# Fifth Grade Mathematics Curriculum Map

*During the month of September, the 5th grade mathematics program will concentrate on reviewing for the upcoming MEAP mathematics assessment. Fourth grade GLCEs that will be the focus of this review are N.ME.04.02, N.ME.04.03, N.ME.04.08, N.FL.04.34, N.FL.04.35, N.FL.04.36, and N.FL.O4.10.*

Note: The following timeline and sequence is meant to be a guide only and is subject to change. The first 2 weeks are used for MEAP review.

(Revised 2008-09 school year)



| Grade Level Content Expectations | 1st Trimester | | | 2nd Trimester | | | 3rd Trimester | | |
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| | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| N.MR.05.02 Relate division of whole numbers with remainders to the form a = bq + r, e.g., 34 ÷ 5 = 6 r 4, so 5 • 6 + 4 = 34; note remainder (4) is less than divisor (5). | | X | X | | | | | | |
| N.MR.05.03 Write mathematical statements involving division for given situations. | | X | X | | | | | | |
| N.FL.05.04 Multiply a multi-digit number by a two-digit number; recognize and be able to explain common computational errors such as not accounting for place value. | | X | X | | | | | | |
| N.FL.05.05 Solve applied problems involving multiplication and division of whole numbers.* | | X | X | | | | | | |
| N.FL.05.06 Divide fluently up to a four-digit number by a two-digit number. | | X | X | | | | | | |
| N.MR.05.15 Multiply a whole number by powers of 10: 0.01, 0.1, 1, 10, 100, 1,000; and identify patterns. | | X | X | | | | | | |
| N.FL.05.16 Divide numbers by 10's, 100's, 1,000's using mental strategies. | | X | X | | | | | | |
| N.MR.05.01 Understand the meaning of division of whole numbers with and without remainders; relate division to fractions and to repeated subtraction. | | | X | X | | | | | |
| N.MR.05.07 Find the prime factorization of numbers from 2 through 50, express in exponential notation, e.g., 24 = 23 x 31, and understand that every whole number greater than 1 is either prime or can be expressed as a product of primes.* | | | X | X | | | | | |
| N.ME.05.10 Understand a fraction as a statement of division, e.g., 2 ÷ 3 = □□ , using simple fractions and pictures to represent. | | | | X | X | X | X | | |
| N.ME.05.11 Given two fractions, e.g., ©□ @nd □ □ , express them as fractions with a common denominator, but not necessarily a least common denominator, e.g., ©□ = □ □ and ®□© = □□ ; use denominators less than 12 or factors of 100.* | | | | X | X | X | X | | |
| N.ME.05.12 Find the product of two unit fractions with small denominators using an area model.* | | | | X | X | X | X | | |
| N.MR.05.13 Divide a fraction by a whole number and a whole number by a fraction, using simple unit fractions.* | | | | X | X | X | X | | |
| N.FL.05.14 Add and subtract fractions with unlike denominators through 12 and/or 100, using the common denominator that is the product of the denominators of the 2 fractions, e.g., 3/8 + 7/10: use 80 as the common denominator.* | | | | X | X | X | X | | |
| N.FL.05.18 Use mathematical statements to represent an applied situation involving addition and subtraction of fractions.* | | | | X | X | X | X | | |

