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| **Standard** | **Vocabulary** | **Learning Targets** | **I got this!** |
| EXTENDS PREVIOUS UNDERSTANDINGS OF MULTIPLICATION AND DIVISION TO MULTIPLY AND DIVIDE FRACTIONS | | | |
| **MCC5.NF.3** Interpret a fraction as division of the numerator by the denominator (*a/b = a ÷ b).* Solve word problems involving division of the whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.  *For example, 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 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?* | Fractions, Mixed numbers, Improper fractions, Denominators, Numerators, Simplify | ***Interpret and explain a fraction as division of the numerator by the denominator.***  ***Evaluate word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.*** | Formative Grade:  DNM NI P M |
| **MCC5.NF.4** Apply and extend previous understandings of multiplication to multiply a fraction or a whole number by a fraction.   1. Interpret the product (*a/b x q*) as a parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations *a x q ÷ b.*   *For example, use a visual fraction model to show (2/3) x 4 = 8/3, and create a story context for this equation. Do the same with (2/3) x (4/5) = 8/15. (In general, (a/b) x (c/d) = ac/bd.)*   1. 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. | Area, Unit squares | ***Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.***  ***Reason that a product is a result of repeated fractional parts.***  ***Find the area of a rectangle with fractional side lengths using unit squares and show that the area is the same as would be found by multiplying the side lengths.*** | Formative Grade:  DNM NI P M |
| APPLIES AND EXTENDS PREVIOUS UNDERSTANDINGS OF MULTIPLICATION AND DIVISION TO MULTIPLY AND DIVIDE FRACTIONS | | | |
| **MCC5.NF.5** Interpret multiplication as scaling (resizing), by:   1. 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. 2. Explaining why multiplying a given number by a fraction great 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 x a)/(n x b)* to the effect of multiplying *a/b* by 1. | Compare, Product, Factor, Unit fraction (numerator 1) | ***Compare the size of a product to the size of one of its factors based on the size of the other factor, without performing multiplication.***  ***Explain why multiplying a given number by a fraction greater than or less than 1 results in a product greater than or less than the given number*** | Formative Grade:  DNM NI P M |
| **MCC5.NF.6** Solve real world problems involving multiplication of fractions and mixed number, e.g., by using visual fraction models or equations to represent the problem. | Reasonableness, Estimate, Common (benchmark) fractions | ***Solve real world problems involving multiplication of fractions and mixed numbers by using visual fraction models or equations to represent the problem.*** | Formative Grade:  DNM NI P M  Summative Grade:  DNM NI P M E |
| APPLIES AND EXTENDS PREVIOUS UNDERSTANDINGS OF MULTIPLICATION AND DIVISION TO MULTIPLY AND DIVIDE FRACTIONS | | | |
| **MCC5.NF.7** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.   1. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, 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) x 4 = 1/3.* 2. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, creat 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 x (1/5) = 4. 3. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fraction, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are 2 cups of raisins? | Divide, Quotient, Unit fractions (numerator 1) | ***Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.***  ***Interpret division of a unit fraction by a whole number using models.***  ***Interpret and solve division of a whole number by a unit fraction.***  ***Solve real world problems involving division of unit fractions by whole number and solve division of whole numbers by unit fractions by using visual fraction models and equations to represent the problem.*** | Formative Grade:  DNM NI P M  Summative Grade:  DNM NI P M |
| REPRESENTS AND INTERPRETS DATA (LINE PLOTS) | | | |
| **MCC5.MD.2** Make a line plot display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for the grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were | Line Plot | ***Create a line plot to display a data set of measurements in fraction of a unit (1/2, 1/4, 1/8).***  ***Use operations on fractions to solve problems involving information presented in line plots.*** | Formative Grade:  DNM NI P M |