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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DATES** | **CONCEPT** | **I CAN!s** | **STANDARDS** | **FOCUS DOMAINS** |
| 8/27-9/14/18(14 days) | Integer Operations & ApplicationsAbsolute Zero | 7.17.2 | 7 NS 27 NS 1 | NUMBER SENSE |
|
| 9/17-10/12/18(19 days) | Rational Numbers, Conversions & Applications | 7.37.4 | 7 NS 37 EE 1, 2 |
| 10/15-11/9/18(20 days) | Percents & ApplicationsFraction/Decimal/Percent Conversions | 7.67.7 | 7 RP 1, 27 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 | 7.87.9 | 7 G 1, 2, 37 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 | 7.107.11 | 7 SP 1, 27 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**

|  |  |  |
| --- | --- | --- |
|  | **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)**

|  |  |
| --- | --- |
| #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. |