K-5 Learning Progression Aligned to Content Connections (Adapted from the 2023 CA Framework)

	Reasoning with Data	**Exploring Changing Quantities**	**Taking Wholes Apart, Putting Parts Together**	**Discovering Shape and Space**
TK	Compare, Order, Count, and Measure Objects in the World	Recognize and Duplicate Patterns and Notice Size Differences in Similar Shapes	Use Similar Shapes to make a Pattern and Identify Size Differences in the Patterns	Visualize, Create, and Measure Different 2D and 3D Shapes and Describe their Location in Space
K	Sort and Describe Data, Compare Measurable Attributes such as Length and Weight	Develop Strategies to make Groups and Reason with Equality in different Groups	Get to Know Numbers Between 11 and 19 as well as Understand and Model Addition and Subtraction Within 10	Compose, Decompose, and Describe the World using 2D and 3D Shapes
1	Organize, Order, Represent, and Interpret Data with two or more Categories and Express Length by Units of Measurement	Read and Express Time, Understand Addition and Subtraction using Models, Compose and Decompose Numbers to make Equal Expressions	Think of Whole Numbers between 10 and 100 in terms of Tens and Ones.	Compose, Decompose, and Explore 2D and 3D Shapes using Numbers and Measurements
2	Measuring Time, Length, and Money and Interpreting Data in Different Data Representations (line plots, bar graphs, and picture graphs)	Understand and Compute the Different Unit Values of Money and Use Addition and Subtraction to Solve Problems Involving Length Measures	Expanding Place Value Concepts through Patterns and Multi-Digit Computation and Use Skip Counting to Understand Numbers up to 1,000	Understand Geometry and Spatial Structure through the Partitioning of 2D and 3D Shapes into Square Units in an Array
3	Data Collection, Representation, and Interpretation through Measurement and Visualization (line plots)	Expanding Number Flexibility to All Four Operations (add/subtract to 1000) (multiply/divide to 100) Using Patterns and Models (array)	Understanding and Representing Fractions through Visual and Conceptual Models	Analyze Quadrilateral Properties and Measurement and Explore Area and Perimeter of Quadrilaterals in Real World Context
4	Investigate Rectangles in the world, Collect Data, and Represent Data Sets Using Line Plots and various Visualizations	Illustrate Multiplication and Division Through Patterns, Area Models, and Rectangular Arrays that Represent Factors	Reason About Fraction Relationships Using Visual Fraction Models and Connect Fractions to Decimals	Explore Relationships between Rays, Lines, and Angles and Solve problems involving Perimeter, Area, Volume, Distance, and Symmetry
5	Explore Patterns and Relationships in Data and use Visual Representations to tell a Story of a Real-World Event	Model Relationships and Solve Problems with Whole Numbers, Fractions, and Decimals	Operate with Fractions, Solve Real Problems that Involve Volume, Area, and Division, and Connect Numbers and Decimals to the Power of 10	Graph 2D Shapes in the Coordinate Plane and Analyze and Decompose Three-Dimensional Figures to find Volume using Layers of Arrays

6-12 Learning Progression Aligned to Content Connections (Adapted from the 2023 CA Framework)

	Reasoning with Data	**Exploring Changing Quantities**	**Taking Wholes Apart, Putting Parts Together**	**Discovering Shape and Space**
6	Analyzing Variability in Data and Understanding Measures of Center and Distribution of Data	Use Variables, Visuals, and Models to Develop Proportional Reasoning with Rates, Ratios, and Percentages	Solve and Model Real World Problems using Rational Numbers and Expressions	Build and Decompose 3D figures using Nets, Graphing 2D Shapes on the Coordinate Plane, and Represent Absolute Value on a Number Line
7	Interpret Probability Models of Different Populations and Analyze Random Samples of Events	Explore, Understand, and Use Proportional Relationships and Solve Problems using Equations and Inequalities	Solve Real-World Problems using Different Operations on Rational Numbers, Algebraic Expressions, and Equations	Explore Similarity, Construct Scale Drawings, Transform Geometric Figures, and Solve Problems involving Area, Surface Area, and Volume
8	Make Predictions using Large Data Sets and Analyze Bivariate Data Using Scatter Plots and Correlations	Construct Graphs using Bivariate Data and use Different Representations to Solve Linear Functions	Solve Real-World Problems using Exponents, Radicals, and Scientific Notation	Learn Congruence using Transformations and Solve problems involving the Pythagorean Theorem and 3D shapes
9	Investigate Data Distributions, Variability, and Probability in Decision-Making	Connect Algebra and Functions: Linear, Quadratic, and Exponential Relationships	Solve Equations and Inequalities While Understanding Polynomial and Rational Expressions	Explore Congruence, Similarity, and Transformational Geometry
10	Explore Statistical Methods for Analyzing and Comparing Data	Apply Trigonometric and Logarithmic Functions to Complex Models	Develop Fluency in Solving Polynomial and Rational Equations	Using Coordinate Geometry and Theorems to Prove Properties of Shapes
11	Understand Probability Distributions, Statistical Inference, and Hypothesis Testing	Investigate Advanced Functions, Including Logarithmic, Rational, and Piecewise Functions	Model Real-World Situations Through Polynomials, Rational Expressions, and Functions (including Complex Numbers)	Extend Geometric Reasoning Through Vectors, Parametric Equations, and Matrices
12	Interpret Large Data Sets and Applying Inferential Statistical Methods	Model Change Using Calculus Concepts: Limits, Derivatives, and Integrals	Explore Advanced Algebraic Structures and Transformations in Functions	Apply Three-Dimensional Geometry and Advanced Trigonometry in Real-World Contexts