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| N.MR.05.19 Solve contextual problems that involve finding sums and differences of fractions with unlike denominators using knowledge of equivalent fractions.* | | | | | | | X | X | X | X | | | | | | | | |
| N.FL.05.20 Solve applied problems involving fractions and decimals; include rounding of answers and checking reasonableness.* | | | | | | | X | X | X | X | | | | | | | | |
| N.MR.05.21 Solve for the unknown in equations such as 1/4 + x = 7/12 .* | | | | | | | X | X | X | X | | | | | | | | |
| N.ME.05.23 Express ratios in several ways given applied situations, e.g., 3 cups to 5 people, 3 : 5, 3/5 ; recognize and find equivalent ratios. | | | | | | | X | X | X | X | | | | | | | | |
| N.ME.05.09 Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. | | | | | | | | | | | X | X | | | | | | |
| N.MR.05.17 Multiply one-digit and two-digit whole numbers by decimals up to two decimal places. | | | | | | | | | | | X | X | | | | | | |
| N.MR.05.22 Express fractions and decimals as percentages and vice versa. | | | | | | | | | | | X | X | | | | | | |
| N.ME.05.08 Understand the relative magnitude of ones, tenths, and hundredths and the relationship of each place value to the place to its right, e.g., one is 10 tenths, one tenth is 10 hundredths. | | | | | | | | | | | X | X | | | | | | |
| G.TR.05.01 Associate an angle with a certain amount of turning; know that angles are measured in degrees; understand that 90°, 180°, 270°, and 360° are associated respectively, with 1/4 , 1/2 , and 3/4 , and full turns. | | | | | | | | | | | | | X | X | | | | |
| G.GS.05.02 Measure angles with a protractor and classify them as acute, right, obtuse, or straight. | | | | | | | | | | | | | X | X | | | | |
| G.GS.05.03 Identify and name angles on a straight line and vertical angles. | | | | | | | | | | | | | X | X | | | | |
| G.GS.05.04 Find unknown angles in problems involving angles on a straight line, angles surrounding a point, and vertical angles. | | | | | | | | | | | | | X | X | | | | |
| G.GS.05.05 Know that angles on a straight line add up to 180° and angles surrounding a point add up to 360°; justify informally by "surrounding" a point with angles. | | | | | | | | | | | | | X | X | | | | |
| G.GS.05.06 Understand why the sum of the interior angles of a triangle is 180° and the sum of the interior angles of a quadrilateral is 360°, and use these properties to solve problems. | | | | | | | | | | | | | X | X | | | | |
| G.GS.05.07 Find unknown angles and sides using the properties of: triangles, including right, isosceles, and equilateral triangles; parallelograms, including rectangles and rhombuses; and trapezoids. | | | | | | | | | | | | | X | X | | | | |
| M.UN.05.01 Recognize the equivalence of 1 liter, 1,000 ml and 1,000 cm3 and include conversions among liters, milliliters, and cubic centimeters. | | | | | | | | | | | | | | | X | X | | |
| M.UN.05.02 Know the units of measure of volume: cubic centimeter, cubic meter, cubic inches, cubic feet, cubic yards, and use their abbreviations (cm3, m3, in3, ft3, yd3). | | | | | | | | | | | | | | | X | X | | |
| M.UN.05.03 Compare the relative sizes of one cubic inch to one cubic foot, and one cubic centimeter to one cubic meter. | | | | | | | | | | | | | | | X | X | | |
| M.UN.05.04 Convert measurements of length, weight, area, volume, and time within a given system using easily manipulated numbers. | | | | | | | | | | | | | | | X | X | | |

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| M.PS.05.05 Represent relationships between areas of rectangles, triangles, and parallelograms using models. | | | | | | | | | | | | | | | X | X | | |
| M.TE.05.06 Understand and know how to use the area formula of a triangle: A = 1/2 bh (where b is length of the base and h is the height), and represent using models and manipulatives. | | | | | | | | | | | | | | | X | X | | |
| M.TE.05.07 Understand and know how to use the area formula for a parallelogram: A = bh, and represent using models and manipulatives. | | | | | | | | | | | | | | | X | X | | |
| M.TE.05.08 Build solids with unit cubes and state their volumes. | | | | | | | | | | | | | | | X | X | | |
| M.TE.05.09 Use filling (unit cubes or liquid), and counting or measuring to find the volume of a cube and rectangular prism. | | | | | | | | | | | | | | | X | X | | |
| M.PS.05.10 Solve applied problems about the volumes of rectangular prisms using multiplication and division and using the appropriate units. | | | | | | | | | | | | | | | X | X | | |
| D.RE.05.01 Read and interpret line graphs, and solve problems based on line graphs, e.g., distance-time graphs, and problems with two or three line graphs on same axes, comparing different data. | | | | | | | | | | | | | | | | | X | X |
| D.RE.05.02 Construct line graphs from tables of data; include axis labels and scale. | | | | | | | | | | | | | | | | | X | X |
| D.AN.05.03 Given a set of data, find and interpret the mean (using the concept of fair share) and mode. | | | | | | | | | | | | | | | | | X | X |
| D.AN.05.04 Solve multi-step problems involving means. | | | | | | | | | | | | | | | | | X | X |