**4th Grade Math Pacing Guide 2018-2019**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DATES** | **CONCEPT** | **I CAN!s** | **STANDARDS** | **FOCUS DOMAINS** |
| 8/27-9/14/18  (14 days) | Place Value to Add, Subtract & Compare  Whole Number Operations | 4.1  4.2 | 4 NBT 1-3  4 NBT 4 | NUMBERS IN BASE TEN |
|
| 9/17-10/12/18  (19 days) | Place Value & Multiplication with Modeling  Expanded Form | 4.7  4.5 | 4 NBT 5  4 OA 1-3 |
| **Milestone #1 Window 10/22-11/5/18 I CAN!s: 4.1, 4.2, 4.5, 4.7**  **Data Day 11/13/2018** | | | | |
| 10/15-11/7/18  (18 days) | Multiplication, Area Models & Estimating  Comparing & Ordering Numbers | 4.5  4.6  4.7 | 4 OA 1-2  4 OA 3  4 NBT 5,6 | OPERATIONS & ALGEBRAIC THINKING |
| 11/8-12/14/18  (20 days) | Factors & Multiples  Prime & Composite Numbers  Number Patterns | 4.3  4.4 | 4 OA 4  4 OA 5 |
| 1/7-1/25/19  (12 days) | Adding & Subtracting Fractions  Fraction Equivalence  Comparing Fractions | 4.9  4.8 | 4 NF 2  4 NF 1 | NUMBER & OPERATIONS: FRACTIONS |
| 1/28-2/22/19  (20 days) | Multi-step Problems with Fractions  Multiplying Fractions | 4.10 | 4 NF 3, 4 |
| **Milestone #2 (1/14-1/25/18) I CAN!s: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7**  **Data Day 2/15/2019** | | | | |
| 2/25-3/15/19  (15 days) | Fraction & Decimal Relationships  Comparing Decimals | 4.11  4.12 | 4 NF 5-7  (4 G 1-3) | MEASUREMENT & DATA |
| **Milestone #3 Window (3/18-3/29/19) I CAN!s: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12**  **Data Day 4/5/2019** | | | | |
| 3/18-4/4/19  (14 days) | Angles, Triangles, Point, Lines  Symmetry  Circles & Quadrilaterals | 4.13  4.12 | 4 MD 5-7  (4 G 1-3) |  |
| 4/8-4/26/19  (10 days) | Length, Volume & Measurement  Area & Perimeter | 4.14  4.15 | 4 MD 4  4 MD 1-3 |
| 4/29-5/11/19 | **CAASPP Prep & Testing** | | | |
| 5/13-6/13/19  (23 days) | **I CAN! Review**  **Onramp to Next Grade**  **Demonstration of Mastery** | | | |

