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| **Unit 1: Compute with Decimals and Fractions (18 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.NSO.2.1, MA.6.NSO.2.3 | Multiply Multi-Digit Decimals | 5.3 |
| 3 | MA.6.NSO.3.1 | Factors and Multiples |  |
| 3 | MS.6.NSO.2.2, MA.6.NSO.2.3 | Multiply Fractions |  |
| 3 | MA.6.NSO.2.2, MA.6.NSO.2.3 | Divide Whole Numbers by Fractions | 4.2 |
| 2 | MA.6.NSO.2.2, MA.6.NSO.2.3 | Divide Fractions by Fractions | 4.2 |
| 3 | MA.6.NSO.2.2, MA.6.NSO.2.3 | Divide with Whole and Mixed Numbers | 4.3 |
| 3 | MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3 | Apply Decimal and Fraction Operations | 4.45.5 |

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| Benchmarks | Clarifications | Big M |
| MA.6.NSO.2.1 Multiply and divide positive multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency. | Clarification 1: Multi-digit decimals are limited to no more than 5 total digits. | Pages 27-30 |
| MA.6.NSO.2.2 Extend previous understanding of multiplication and division to compute products and quotient of positive fractions by positive fractions, including mixed numbers, with procedural fluency | Clarification 1: Instruction focuses on making connections between visual models, and the relationship between multiplication and division, reciprocals and algorithms. | Pages 30-35 |
| MA.6.NSO.2.3 Solve multi-step real-world problems involving any of the four operations with positive multi-digit decimals or positive fractions, including mixed numbers. | Clarification 1: Within this benchmark, it is not the expectation to include both decimals and fractions within a single problem. | Pages 36-37 |
| MA.6.NSO.3.1 Given a mathematical or realworld context, find the greatest common factor and least common multiple of two whole numbers. | Clarification 1: Within this benchmark, expectations include finding greatest common factor within 1,000 and least common multiple with factors to 25. Clarification 2: Instruction includes finding the greatest common factor of the numerator and denominator of a fraction to simplify the fraction | Pages 37-41 |

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| **Unit 2: Integers and Rational Numbers (10 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.NSO.1.1,  | Integers and Rational Numbers | 1.1; 3.1 |
| 2 | MA.6.NSO.1.1, MA.6.NSO.1.2 | Compare and Order Integers | 1.2 |
| 2 | MA.6.NSO.1.1, MA.6.NSO.1.2 | Compare and Order Rational Numbers | 1.2; 3.3 |
| 2 | MA.6.NSO.1.3, MA.6.NSO.1.4 | Absolute Value | 1.3; 3.2 |
| 2 | MA.6.NSO.1.4 | Solve Problems with Absolute Value | 1.3 |

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| Benchmarks | Clarifications | Big M |
| MA.6.NSO.1.1 Extend previous understanding of numbers to define rational numbers. Plot, order and compare rational numbers. | Clarification 1: Within this benchmark, the expectation is to plot, order and compare positive and negative rational numbers when given in the same form and to plot, order and compare positive rational numbers when given in different forms (fraction, decimal, percentage). Clarification 2: Within this benchmark, the expectation is to use symbols (>, < 𝑜𝑟 =). | Pages 13-16 |
| MA.6.NSO.1.2 Given a mathematical or realworld context, represent quantities that have opposite direction using rational numbers. Compare them on a number line and explain the meaning of zero within its context. | Clarification 1: Instruction includes vertical and horizontal number lines, context referring to distances, temperatures and finances and using informal verbal comparisons, such as, lower, warmer or more in debt. Clarification 2: Within this benchmark, the expectation is to compare positive and negative rational numbers when given in the same form. | Pages 17-20 |
| MA.6.NSO.1.3 Given a mathematical or realworld context, interpret the absolute value of a number as the distance from zero on a number line. Find the absolute value of rational numbers | Clarification 1: Instruction includes the connection of absolute value to mirror images about zero and to opposites. Clarification 2: Instruction includes vertical and horizontal number lines and context referring to distances, temperature, and finances. | Pages 21-23 |
| MA.6.NSO.1.4 Solve mathematical and realworld problems involving absolute value, including the comparison of absolute value. | Clarification 1: Absolute value situation include distances, temperatures, and finances. Clarification 2: Problems involving calculations with absolute value are limited to two or fewer operations. Clarification 3: Within this benchmark, the expectation is to use integers only | Pages 24-26 |

