## Mathematics 6 at a Glance

## Unit 1: Statistical Variability and Graphing

Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers
Adding, Subtracting, and Multiplying Decimals
Divisibility
Dividing Whole Numbers (with Whole Number and Decimal Quotients)
Dividing Decimals by a Whole Number
Dividing Decimals by a Decimal
Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape
Understand the difference between a measure of center and a measure of variability and apply it when interpreting a data set
Display numerical data using dots plots, histograms, and box plots
Describe a numerical data set
Calculating quantitative measures of center and variability
Choose appropriate measures of center and variability

## Unit 2: Division of Fractions

Divisibility (spiral)
Prime Factorization
Modeling Fraction Division
Interpret and Compute Quotients of Fractions
Solve Real-World Problems Involving Division of Fractions by Fractions Area of Rectangles and Triangles and area of polygons by decomposing into triangles or composing into rectangles.
Three-Dimensional Figures and Nets
Investigating Volume and Solve Real-World Problems Finding the Volume of a Rectangular Prism and How Many Cubes are in a Rectangular Prism Involving Whole Number and Fractional Edge Lengths

## Unit 3: Rates and Ratios

Ratio Concepts
Equivalent Ratios
Unit Rates in Real-World Context
Use Ratio and Rate Reasoning to Find the Missing Value in Equivalent Ratios or a Table
Solve Real-World problems Involving Finding the Missing Value in Equivalent Ratios or a Table
Use Ratio Reasoning to Convert Measurement Units
Percent, Part, and Whole Relationships and Using Equivalent Ratios
Circle Graphs
Unit 4: Rational Numbers and Graphing
The Magnitude and Real World Context of Integers
Plotting Integers on Horizontal and Vertical Number Lines
Comparing Integers Using Inequality Statements and Order a Set of Integers
Integers in Ordered Pairs and their Locations in the Quadrants of the Coordinate Plane
Multiples and Least Common Multiple
Compare Two Rational Numbers Using Inequality Statements and Horizontal and Vertical Number

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Lines
Least Common Multiple
Recognize the Opposite Signs of Rational Numbers as Indicating Locations on Opposite Sides of Zero
Rational Numbers in Ordered Pairs and Their Locations in the Quadrants of the Coordinate Plane
Absolute Value of a Rational Number
Interpret and Explain Inequality Statements in Real-World Contexts
Reflections over the x and y axes
Real-World Contexts of Graphing Points and Distance Between Points in the Coordinate Plane
Plot the Pairs of Values in a Ratio Table on the Coordinate Plane
Geometric Figures in the Coordinate Plane
Triangles and area of polygons by decomposing into triangles or composing into rectangles. (spiral
review)
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## Unit 5: Expressions

Write and Evaluate Numerical Expressions Involving Whole Number Exponents
Write Algebraic Expressions and Identify Parts of Expressions
Factors and Greatest Common Factor
Generate Equivalent Numerical Expressions by using the Distributive Property
Evaluate Algebraic Expressions and Formulas
Generate Equivalent Algebraic Expressions by Using the Distributive Property
Generate Equivalent Expressions by Combining Like Terms
Identify Equivalent Expressions
Solutions of Equations and Inequalities
Writing Equations
Writing Inequalities
Graph Inequalities
Dependent and Independent Variables

Unit 6: Equations and Inequalities
Solving Equations Involving Addition and Subtraction
Solving Equations Involving Multiplication and Division
Fluency Standard: (incorporated throughout the entire year)
This standard will be formally assessed at the end of the year.
Divide multi-digit whole numbers
Add, Subtract, Multiply, and Divide Multi-Digit Decimals

