MARESA FIFTH GRADE MATH COMMON CORE PACING GUIDE

SEPTEMBER/OCTOBER

- 5.NBT.1 Recognize that in a multi-digit number, digits are either 10 times or 1/10 of the digit next to it.
- 5.NBT.2 Explain patterns in the number of zeros and placement of the decimal point when multiplying or dividing by powers of 10. Use whole number exponents to denote powers of 10.
- 5.NBT.3a Read and write decimals to the thousandths using base-ten numerals, number names and expanded form.
- 5.NBT.3b Use symbols to compare two decimals to the thousandths.
- 5.NBT.4 Use place value to round decimals to any place.
- 5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.
- 5.NBT.6 Divide multi-digit whole numbers (not to exceed a four-digit by a two-digit divisor).
- 5.NBT.7 Use multiple strategies to add, subtract, multiply and divide decimals to the hundredths and explain the reasoning used.

NOVEMBER/DECEMBER

- 5.OA.1 Use and evaluate numerical expressions using parentheses, brackets or braces.
- 5.OA.2 Write and interpret simple numerical expressions.
- 5.OA.3 Generate two numerical patterns (independent/dependent variables) using two given rules. Demonstrate the relationship between two numerical patterns by graphing on the coordinate plane. Interpret coordinate values of points and the relationship between them.
- 5.NF.1 Add and subtract fractions (including mixed numbers) with unlike denominators.
- 5.NF.2 Solve word problems involving addition and subtraction of fractions by using fraction models and equations. Use benchmark fractions to estimate and assess answers for reasonableness.

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**

JANUARY/FEBRUARY

- 5.NF.3 Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers. Interpret a fraction as division of the numerator by the denominator.
- 5.NF.4a Multiply a fraction or a whole number by a fraction using visual fraction models and create a story context.
- 5.NF.4b Find the area of a rectangle with fractional side lengths by tiling it with the appropriate unit fraction, and show that the area is the same as would be found by multiplying the side lengths.
- 5.NF.5a Compare 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.
- 5.NF.5b Explain why multiplying a given number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a given number by a fraction less than one results in a product less than the given number.
- 5.NF.6 Solve real world problems involving multiplying fractions and mixed numbers.
- 5.NF.7a Divide a fraction by a whole number using visual fraction models and create a story context. Use the relationship between multiplication and division to compute the quotient.
- 5.NF.7b Divide a whole number by a fraction using visual fraction models and create a story context. Use the relationship between multiplication and division to compute the quotient.
- 5.NF.7c Solve real world problems involving the above standards (7a and 7b) by using visual fraction models and equations to represent the problem.

MARCH/APRIL/MAY

- 5.MD.1 Convert among different-sized standard measurement units within a given measurement system. Solve multi-step real world problems using conversions with a given measurement system.
- 5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit and solve related problems.
- 5.MD.3a Recognize that a cube with side length 1 unit, called a “unit cube,” is “one cubic unit” of volume, and can be used to measure volume.
- 5.MD.3b Recognize that a solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units.
- 5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in., cubic ft. and improvised units.
- 5.MD.5a Find the volume of a right rectangular prism with whole-number side lengths using multiplication and addition using visual models.
- 5.MD.5b Apply the formulas V = l × w × h and V = b × h for rectangular prisms to solve real world and mathematical problems.
- 5.MD.5c Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts.
- 5.G.1 Recognize the attributes of the coordinate plane within the first quadrant (axes, origin, ordered pairs, coordinates).
- 5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.
- 5.G.3 Reason about attributes of two-dimensional shapes and how they are categorized by these attributes.
- 5.G.4 Classify two-dimensional figures in a hierarchy based upon attributes.

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