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

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)

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