Randolph County Schools
"Purpose, Pride, and Perspective"
Est. 1933

| 2018-2019 Curriculum Map for *Fourth Grade* Math 3rd Nine Weeks | Go Math Chapters |
|---|---|
| M.4.5 *Operations and Algebraic Thinking- Generate and analyze patterns.*<br>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.) | 10 |
| M.4.14 *Number an Operations-Fractions- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.*<br>Understand the fraction a/b, with a > 1, as the sum of a of the fractions 1/b.<br>Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.<br>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).<br>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.<br>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. | 7 |
| M.4.15 *Number an Operations-Fractions- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.*<br>Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.<br>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)).<br>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).<br>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?). | 8 |
| M.4.16 *Number and Operations- Fractions- Understand decimal notation for fractions, and compare decimal fractions.*<br>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). | 9 |
| M.4.17 *Number and Operations- Fractions- Understand decimal notation for fractions, and compare decimal fractions.*<br>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). | 9 |
| M.4.18 *Number and Operations- Fractions- Understand decimal notation for fractions, and compare decimal fractions.*<br>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 <, and justify the conclusions by using a visual model. | 9 |
| M.4.20 *Measurement and Data- Solving problems involving measurement and conversion of measurements from a larger unit to a smaller unit.*<br>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. | 9 |
| M.4.26 *Geometry- Draw and identify lines and angles and classify shapes by properties of lines and angles.*<br>Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines. Identify these in two-dimensional figures. | 10 |
| M.4.27 *Geometry- Draw and identify lines and angles and classify shapes by properties of lines and angles.*<br>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. | 10 |
| M.4.28 *Geometry- Draw and identify lines and angles and classify shapes by properties of lines and angles.*<br>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 line-symmetric figures and draw lines of symmetry. | 10 |
| Include **Number Talks** and integrate the **Mathematical Habits of Mind**. 1. Make sense of problems and persevere in solving them. 2. Reason Abstractly and Quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. | |