**7th Grade Math Pacing Guide 2018-2019**

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| **DATES** | **CONCEPT** | **I CAN!s** | **STANDARDS** | **FOCUS DOMAINS** |
| 8/27-9/14/18  (14 days) | Integer Operations & Applications  Absolute Zero | 7.1  7.2 | 7 NS 2  7 NS 1 | NUMBER SENSE |
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| 9/17-10/12/18  (19 days) | Rational Numbers, Conversions & Applications | 7.3  7.4 | 7 NS 3  7 EE 1, 2 |
| 10/15-11/9/18  (20 days) | Percents & Applications  Fraction/Decimal/Percent Conversions | 7.6  7.7 | 7 RP 1, 2  7 RP 3 | RATIOS & PROPORTIONS |
| **Milestone #1 Window 10/22-11/5/18 I CAN!s: 7.1, 7.2, 7.3, 7.4**  **Data Day 11/13/2018** | | | | |
| 11/14-12/14/18  (18 days) | Equations & Inequalities | 7.5 | 7 EE 3, 4 | EXPRESSIONS & EQUATIONS  (GEOMETRY) |
| 1/7-2/22/19  (32 days) | Surface Area, Volume & Circumference, Composite Figures | 7.8  7.9 | 7 G 1, 2, 3  7 G 4, 5, 6 |
| **Milestone #2 (1/14-1/25/19) I CAN!s: 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7**  **Data Day 2/15/2019** | | | | |
| 2/25-3/15/19  (15 days) | Data, Box Plots, Samples & Displays | 7.10  7.11 | 7 SP 1, 2  7 SP 3, 4 | PROBABILITY & STATISTICS |
| **Milestone #3 Window (3/18-3/29/19) I CAN!s: 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11**  **Data Day 4/5/2019** | | | | |
| 3/18-4/12/19  (19 days) | Probability | 7.12 | 7 SP 5, 6, 7, 8 |  |
| 4/22-5/10/19 | **CAASPP Prep & Testing** | | | |
| 5/13-6/13/19  (23 days) | **I CAN! Review**  **Onramp to Next Grade**  **Demonstration of Mastery** | | | |

**7th Grade Math I CAN!s and CAN I?s**

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|  | **I CAN!s** | **CAN I?s** |
| 7.1 | I CAN apply number operations to real world problems.  NS 3 | * Convert a fraction into a decimal? * Convert a decimal into a fraction? * Compare the value of rational numbers (positive, negative, fraction, decimal)? |
| 7.2 | I CAN use a number line to add and subtract rational numbers and define absolute value as the distance from zero.  NS 1 | * Find the absolute value of a number? * Define absolute value as the distance from zero? * Identify and apply rules of absolute value computation? * Give real world examples applied to negative numbers? * Use a line diagram to model operations with rational numbers? |
| 7.3 | I CAN extend my understanding of fractions to multiply and divide rational numbers.  NS 2 | * Solve real world problems involving complex fractions? * Explain why an integer cannot be divided by zero? * Demonstrate the operational rules of multiplication and division with negative numbers? * Interpret quotients of rational numbers by describing real-world contexts? * Interpret products of rational numbers by describing real-world contexts? |
| 7.4 | I CAN apply properties of operations (associative, commutative and distributive) as strategies to compute numbers and algebraic expressions.  EE 1, 2 | * Factor expressions? * Use properties to make equivalent expressions? * Use properties to strategize and find patterns? * Rewrite an expression in other forms without changing the expression? * Use the Distributive Property to solve equations? |
| 7.5 | I CAN solve one- and two-step equations and inequalities using what I know about algebraic expressions and properties of numbers.  EE 3, 4 | * Describe inverse operations? * Use variables to represent a real world problem and construct an equation? * Use variables to represent a real world problem and construct an inequality? * Use mental computation and estimation strategies to check an answer? * Assess the reasonableness of my solutions to equations? |
| 7.6 | I CAN use measure expressed as rate (e.g., speed, density) and measure expressed as products (e.g. person-days) to solve problems and represent the relationships by an equations and a graph.  RP 1, 2 | * Explain the relationship between fractions and proportional relationships? * Compute the unit rate in quantities measured in like or different units? * Use fractions to describe ratios? * Tell whether quantities are proportional? * Use number values and graphs to model rates? |
| 7.7 | I CAN solve problems that involve discounts, markups, commissions, profit, percent increase, percent decrease and simple interest.  RP 3 | * Relate ratio problems to percentages? * Compute problems of ratio using fraction computation? * Identify proportional relationships in the world? * Use a graph to model proportional relationships? * Explain the difference between increase and decrease? |
| 7.8 | I CAN draw, construct, and describe geometric figures based on what I know about similar shapes, and scale drawing and angles then explain the relationships between them.  G 1, 2, 3 | * Reproduce a scale drawing at a different scale (enlarge and reduce)? * Compute the area of geometric figures? * Identify unique triangles by their angles and sides? * Identify the shape of the cross section of right rectangular prisms and right rectangular pyramids? * Draw geometric figures using a ruler, protractor and technology? |
| 7.9 | I CAN solve real-life and mathematical problems involving circumference, area, surface area and volume.  G 4, 5, 6 | * Describe the relationship between area and circumference of a circle? * Use correct units when solving for area (units squared) and circumference (units) * Use facts about angles (supplementary, complementary, vertical and adjacent) to solve multi-step problems? * Identify two- and three-dimensional composite objects made from triangles, quadrilaterals, polygons, cubes and right prisms? * Apply geometric problem solving to real world situations? |
| 7.10 | I CAN use random sampling to draw inferences about a population.  SP 1, 2 | * Explain how statistics can be used to get information and find patterns? * Describe how to gather a sample? * Use sampling to support inferences? * Use data to estimate or predict? * Model and measure statistical variations using data? |
| 7.11 | I CAN compare and analyze data using dot plots and box plots making comparative inferences about two populations.  SP 3, 4 | * Measure data using the Measures of Central Tendency (mean, median, mode and range)? * Compare data variability using the Measures of Central Tendency? * Find the Mean Absolute Deviation of a data set? * Draw informal inferences about two populations based on numerical data? * Apply statistical problem solving to real world situations? |
| 7.12 | I CAN investigate, make predictions and calculate the experimental and theoretical probability of simple and compound events.  SP 5-8 | * Explain why the probability is a number between 0 and 1? * Approximate the probability something will happen based on data? * Calculate the frequency given a probability? * Develop a probability model and justify my model? * Find probabilities of compound events using lists, tables, tree diagrams and situation? |

**Standards of Mathematical Practice (SMPs)**

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| #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. |