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| **Unit 3: Compute with Integers (12 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 3 | MA.6.NSO.4.1 | Add Integers | 7th grade book 1.1, 1.2 |
| 2 | MA.6.NSO.4.1 | Subtract Integers | 7th grade book 1.3 |
| 2 | MA.6.NSO.4.2 | Multiply Integers | 7th grade book 2.1 |
| 2 | MA.6.NSO.4.2 | Divide Integers | 7th grade book 2.2 |
| 3 | MA.6.NSO.4.1MA.6.NSO.4.2 | Apply Integer Operations | 7th grade book 1.4, 2.3 |

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| Benchmarks | Clarifications | Big M |
| MA.6.NSO.4.1 Apply and extend previous understandings of operations with whole numbers to add and subtract integers with procedural fluency | Clarification 1: Instruction begins with the use of manipulatives, models and number lines working towards becoming procedurally fluent by the end of grade 6. Clarification 2: Instruction focuses on the inverse relationship between the operations of addition and subtraction. If p and q are integers, then 𝑝 − 𝑞 = 𝑝 + (−𝑞) and 𝑝 + 𝑞 = 𝑝 − (−𝑞). | Pages 53-56 |
| MA.6.NSO.4.2 Apply and extend previous understandings of operations with whole numbers to multiply and divide integers with procedural fluency. | Clarification 1: Instruction includes the use of models and number lines and the inverse relationship between multiplication and division, working towards becoming procedurally fluent by the end of grade 6. Clarification 2: Instruction focuses on the understanding that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers where 𝑞 ≠ 0, then − ( 𝑝 𝑞 ) = − 𝑝 𝑞 , − ( 𝑝 𝑞 ) = 𝑝 −𝑞 and 𝑝 𝑞 = −𝑝 −𝑞 . | Pages 56-60 |

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| **Unit 4: Numerical and Algebraic Expressions (13 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.NSO.3.3, MA.6.NSO.3.4 | Powers and Exponents | 9.1 |
| 2 | MA.6.NSO.1.4, MA.6.NSO.2.3 | Numerical Expressions | 9.3 |
| 2 | MA.6.AR.1.1 | Write Algebraic Expressions | 10.1 |
| 2 | MA.6.AR.1.3 | Evaluate Algebraic Expressions | 10.2 |
| 2 | MA.6.NSO.3.2, MA.6.AR.1.4 | Use the Distributive Property |  |
| 3 | MA.6.AR.1.4 | Equivalent Algebraic Expressions | 10.3 |

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| Benchmarks | Clarifications | Big M |
| MA.6.AR.1.1 Given a mathematical or realworld context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions. |  | Pages 61-64 |
| MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations. | Clarification 1: Within this benchmark, the expectation is to perform all operations with integers. Clarification 2: Refer to Properties of Operations, Equality and Inequality (Appendix D) | Pages 68-71 |
| MA.6.AR.1.4 Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients. | Clarification 1: Properties include associative, commutative and distributive. Clarification 2: Refer to Properties of Operations, Equality and Inequality (Appendix D). | Pages 71-73 |
| MA.6.NSO.1.4 Solve mathematical and realworld problems involving absolute value, including the comparison of absolute value. | Clarification 1: Absolute value situations include distances, temperatures and finances. Clarification 2: Problems involving calculations with absolute value are limited to two or fewer operations. Clarification 3: Within this benchmark, the expectation is to use integers only | Pages 24-26 |
| MA.6.NSO.2.3 Solve multi-step real-world problems involving any of the four operations with positive multi-digit decimals or positive fractions, including mixed numbers. | Clarification 1: Within this benchmark, it is not the expectation to include both decimals and fractions within a single problem | Pages 30-33 |
| MA.6.NSO.3.2 Rewrite the sum of two composite whole numbers having a common factor, as a common factor multiplied by the sum or two whole numbers. | Clarification 1: instruction includes using the distributive property to generate equivalent expressions | Pages 41-43 |
| MA.6.NSO.3.3 Evaluate positive rational numbers and integers with natural number exponents | Clarification 1: Within this benchmark, expectations include using natural number exponents up to 5. | Pages 44-46 |
| MA.6.NSO.3.4 Express composite whole numbers as a product of prime factors with natural number exponents |  | Pages 46-49 |
| **Unit 5: One Step Equations and Inequalities (18 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.AR.2.1 | Use Substitution to Solve Equations |  |
| 2 | MA.6.AR.2.2 | Use Addition Equations to Solve Problems | 11.2 |
| 2 | MA.6.AR.2.2 | Use Subtraction Equations to Solve Problems | 11.2 |
| 2 | MA.6.AR.2.3 | Use Multiplication Equations to Solve Problems | 11.3 |
| 2 | MA.6.AR.2.3 | Use Division Equations to Solve Problems | 11.3 |
| 3 | MA.6.AR.2.4 | Equations with Rational Numbers |  |
| 2 | MA.6.AR.1.2 | Inequalities | 11.4 |
| 3 | MA.6.AR.2.1 | Solve Inequalities | 11.4 |

