprint 0-3 questions (4.14-4.15)  i-Ready Unit 4 L15  IMA Math Grade 4 Number and Operations Fractions C | **GoMath Gd. 3** 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 8.9 |
| **February/March** | **M.4.15** Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction a/b as a multiple of 1/b, (e.g., use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4)). b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number (e.g., use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. In general, n × (a/b) = (n × a)/b). c. Solve word problems involving multiplication of a fraction by a whole number by using visual fraction models and equations to represent the problem (e.g., If each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?). | Page 26, 27, 30, 33 & 36 Educator’s Guide  GoMath Lessons:  8.4, 8.5  WVGSA Blueprint 0-3 questions (4.14-4.15)  i-Ready Unit 4 L18-19  IMA Module Math G4 Number and Operations Fractions A, B | **GoMath Gd. 3** 3.4, 4.10, 7.10, 7.11, 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 8.9 |
| **February/March** | **M.4.16** Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100 (e.g., express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100). Instructional Note: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade | Page 27, & 36 Educator’s Guide  GoMath lessons- Teacher Edition: 507A-507B, 507–510, 527A-527B, 527–530  GoMath Lessons:  9.3, 9.6  WVGSA Blueprint 0-5 questions (4.16-4.18)  i-Ready Unit 4 L20 |  |
| **February/March** | **M.4.17** Use decimal notation for fractions with denominators 10 or 100 (e.g., rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram). | Page 27 & 28 Educator’s Guide  GoMath lessons- Teacher Edition: 495A-495B, 495–498, 501A-501B, 501–504, 513A-513B, 513–516 See Also: 507A–507B, 507–510  GoMath Lessons:  9.1, 9.2, 9.3, 9.4, 9.5, 9.6  WVGSA Blueprint 0-5 questions (4.16-4.18)  i-Ready Unit 4 L21 |  |
| **February/March** | **M.4.18** Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, = or | Page 27, 28 & 36 Educator’s Guide  GoMath Lessons:  9.7  WVGSA Blueprint 0-5 questions (4.16-4.18)  i-Ready Unit 4 L22  IMA Math Grade 4 Number and Operations Fractions C  IMA Module Math G4 Number and Operations Fractions A, B | **GoMath Gd. 3** 9.1, 9.2, 9.3, 9.4, 9.5, 9.6 |
| **March/May** | **M.4.26** Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines. Identify these in two-dimensional figures | Page 33 & 34 Educator’s Guide  GoMath lessons- Teacher Edition: 549A–549B, 549–552, 561A–561B, 561–564 See Also: 555A–555B, 555–558  GoMath Lessons:  10.1, 10.3  i-Ready Unit 6 L31  WVGSA 0-5 Blueprint questions (4.26-4.28) |  |
| **March/May** | **M.4.27** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. | Page 34 & 35 Educator’s Guide  GoMath lessons- Teacher Edition: 555A–555B, 555–558, 567A–567B, 567–570  GoMath Lessons:  10.2, 10.4  WVGSA Blueprint 0-5 questions (4.26-4.28)  i-Ready Unit 6 L32 |  |
| **March/May** | **M.4.28** Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify linesymmetric figures and draw lines of symmetry | Page 34 Educator’s Guide  WVGSA Blueprint 0-5 questions (4.26-4.28)  i-Ready Unit 6 L33  GoMath Lessons:  10.5, 10.6  IMA Math G4 - Measurement, Data and Geometry A, B | **GoMath Gd. 3** 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8 |

Links

WVDE Educator’s Guide- <https://wvde.us/wp-content/uploads/2020/08/20852_Grade4-EducatorGuide-v3-1.pdf>

The standards listed below are not on the priority standards above but are tested on the WVGSA.

4.4 0-3 questions

4.5 0-3 questions

4.23-4.25 0-5 questions