MSD Wayne Township Schools
Mathematics
Grade 4

Eureka Math^2 serves as the primary curriculum material for grade 4 Mathematics instruction and has been adapted to ensure alignment with the Indiana Academic Standards for Mathematics.

*Timing is approximate and pacing of units is flexible.

Timing	Topic	Student Learning Outcomes
Quarter 1	Place Value Concepts for Addition and Subtraction	Students will: • Create two comparison statements, given a multiplication equation. • Write multiplicative comparison statements as multiplication equations. • Solve word problems involving multiplicative comparison by using multiplication or division within 100. • Assess reasonableness of estimates when using rounding as an estimation strategy. • Solve multi-step word problems by using addition and subtraction, represent these problems by using equations, and assess the reasonableness of the answers. • Explain the relationship between a digit in a multi-digit whole number and the same digit in the place to the right. • Read and write multi-digit whole numbers in unit, standard, word, and expanded form. • Compare two whole numbers by using >, =, or <. • Round multi-digit whole numbers. • Add and subtract multi-digit whole numbers by using the standard algorithm. • Express larger units in terms of a smaller unit within the metric system in a table. • Solve addition and subtraction word problems that require expressing measurements of larger units in terms of given smaller units.

Quarters 1-2	Place Value Concepts for Multiplication and Division	Students will: • Solve word problems involving multiplicative comparison by using two-digit by one-digit multiplication or dividing tens and ones by one-digit numbers. • Find whole number factor pairs in the range 1–100. • Identify a multiple of a given whole number in the range 1–100. • Determine whether a whole number up to 100 is prime or composite. • Create a pattern that follows a given rule and identify additional features of that pattern. • Multiply a two-digit whole number by a one-digit whole number. • Divide by a one-digit whole number using tens and ones. • Express larger units of length in terms of a smaller unit within the customary system in a table. • Solve word problems that require expressing measurements of larger units of length in terms of a smaller unit within the customary system. • Represent measurement quantities by using diagrams. • Solve area and perimeter problems.
Quarter 2	Multiplication and Division of Multi-Digit Numbers	Students will: • Solve multi-step word problems by using the four operations, including problems that require interpreting remainders in context, represent these problems by using equations, and assess reasonableness of answers. • Multiply/divide whole numbers of up to four digits by one-digit whole numbers, and multiply 2 two-digit whole numbers. • Express larger units of time, customary units of weight, and liquid volumes in terms of a smaller unit by using tables. • Solve word problems that require expressing measurements of larger units of time, customary units of weight, and liquid volumes, in terms of a smaller unit.
Quarter 3	Foundations for	Students will:

	Fraction Operations	• Model and explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b). • Generate equivalent fractions and their representations. • Compare two fractions with different numerators and different denominators and justify the conclusions. • Decompose fractions into a sum of fractions with the same denominator in more than one way. • Add/subtract mixed numbers with like denominators. • Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators. • Represent fractions as multiples of unit fractions with the same denominator. • Multiply a fraction by a whole number. • Solve word problems involving multiplication of a fraction by a whole number. • Create a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8) and solve problems involving addition and subtraction of fractions by using the line plot.
Quarter 3	Place Value Concepts for Decimal Fractions	Students will: • Express fractions with denominator 10 as equivalent fractions with denominator 100. • Add two fractions with respective denominators 10 and 100. • Represent tenths and hundredths in decimal form, fraction form, or by using a model. • Compare two decimal numbers to hundredths and justify the conclusions. • Solve word problems involving addition of decimal numbers.
Quarter 4	Angle Measurements and Plane Figures	Students will: • Convert between angle measures expressed as a fractional turn through a circle and degrees. • Measure and draw angles in degrees. • Solve for unknown angle measures by using addition and subtraction. • Identify and draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.

		• Identify points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines in two-dimensional figures. • Identify attributes and use them to classify two-dimensional figures, including triangles. • Identify and draw lines of symmetry.