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| Benchmarks | Clarifications | Big M |
| MA.6.AR.1.2 Translate a real-world written description into an algebraic inequality in the form of 𝑥 > 𝑎, 𝑥 < 𝑎, 𝑥 ≥ 𝑎 or 𝑥 ≤ 𝑎. Represent the inequality on a number line | Clarification 1: Variables may be on the left or right side of the inequality symbol. | Pages 64-67 |
| MA.6.AR.2.1 Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false. | Clarification 1: Problems include the variable in multiple terms or on either side of the equal sign or inequality symbol. | Pages 74-77 |
| MA.6.AR.2.2 Write and solve one-step equations in one variable within a mathematical or real-world context using addition and subtraction, where all terms and solutions are integers | Clarification 1: Instruction includes using manipulatives, drawings, number lines and inverse operations. Clarification 2: Instruction includes equations in the form 𝑥 + 𝑝 = 𝑞 and 𝑝 + 𝑥 = 𝑞, where x, p, and q are any integer. Clarification 3: Problems include equations where the variable may be on either side of the equal sign. | Pages 78-81 |
| MA.6.AR.2.3 Write and solve one-step equations in one variable within a mathematical or real-world context using multiplication and division, where all terms and solutions are integers. | Clarification 1: Instruction includes using manipulatives, drawings, number lines and inverse operations. Clarification 2: Instruction includes equations in the forms 𝑥𝑝 = 𝑞, where 𝑝 ≠ 0, and 𝑝𝑥 = 𝑞. Clarification 3: Problems include equations where the variable may be on either side of the equal sign. | Pages 81-84 |
| MA.6.AR.2.4 Determine the unknown decimal or fraction in an equation involving any of the four operations, relating three numbers, with the unknown in any position. | Clarification 1: Instruction focuses on using algebraic reasoning, drawings, and mental math to determine unknowns. Clarification 2: Problems include the unknown and different operations on either side of the equal sign. All terms and solutions are limited to positive rational numbers. | Pages 84-86 |

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| **Unit 6: Ratios and Rates (17 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.AR.3.1 | Ratios | 6.1 |
| 2 | MA.6.AR.3.3, MA.6.AR.3.5 | Tables of Equivalent Ratios | 7.1 |
| 2 | MA.6.AR.3.5 | Solve Ratio Problems | 6.3 |
| 3 | MA.6.AR.3.5 | Convert Within the Customary System | 7.3 |
| 3 | MA.6.AR.3.5 | Convert Within the Metric System | 7.3 |
| 2 | MA.6.AR.3.2, MA.6.AR.3.5 | Rates and Unit Rates | 6.2 |
| 3 | MA.6.AR.3.2, MA.6.AR.3.5 | Solve Rate Problems | 6.26.3 |

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| Benchmarks | Clarifications | Big M |
| MA.6.AR.3.1 Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation: 𝑎𝑏, 𝑎 𝑡𝑜 𝑏, or 𝑎: 𝑏 where 𝑏 ≠ 0. | Clarification 1: Instruction focuses on the understanding that a ratio can be describes as a comparison of two quantities in either the same or different units. Clarification 2: Instruction includes using manipulatives, drawings, models and words to interpret part-to-part rations and part-to-whole ratios. Clarification 3: The values of a and b are limited to whole numbers | Pages 86-89 |
| MA.6.AR.3.2 Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate. | Clarification 1: Instruction includes using manipulatives, drawings, models and words and making connections between ratios, rates, and unit rates. Clarification 2: Problems will not include conversions between customary and metric systems | Pages 90,91 |
| MA.6.AR.3.3 Extend previous understanding of fractions and numerical patterns to generate or complete a two- or three-column table to display equivalent part-to-part rations and part-to-part-to whole ratios. | Clarification 1: instruction includes using two-column tables (e.g., a relationship between two variables) and three-column tables (e.g., part-to-part-to-whole relationship) to generate conversion charts and mixture charts. | Pages 91-94 |
| MA.6.AR.3.5 Solve mathematical and realworld problems involving ratios, rates, and unit rates, including comparisons, mixtures, rations of lengths and conversions within the same measurement system. | Clarification 1: Instruction includes the use of tables, tape diagrams and number lines. | Pages 98-101 |

