6th Grade Math
Essential Standards and Learning Targets

Essential Standards for 1st and 2nd Nine Weeks

6-NS3 - Decimal Operations: Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
Learning Targets:
- Place Value 5-NBT4
- Adding decimals 6-NS3
- Subtracting decimals 6-NS3
- Multiplying decimals 6-NS3
- Fluently divide multi-digit numbers using the standard algorithm. 6-NS2
- Dividing decimals 6-NS3

6-NS1 - Fraction Operations: Interpret and compute quotients of fractions, and solve word problems involving division of fractions, e.g., by using visual fraction models and equations to represent the problem.
Learning Targets:
- GCF 6-NS4
- LCM 6-NS4
- Add and subtract fractions 5-NF1
- Multiply fractions 5-NF4
- Divide fractions 6-NS1

6-RP3 - Ratios and Proportional Relationships: Use ratio and rate reasoning to solve real-world and mathematical problems.tape diagrams, double number line diagrams, or equations.
Learning Targets:
- Write a rate, ratio, and proportion 6-RP1
- Equivalent Ratios 6-RP3a
- Unit Rates 6-RP2, 6-RP3b
- Ratio Tables 6-RP3a
- Percent of a quantity 6-RP3c

6-NS8 - Rational Numbers: Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane.
Learning Targets:
- Positive and Negative Numbers on a number line 6-NS6, 6-NS5
- Absolute Value and opposites 6-NS6a, 6-NS7c, 6-NS7d
- Comparing/ordering rational numbers 6-NS7a, 6-NS7b
- Graph coordinate planes, all four quadrants 6-NS6b, 6-NS6c

6-EE2c-Expressions- Evaluate expressions that arise from formulas used in real-world problems.
Learning Targets:
- Exponents 6-EE1
- Numerical expressions (Order of operations) 6-EE1, 6-EE2c
- Algebraic expressions 6-EE2a, 6-EE2b
- Associative, Commutative, and Identity Properties 6-EE3
- Distributive Property 6-EE3
- Equivalent expressions 6-EE4

6-EE7 Equations - Solve real-world and mathematical problems by writing and solving equations of all nonnegative rational numbers.
Learning Targets:
- Addition equations 6-EE5, 6-EE6, 6-EE7
- Subtraction equations 6-EE5, 6-EE6, 6-EE7
- Multiplication equations 6-EE5, 6-EE6, 6-EE7
- Division equations 6-EE5, 6-EE6, 6-EE7
- Two step equations 7-EE4

Essential Standards for 3rd and 4th Nine Weeks

6-EsE8 Inequalities - Write an inequality to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities have infinite solutions and represent solutions of such inequalities on number line diagrams.
Learning Targets:
- Function Tables 6-EE9
- Addition inequalities 6-EE8
- Subtraction inequalities 6-EE8
- Multiplication inequalities 6-EE8
- Division inequalities 6-EE8

6-G2, 6-G4 - Geometry- Solve real-world and mathematical problems with surface area and volume. [6-G4]
Learning Targets:
- Area (square, rectangle, parallelogram, triangle, trapezoid, nets) 6-G1
- Area of composite figures 6-G1
- Polygons on the coordinate plane 6-G3 (NOT ASSESSED)
- Volume of rectangular prism 6-G2
- Volume of triangular prism 6- G2
- Surface area of rectangular prism 6-G4
- Surface area of triangular prism 6-G4
- Surface area of pyramid 6-G4

6-SP5 -Statistical Measures- Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation) as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
Learning Targets:
- Statistical questions 6-SP1, 6-SP2, 6-SP5b, 6-SP5a
- Mean 6-SP3
- Median 6-SP3
- Mode 6-SP3
- Appropriate measures of center 6-SP5c
- Measures of variation 6-SP3
- Mean absolute deviation 6-SP3

6-SP4 Statistical Displays - Display numerical data
Learning Targets:
- Dot plots 6-SP4
- Histograms 6-SP4
- Box plots 6-SP4
- Line graphs 6-SP4
- Shape and Distribution 6-SP2, 6-SP5d

<u>Additional Clusters</u>

- Converts measurements 6-RP3d
- Coordinate planes 6-NS6b, 6-NS6c, 6-NS8, 6-G3