
 Mathematics Curriculum Map Overview

| Topic | Skills | Approx. Weeks Of Study |
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| Place Value, Rounding and Algorithms for Addition and Subtraction (Module 1) | <ul style="list-style-type: none"> •Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. •Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. •Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols •Use place value understanding to round multi-digit whole numbers less than or equal to 1,000,000 to any place •Fluently add and subtract multi-digit whole numbers •Solve multistep word problems posed with whole numbers using the four operations (+, -, x, \div), including problems in which remainders must be interpreted. <p>*Gr. 4 expectations are limited to whole #'s less than or equal to 1,000,000</p> <p>*Gr. 4 Required Fluency: Add and subtract within 1,000,000</p> | 6 |
| Multi-Digit Multiplication and Division (Module 2) | <ul style="list-style-type: none"> •Apply the area and perimeter formulas for rectangles in real world and mathematical problems. •Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers •Find whole-number quotients and remainders with up to four-digit dividends and one-digit •Multiply or divide to solve word problems •Solve multistep word problems posed with whole numbers using the four operations (+, -, x, \div), including problems in which remainders must be interpreted. •Find all factor pairs for a whole number in the range 1–100. •Recognize that a whole number is a multiple of each of its factors. •Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. •Determine whether a given whole number in the range 1–100 is prime or composite. •Interpret a multiplication equation as a comparison (e.g. | 8 |

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| | <p>35=5x7 means 35 is 5 times as many as 7 and 7 times as many as 5)</p> <ul style="list-style-type: none"> •Generate a number or shape pattern that follows a given rule and identify features of a pattern •Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. | |
| <p>Measurement and Geometry - Unit Conversions and Problem Solving with Metric Measurement and Angle measures and Plane Figures (Module 3)</p> | <ul style="list-style-type: none"> •Know relative sizes of measurement units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. and express measurements in a larger unit in terms of a smaller unit (1 ft is 12 times as long as 1 inch) •Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. •Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale •Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint •Understand concepts of angle measurement •Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. •Recognize angle measure as additive (when an angle is decomposed into parts, the angle measure of the whole is the sum of the angle measures of the parts) •Solve addition and subtraction problems to find unknown angles •Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. •Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. | <p>5</p> |
| <p>Fraction Equivalence, Ordering, and Operations and Decimals (Module 4)</p> | <ul style="list-style-type: none"> • Recognize and generate equivalent fractions. •Compare two fractions with different numerators and different denominators,. •Add and subtract fractions •Add and subtract mixed numbers with like denominators, •Solve word problems involving addition and subtraction of fractions referring to the same whole and having like | <p>13</p> |

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| | <p>denominators</p> <ul style="list-style-type: none"> • Understand a fraction a/b as a multiple of $1/b$ e.g. $5/4=5 \times (1/4)$ • Multiply a fraction by a whole number. • Solve word problems involving multiplication of a fraction by a whole number • Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and add two fractions with respective denominators 10 and 100. • Write decimals for fractions with denominators 10 or 100 e.g. $0.62=62/100$ • Compare two decimals to hundredths • Use the four operations (+, -, x, ÷) to solve word problems involving simple fractions or decimals • Make a line plot to display a data set of measurements in fractions of a unit ($1/2, 1/4, 1/8$). | |
| <p>Exploring Multiplication (Module 5)</p> | <ul style="list-style-type: none"> • Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. • Interpret a multiplication equation as a comparison • Multiply or divide to solve word problems • Solve multistep word problems posed with whole numbers using the four operations (+, -, x, ÷), including problems in which remainders must be interpreted. • Know relative sizes of measurement units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. and express measurements in a larger unit in terms of a smaller unit • Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. | <p>4</p> |