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| **Unit 7: Percents (14 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.AR.3.4 | Percents | 8.1 |
| 2 | MA.6.AR.3.4 | Percents Greater Than 100% and Less Than 1% |  |
| 2 | MA.6.NSO.1.1, MA.6.NSO.3.5 | Relate Fractions, Decimals, and Percents | 8.2 |
| 2 | MA.6.AR.3.4, MA.6.AR.3.5 | Find the Percent of a Number | 8.3 |
| 2 | MA.6.AR.3.4 | Estimate the Percent of a Number |  |
| 2 | MA.6.AR.3.4, MA.6.AR.3.5 | Find the Whole | 8.3 |
| 2 | MA.6.AR.3.4, MA.6.AR.3.5 | Find the Percent | 8.3 |

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| Benchmarks | Clarifications | Big M |
| MA.6.AR.3.4 Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities. | Clarification 1: Instruction includes the comparison of 𝑝𝑎𝑟𝑡 𝑤ℎ𝑜𝑙𝑒 to 𝑝𝑒𝑟𝑐𝑒𝑛𝑡 100 in order to determine the percent, the part or the whole. | Pages 94-98 |
| MA.6.AR.3.5 Solve mathematical and realworld problems involving ratios, rates, and unit rates, including comparisons, mixtures, rations of lengths and conversions within the same measurement system. | Clarification 1: Instruction includes the use of tables, tape diagrams and number lines. | Pages 98-101 |
| MA.6.NSO.1.1 Extend previous understanding of numbers to define rational numbers. Plot, order and compare rational numbers. | Clarification 1: Within this benchmark, the expectation is to plot, order and compare positive and negative rational numbers when given in the same form and to plot, order and compare positive rational numbers when given in different forms (fraction, decimal, percentage). Clarification 2: Within this benchmark, the expectation is to use symbols (>, < 𝑜𝑟 =). | Pages 13-16 |
| MA.6.NSO.3.5 Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages. | Clarification 1 Rational numbers include decimals equivalence up to the thousandths place. | Pages 49-52 |
| **Unit 8: Coordinate Geometry (12 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 3 | MA.6.GR.1.1 | The Coordinate Plane | 14.1 |
| 3 | MA.6.GR.1.1 | Reflections of Points |  |
| 3 | MA.6.GR.1.2, MA.6.NSO.1.4 | Distance on the Coordinate Plane | 14.1 |
| 3 | MA.6.GR.1.3 | Perimeter and Area on the Coordinate Plan | 14.2 |

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| Benchmarks | Clarifications | Big M |
| MA.6.GR.1.1 Extend previous understanding of the coordinate plane to plot rational number ordered pairs in all four quadrants and on both axes. Identify the x- or y-axis as the line of reflection when two ordered pairs have an opposite x- or y-coordinate |  | Pages 102-104 |
| MA.6.GR.1.2 Find distances between ordered pairs, limited to the same x-coordinate or the same y-coordinate, represented on the coordinate plan |  | Pages 105-107 |
| MA.6.GR.1.3 Solve mathematical and realworld problems by plotting points on a coordinate plane, including finding the perimeter or area of a rectangle | Clarification 1: Instruction includes finding distances between points, computing dimensions of a rectangle or determining a fourth vertex of a rectangle. Clarification 2: Problems involving rectangles are limited to cases were the sides are parallel to the axes | Pages 107-110 |
| MA.6.NSO.1.4 Solve mathematical and realworld problems involving absolute value, including the comparison of absolute value. | Clarification 1: Absolute value situation include distances, temperatures, and finances. Clarification 2: Problems involving calculations with absolute value are limited to two or fewer operations. Clarification 3: Within this benchmark, the expectation is to use integers only. |  Pages 24-26 |

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| **Unit 9: Area, Volume, And Surface Area (13 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.GR.2.1, MA.6.GR.2.2 | Areas of Triangles | 13.2 |
| 2 | MA.6.GR.2.2 | Areas of Quadrilaterals | 13.1 |
| 3 | MA.6.GR.2.2 | Area of Composite Figures | 13.4 |
| 2 | MA.6.GR.2.3 | Volume of Right Rectangular Prisms | 15.2 |
| 2 | MA.6.GR.2.4 | Surface Area of Right Rectangular Prisms |  |
| 2 | MA.6.GR.2.4 | Surface Area of Pyramids |  |

