Grade 5 Mathematics Year At-A-Glance

Overview

How can we use mathematics to organize and make sense of our world? Fifth-grade students will be able to leverage their understanding of number relationships by organizing and reasoning mathematically through a variety of contextual problems using multiple representations to justify their thinking.

Quarter 1	**Unit 1: Building a Mathematical Community through the Data Cycle (about 9 days)**	**Unit 2: The Structure of Numbers and Problems Solving with Whole Numbers (about 25 days)**	**Begin Unit 3: Decimal and Fraction Number Sense (about 16 days)**
Quarter 2	**Complete Unit 3: Decimal and Fraction Number Sense (about 9 days)**	**Unit 4: Decimal Computation (about 20 days)**	**Unit 5: Measurement (about 10 days)**
Quarter 3	**Unit 6: Fraction Computation (about 24 days)**	**Unit 7: Geometry and Measurement (about 21 days)**	
Quarter 4	**Unit 8: Probability and Algebra (about 9 days)**	**Unit 9: Data (about 14 days)**	**SOL Review & Post SOL Reteaching (about 23 days)**

Quarter 1: August 19 – October 31 (50 Days)

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 1	**Unit 1: Building a Mathematical Community through the Data Cycle**	About 9 days	5.PS.1 The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on line plots (dot plots) and stem-and-leaf plots.
	Unit 2: The Structure of Numbers and Problems Solving with Whole Numbers	About 25 days Assessment Window: Week of 10/7/24	5.NS.2 The student will demonstrate an understanding of prime and composite numbers, and determine the prime factorization of a whole number up to 100. 5.CE.1 The student will estimate, represent, solve, and justify solutions to single-step and multistep contextual problems using addition, subtraction, multiplication, and division with whole numbers. 5.MG.2 The student will use multiple representations to solve problems, including those in context, involving perimeter, area, ~~and volume~~. [focus on perimeter and area] 5.PFA.2 The student will investigate and use variables in contextual problems. 5.PFA.1 The student will identify, describe, extend, and create increasing and decreasing patterns with whole numbers, ~~fractions, and decimals~~, including those in context, using various representations. [focus on whole numbers] 5.CE.4 The student will simplify numerical expressions with whole numbers using the order of operations.
	Begin Unit 3: Decimal and Fraction Number Sense	About 16 days Assessment Window: Week of 11/18/24	5.NS.1 The student will use reasoning and justification to identify and represent equivalency between fractions (with denominators that are thirds, eighths, and factors of 100) and decimals; and compare and order sets of fractions (proper, improper, and/or mixed numbers having denominators of 12 or less) and decimals (through thousandths).

Quarter 2: November 6 – January 17 (39 Days) Quarter 2 Unit Guides will be released on October 16, 2024

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 2	**Complete Unit 3: Decimal and Fraction Number Sense**	About 9 days Assessment Window: Week of 11/18/24	5.NS.1 The student will use reasoning and justification to identify and represent equivalency between fractions (with denominators that are thirds, eighths, and factors of 100) and decimals; and compare and order sets of fractions (proper, improper, and/or mixed numbers having denominators of 12 or less) and decimals (through thousandths).
	Unit 4: Decimal Computation	About 20 days Assessment Window: Week of 12/16/24	5.CE.3 The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition, subtraction, multiplication, and division with decimal numbers. 5.PFA.1 The student will identify, describe, extend, and create increasing and decreasing patterns with ~~whole numbers,~~ ~~fractions, and~~ decimals, including those in context, using various representations. [focus on decimals]
	Unit 5: Measurement	About 10 days Assessment Window: Week of 1/13/25	5.MG.1 The student will reason mathematically to solve problems, including those in context, that involve length, mass, and liquid volume using metric units.

Quarter 3: January 23 – March 27 (45 Days) Quarter 3 Unit Guides will be released on January 2, 2025

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 3	**Unit 6: Fraction Computation**	About 24 days Assessment Window: Week of 2/24/25	5.CE.2 The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction of fractions with like and unlike denominators (with and without models), and solve single-step contextual problems involving multiplication of a whole number and a proper fraction, with models. 5.PFA.1 The student will identify, describe, extend, and create increasing and decreasing patterns with ~~whole numbers,~~ fractions~~, and decimals~~, including those in context, using various representations. [focus on fractions]
	Unit 7: Geometry and Measurement	About 21 days Assessment Window: Week of 3/24/25	5.MG.2 The student will use multiple representations to solve problems, including those in context, involving perimeter, area, and volume. 5.MG.3 The student will classify and measure angles and triangles, and solve problems, including those in context. 5.PFA.1 The student will identify, describe, extend, and create increasing and decreasing patterns with whole numbers, fractions, and decimals, including those in context, using various representations.

Quarter 4: April 1 – June 12 (46 Days) Quarter 4 Unit Guides will be released on March 11, 2025

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 4	**Unit 8: Probability and Algebra**	About 9 days Assessment Window: Week of 4/7/25	5.PS.3 The student will determine the probability of an outcome by constructing a model of a sample space and using the Fundamental (Basic) Counting Principle. 5.PFA.2 The student will investigate and use variables in contextual problems.
	Unit 9: Data	About 14 days Assessment Window: Week of 5/5/25	5.PS.1 The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on line plots (dot plots) and stem-and-leaf plots. 5.PS.2 The student will solve contextual problems using measures of center and the range.