MARESA FOURTH GRADE MATH COMMON CORE PACING GUIDE

SEPTEMBER/OCTOBER

- Write equations for multiplicative comparison. (4.OA.1)
- Identify equations as multiplicative equations. (4.OA.1)
- Use place value to recognize and understand the relationship of multiplying and dividing by multiples of 10. (4.NBT.1)
- Read and write multi-digit whole numbers using various base-ten representations. (4.NBT.2) (Numbers up to 1,000,000)
- Read and write multi-digit whole numbers using numerals, number names and expanded form. (4.NBT.2) (Numbers up to 1,000,000)
- Compare two multi-digit whole numbers using >, =, < symbols. (4.NBT.2) (Numbers up to 1,000,000)
- Using place value understanding to round multi-digit whole numbers to any place. (4.NBT.2) (Numbers up to 1,000,000)
- Apply the area and perimeter formulas for rectangles in real world and mathematical problem. (4.MD.3)
- Use drawings to solve word problems involving multiplicative comparison. (4.OA.2)
- Write equations with a symbol for the unknown number to represent the problem. (4.OA.2)
- Continue instruction of using the four operations with whole numbers to solve problems (4.OA.2)
- Distinguish multiplicative comparison from additive comparison. (4.OA.2)
- Fluently add and subtract multi-digit whole numbers using the standard algorithm. (4.NBT.4) (Numbers up to 1,000,000)

NOVEMBER/DECEMBER

- Compose and decompose fractions using the same whole. (4.NF.3)
- Decompose a fraction and/or mixed number with the same denominator in multiple ways. (4.NF.3)
- Add and subtract mixed numbers with like denominators. (4.NF.3)
- Solve word problems involving addition and subtraction of fractions. (4.NF.3)
- Generate a number or shape pattern that follows a given rule. (4.OA.5)
- Identify features of a pattern not given by the rule itself. (4.OA.5)
- Recognize angles as geometric shapes that are formed whenever two rays share a common endpoint. (4.MD.5)
- Recognize angle measurement as a series of 1 degree turns in a circle. (4.MD.5)
- Measure angles in whole-number degrees using a protractor. (4.MD.5)
- Sketch angles of specified measurements (4.MD.6)
- Decompose an angle into smaller parts. (4.MD.7)
- Write an equation with a symbol for the unknown angle measurement. (4.MD.7)

STANDARDS FOR MATHEMATICAL PRACTICE

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**

MARCH

- Compare two fractions with different numerators and different denominators. (4.NF.2)
- Compare two fractions using a benchmark fraction. (4.NF.2)
- Justify conclusions of comparisons by using visual models. (4.NF.2)
- Measure a set of objects to the nearest 1/8, ¼, ½ of a unit. (4.MD.4)
- Display the data set of measurements in a line plot. (4.MD.4)
- Solve fractional addition and subtraction problems by using information presented in line plots. (4.MD.4)
- Recognize a whole number (1-100) is a multiple of its factors. (4.OA.4)
- Find all factor pairs for a whole number in the range of 1-100. (4.OA.4)
- Determine if a whole number (range 1-100) is a multiple of a given one-digit number. (4.OA.4)
- Determine whether a given whole number in the range 1-100 is prime or composite. (4.OA.4)

MARESA FOURTH GRADE MATH COMMON CORE PACING GUIDE

JANUARY/FEBRUARY

- Multiply a fraction by a whole number using visual models and strategies. (4.NF.4)
- Solve word problems involving multiplication of a fraction by a whole number. (4.NF.4)
- Use strategies based on place value and the properties of operation to multiply up to four-digit by one-digit whole numbers. (4.NBT.5) (Numbers up to 1,000,000)
- Use strategies based on place value and the properties of operation to multiply two two-digit numbers. (4.NBT.5) (Numbers up to 1,000,000)
- Use strategies based on place value and properties of operation to divide four-digit dividends and one-digit divisors. (4.NBT.6)
- Use mental comparison and estimation strategies to assess the reasonableness of the problem. (4.OA.3)
- Solve multi-step word problems using whole numbers. (4.OA.3)
- Write equations with a letter to represent problems with an unknown quantity and assess the reasonableness of the problem. (4.OA.3)
- Represent a solution with a remainder in various contexts. (4.OA.3)
- Use visual fraction models to explain equivalency in fractions. (4.NF.1)
- Recognize and generate equivalent fractions. (4.NF.1)

APRIL/MAY

- Express a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100. (4.NF.5)
- Add two fractions with respective denominators 10 and 100. (4.NF.5)
- Use decimal notation for fractions with denominators 10 and 100. (4.NF.6)
- Use understanding of place value (up to hundredths) to express fractions in decimal form. (4.NF.5/4.NF.7)
- Compare decimals to hundredths. (4.NF.7)
- Justify comparison of decimals by using visual models. (4.NF.7)
- Know the following units of measure: km, m, cm; kg, g; lb, oz; l, ml; hr, min, sec. (4.MD.1)
- Convert measurements from larger units to smaller units within the same system. (4.MD.1)
- Solve multi-step word problems related to measurement. (4.MD.2)
- Represent measurement quantities using diagrams that feature a measurement scale. (4.MD.2)
- Identify and draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines in two-dimensional figures. (4.G.1)
- Classify two-dimensional figures using parallel or perpendicular lines or by angle measurement. (4.G.2)
- Recognize and identify right triangles. (4.G.2)
- Recognize a line of symmetry for two-dimensional figures. (4.G.3)
- Identify line-symmetric figures and draw lines of symmetry. (4.G.3)