5th Grade Math Curriculum Overview

The primary focal areas in Grade 5 are solving problems involving all four operations with positive rational numbers, determining and generating formulas and solutions to expressions, and extending measurement to area and volume. These focal areas are supported throughout the mathematical strands of number and operations, algebraic reasoning, geometry and measurement, and data analysis. In Grades 3-5, the number set is limited to positive rational numbers. In number and operations, students will apply place value and identify part-to-whole relationships and equivalence. In algebraic reasoning, students will represent and solve problems with expressions and equations, build foundations of functions through patterning, identify prime and composite numbers, and use the order of operations. In geometry and measurement, students will classify two-dimensional figures, connect geometric attributes to the measures of three-dimensional figures, use units of measure, and represent location using a coordinate plane. In data analysis, students will represent and interpret data.

 5th Grade Texas Essential Knowledge and Skills

Year at a Glance	
1st 9 Weeks	**2nd 9 Weeks**
Unit 1: Place Value ● 5.2 (A) Represent value of digit, through thousandths, using notation and numerals ● **5.2 (B) Compare and order decimals to thousandths** ● 5.2 (C) Round decimals through hundredths **Unit 2: Adding and Subtracting Whole Numbers and Decimals** ● 5.3 (A) Estimate sums and differences ● **5.3 (K) Add and subtract whole and decimal numbers** **Unit 3: Multiplying Whole Numbers & Decimals** ● 5.3 (A) Estimate products ● 5.3 (B) Multiply 3-digit by 2-digit numbers ● 5.3 (D) Represent multiplication of decimals to the hundredths ● **5.3 (E) Multiplying decimals to the hundredths**	**Unit 4: Divide Decimals & Whole Numbers** ● 5.3 (A) Estimate quotients ● 5.3 (C) Divide quotients of up to a 4 digit dividend by a 2 digit divisor ● 5.3 (F) Represent quotients of decimals to the hundredths ● **5.3 (G) Solve quotients of decimals to the hundredths, up to a 4 digit dividend by a 2 digit divisor** **Unit 5: Add & Subt Fractions** ● 5.4 (A) Identify prime & composite numbers ● 5.3 (A) Estimate sums and differences of fractions with unequal denominators ● 5.3 (H) Represent add and subt of fractions with unequal denominators ● **5.3 (K) Add and subt fractions with unequal denominators** **Unit 6 Add & Subt Mixed Numbers** ● SEE ABOVE FOR 5.3 (A), 5.3 (H), and 5.3 (K)
3rd 9 Weeks	**4th 9 Weeks**
Unit 7:Mult & Div Fractions ● 5.3 (I) Represent and solve mult. of a whole number and fraction ● 5.3 (J) Represent div of unit fract by whole number & whole number by a unit fract ● **5.3 (L) Divide whole numbers by unit fractions & unit fractions by whole number** **Unit 8: Expressions and Equations** ● 5.4 (E) Describe meaning of parenthesis and brackets ● **5.4 (F) Simplify numerical expressions (no exponents), including up to 2 levels of grouping** ● **5.4 (B) Represent and solve multi-step problems using equations with variable for unknown** **Unit 9: Ordered Pairs and 2D Shapes** ● **5.4 (C) Generate pattern given rule (y = ax, y = x + a) and graph** ● 5.4 (D) Recognize difference between additive and multiplicative patterns given table or graph ● 5.8 (A) Describe the key attributes of the coordinate plane including axes, origin, x-coordinate, y-coordinate ● 5.8 (B) Describe process for graphing ordered pairs ● **5.8 (C) Graph ordered pairs in the first quadrant of the coordinate plane** ● **5.5 (A) Classify two-dimensional figures in sets and subsets based on attributes and properties**	**Unit 11: Data Analysis and Graphs & Personal Financial Literacy** ● 5.10 (C) identify the advantages and disadvantages of different methods, including check, credit card, debit card, and electronic payments; ● 5.10 (D) develop a system for keeping and using financial records; ● Readiness Standards, Supporting Standards, and not tested SEs

Unit 10: Perimeter, Area, and Volume & Measurement & Conversions
   ● **5.4 (H) Represent and solve problems related to perimeter and/or area and volume**
   ● 5.4 (G) Develop formulas, using objects and pictures, for volume of a rectangular prism, including V=lxwxh, V=sxsxs, and V=Bh
   ● 5.6 (A) Recognize a cubic unit of volume and the volume of a 3 dimensional figure is the number of unit cubes needed to fill it
   ● 5.6 (B) Determine the volume of a rectangular prism related to number of layers times number of unit cubes in area of base
   ● 5.7 (A) Solve problems by calculating conversions within a measurement system, customary or metric
Unit 11: Data Analysis and Graphs & Personal Financial Literacy
   ● 5.9(A) Represent categorical data (bar graphs or frequency tables) & numerical data ,in fractions or decimals, with dot or stem-and-leaf plots
   ● 5.9(B) Represent discrete paired data on a scatter plot
   ● **5.9(C) Solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot**
   ● 5.10(A) Define income tax, payroll tax, sales tax, and property tax
   ● 5.10(B) Explain the difference between gross income and net income
   ● 5.10(E) Describe actions to balance a budget when expenses exceed income
   ● 5.10(F) Balance a simple budget	