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| Benchmarks | Clarifications | Big M |
| MA.6.GR.2.1 Derive a formula for the area of a right triangle using a rectangle. Apply a formula to find the area of a triangle. | Clarification 1: Instruction focuses on the relationship between the area of a rectangle and the area of a right triangle. Clarification 2: Within this benchmark, the expectation is to know from memory a formula for the area of a triangle | Pages 110-113 |
| MA.6.GR.2.2 Solve mathematical and realworld problems involving the area of quadrilaterals and composite figures by decomposing them into triangles or rectangles | Clarification 1: Problem types include finding area of composite shapes and determining missing dimensions. Clarification 2: Within this benchmark, the expectation is to know from memory a formula for the area of a rectangle and triangle. Clarification 3: Dimensions are limited to positive rational number | Pages 113-116 |
| MA.6.GR.2.3 Solve mathematical and realworld problems involving the volume of right rectangular prisms with positive rational number edge lengths using a visual model and a formula | Clarification 1: Problem types include finding the volume or a missing dimension of a rectangular prism | Pages 116-119 |
| MA.6.GR.2.4 Given a mathematical or realworld context, find the surface area or right rectangular prisms and right rectangular pyramids using the figure’s net. | Clarification 1: Instruction focuses on representing a right rectangular prism and right rectangular pyramid with its net and on the connection between the surface area of a figure and its net. Clarification 2: Within this benchmark, the expectation is to find the surface area when given a net or when given a three-dimensional figure. Clarification 3: Problems involving right rectangular pyramids are limited to cases where the heights of triangles are given. Clarification 4: Dimensions are limited to positive rational numbers |  Pages 119-122 |

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| **Unit 10: Statistical Measures and Displays (15 days)** |
| **Est # Days** | **Focus Benchmark(s)** | **Lesson/Topic** | **GO MATH sections and other resources** |
| 2 | MA.6.DP.1.1, MA.6.DP.1.5 | Statistical Questions |  |
| 2 | MA.6.DP.1.5 | Biased and Unbiased Samples |  |
| 1 | MA.6.DP.1.5 | Histograms |  |
| 2 | MA.6.DP.1.2 | Measures of Center | 16.1 |
| 2 | MA.6.DP.1.2, MA.6.DP.1.3, MA.6.DP.1.5 | Interquartile Range and Box Plots | 16.316.4 |
| 2 | MA.6.DP.1.2, MA.6.DP.1.6 | Outliers |  |
| 2 | MA.6.DP.1.4 | Interpret Data Distributions | 16.5 |
| 2 | MA.6.DP.1.6 | Changes in Data Values | 16.1 |

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| Benchmarks | Clarifications | Big M |
| MA.6.DP.1.1 Recognize and formulate a statistical question that would generate numerical data |  | Pages 123-126 |
| MA.6.DP.1.2 Given a numerical data set within a real-world context, find and interpret mean, median, mode and range. |  | Pages 126-129 |
| MA.6.DP.1.3 Given a box plot within a realworld context, determine the minimum, the lower quartile, the median, the upper quartile and the maximum. Use this summary of the data to describe the spread and distribution of the data | Clarification 1: Instruction includes describing range, interquartile range, halves and quarters of the data. | Pages 129-132 |
| MA.6.DP.1.4 Given a histogram or a line plot within a real-world context, qualitatively describe and interpret the spread and distribution of the data, including any symmetry, skewness, gaps, clusters, outliers and the range. | Clarification 1: Refer to K-12 Mathematics Glossary (Appendix C). |  Pages 132-135 |
| MA.6.DP.1.5 Create box plots and histograms to represent sets of numerical data within real-world contexts. | Clarification 1: Instruction includes collecting data, discussing ways to collect truthful data to construct graphical representations. Clarification 2: Within this benchmark, it is the expectation to use appropriate titles, labels, scales and units when constructing graphical representations. Clarification 3: Numerical data is limited to positive rational numbers. | Pages 136-140 |
| MA.6.DP.1.6 Given a real-world scenario, determine and describe how changes in data values impact measures of center and variation | Clarification 1: Instruction includes choosing the measure of center or measure of variation depending on the scenario. Clarification 2: The measures of center are limited to mean and median. The measures of variation are limited to range and interquartile range. Clarification 3: Numerical data is limited to positive rational numbers. | Pages 141-143 |