4th Grade Math I CAN!s and CAN I?s

|  |  |  |
| --- | --- | --- |
|  | **I CAN!s** | **CAN I?s** |
| 4.1 | I CAN use my understanding of place value to represent, round and compare multi-digit whole numbers. | * Name the digits in a multi-digit whole number? * Explain how a digit in the ones place represents 10 times the number on its right? * Write numbers in expanded form using place value? * Use the symbols <, > and = to compare numbers? * Know the rules of rounding for estimating numbers? |
| 4.2 | I CAN add and subtract numbers within 1,000,000. | * Model adding and subtracting using base ten blocks? * Explain how to regroup numbers? * Know the vocabulary that means “add”? * Know the vocabulary that means “subtract”? * Use place value to apply the adding and subtracting algorithms? |
| 4.3 | I CAN determine factor pairs and multiples for the numbers 1-100 and tell whether a number is prime or composite.  *(additional or supporting I CAN)* | * Explain the difference between a prime and composite number? * Explain the difference between factors and multiples? * Write a whole number as a multiplication problem of its factors? * Fluently say my multiplication facts to 12? * List all of the prime numbers between 1 and 100? |
| 4.4 | I CAN create and analyze patterns to identify features of the pattern to follow a math rule. | * See patterns in the real-world? * Describe math patterns using math language? * Identify odd numbers and even numbers? * Write a math pattern? * Create a math rule such as “add 3” or subtract 4”? |
| 4.5 | I CAN use addition, subtraction, multiplication and division with whole numbers to estimate and solve problems and explain the solution with words and models. | * Translate math equations into verbal statements? * Describe multiplication equations as a comparison of numbers? * Use drawings to show multiplication comparisons? * Know the difference between comparing multiplication problems and addition problems? * Solve real-world problems using multiplicative comparisons? |
| 4.6 | I CAN use what I know about the four operations to solve for an unknown value represented by a letter. | * Write equations with an unknown value using a letter? * Solve real-word problems using multiplication and division? * Solve real-world problems using addition and subtraction? * Interpret math problems that involve remainders? * Use mental estimation to check answers? |
| 4.7 | I CAN use place value understanding and properties of operations to add, subtract, multiply and divide multi-digit whole numbers. | * Add and subtract numbers within 1,000,000 using the algorithm? * Find whole number quotients with remainders? * Use rectangular area models to illustrate multiplication? * Use arrays to model my understanding of multiplication? * Explain the relationship between multiplication and division? |
| 4.8 | I CAN compare, order, and understand equivalence of fractions with different numerators and denominators. | * Use fraction models to show fraction value? * Explain that a fraction a/a is equal to one whole? * Show how two fractions can be equal even when the parts are different sizes? * Create a fraction that is equal to another fraction but has different numbers? * Recognize equivalent fractions? |
| 4.9 | I CAN use what I know about adding fractions to decompose fractions, add fractions with mixed numbers that have like denominators and model my answer. | * Use the symbols >, < and = to compare fractions and justify the reasoning? * Name and locate benchmark fractions on a number line? * Create common denominators and numerators with benchmark fractions? * Create a visual fraction model? * Know when fraction comparisons are valid only when they refer to the same whole? |
| 4.10 | I CAN use unit fractions to multiply fractions and model my answer. | * Explain the difference between a fraction and a whole number? * Fluently use multiplication facts to 12? * Name the numerator and denominator of fractions? * Write a fraction with a numerator greater than 1 as a sum of two fractions? * Write a whole number as a fraction? |
| 4.11 | I CAN use decimals to represent and model fractions with denominators of 10 and 100 and reason about their size with models and words. | * Use mental math to multiply by 10? * Create an equivalent fraction by multiplying the number by 10/10 to add two fractions? * Change fractions with denominator of 10 or 100 into a decimal? Ex. 62/100 is equal to 0.62 * Compare decimals to hundredths? * Use the symbols >, < and = to compare decimals and justify the reasoning? |
| 4.12 | I CAN draw and name lines and angles, classify shapes by properties of their lines or angles and identify lines of symmetry in figures.  *(additional or supporting I CAN)* | * Define and draw geometric vocabulary: point, line, segment, ray, parallel lines and perpendicular lines? * Draw, identify and measure angles: right, acute & obtuse? * Classify two-dimensional figures and identify right triangles? * Define and locate lines of symmetry? * Explain how parallel and perpendicular lines define a figure? |
| 4.13 | I CAN understand concepts of angles, draw angles and measure angles using tools.  *(additional or supporting I CAN)* | * Draw an angle by connecting two rays at an endpoint? * Measure and draw an angle using a protractor and name the size using degrees? * Describe how an angle is related to a the total angle measurement of a circle (360 degrees)? * Solve addition and subtraction problems to find unknown angles on a diagram? * Explain how angle measure can be additive, the whole of one angle is the sum of its parts? |
| 4.14 | I CAN represent and interpret data measured in fractions by making a line plot to display the data.  *(additional or supporting I CAN)* | * Collect data to create a data set? * Use a line plot to display measurement data in fraction form? * Interpret the meaning of data displayed in a line plot? * Identify data in the real-world and justify the findings? * Explain how data can be used to solve real-world scenarios? |
| 4.15 | I CAN solve problems involving measurement and know how to change measurement from a larger unit to a smaller unit.  *(additional or supporting I CAN)* | * Know relative sizes of measurement units: km, m, cm, kg, g, lb, oz, l, ml, hr, min, sec? * Record measurement equivalents in a two-column table? * Use four operations to solve real-world measurement problems? * Represent measurement quantities using diagrams? * Apply area & perimeter to measurement problems using formulas? |

**Standards of Mathematical Practice (SMPs)**

|  |  |
| --- | --- |
| #1 Make sense of problems and persevere in solving them. | #5 Use appropriate tools strategically. |
| #2 Reason abstractly and quantitatively. | #6 Attend to precision. |
| #3 Construct viable arguments & critique the reasoning of others. | #7 Look for and make use of structure. |
| #4 Model with mathematics. | #8 Look for and express regularity in repeated reasoning. |