

Syllabus

Grade 5 Mathematics

Grade 5 Mathematics is a comprehensive course that builds upon foundational math skills and focuses on key concepts aligned with the Common Core standards. Students will engage in hands-on activities, problemsolving tasks, and collaborative learning experiences to deepen their understanding of number sense, operations, fractions, decimals, geometry, measurement, and data analysis. They will explore topics such as place value, multiplication, division, fractions, volume, and graphing, while developing fluency in mathematical operations and applying critical thinking skills to solve real-world problems. This course emphasizes conceptual understanding, mathematical reasoning, and effective communication, providing students with the necessary skills to excel in higher-level math and everyday life. Ongoing assessments will assess progress and ensure mastery of the standards.

Time Commitment: This 22-week (43 lesson) course includes 2 in-class hours each week and 1-2 hours of homework each lesson, corresponding to a full-year course.

Grading: 5% Class Participation, 10% Homework, 15% Classwork, 33% Quizzes, 37% Assessments.

Content: Note: An extra class is added at the end of each unit for review and assessment of the material learned.

Unit	Name	Lessons	Length
1	Place Value and Algebraic Thinking	Lesson 1-1: Whole Number Place Value	3 weeks
		Lesson 1-2: Place Value to the Thousandths	
		 Lesson 1-3: Base Ten and Expanded Form 	
		 Lesson 1-4: Ordering Numbers and Rounding Numbers 	
		Lesson 1-5: Properties of Operations	
2	Multiplying and Dividing Whole Numbers	 Lesson 2-1: Powers of Ten and Multiplying by 1 Digit 	3 weeks
		Lesson 2-2: Multiplying by 2 and Multi Digit Numbers	
		Lesson 2-3: Dividing by 1 Digit Numbers	
		Lesson 2-4: 2 Digit Division and Problem Solving	
		Lesson 2-5: Order of Operations	
2	Decimal Operations	Lesson 3-1: Adding and Subtracting Decimals	2.5 weeks
		 Lesson 3-2: Multiplying Decimals by Whole Numbers 	
3		 Lesson 3-3: Multiplying Decimals by Decimals 	
		Lesson 3-4: Dividing Decimals by Whole Numbers	
4	Fraction Concepts	Lesson 4-1: Visualizing Fractions	2.5 weeks
		 Lesson 4-2: Types of Fractions and Simplifying Fractions 	
		Lesson 4-3: Common Denominators	
		Lesson 4-4: Compare and Order Fractions and Mixed Numbers	
	Adding and Subtracting Fractions	Lesson 5-1: Adding & Subtracting Fractions with Like Denominators	2.5 weeks
-		Lesson 5-2: Adding & Subtracting Fractions with Unlike Denominators	
5		Lesson 5-3: Adding Mixed Numbers	
		Lesson 5-4: Subtracting Mixed Numbers	

	Multiplying & Dividing Fractions	Lesson 6-1: Multiplying Fractions	
6		Lesson 6-2: Multiplying Mixed Numbers	
		 Lesson 6-3: Dividing Fractions and Whole Numbers 	2.5 weeks
		Lesson 6-4: Metric Conversions	
7	Patterns and the Coordinate Plane	Lesson 7-1: Numerical Patterns	
		Lesson 7-2: The Coordinate Plane	2 weeks
		Lesson 7-3: Coordinate Plane Applications	
8	Geometry	Lesson 8-1: Classifying Polygons	
		Lesson 8-2: Classifying Triangles	
		Lesson 8-3: Classifying Quadrilaterals	3.5 weeks
		Lesson 8-4: Area and Perimeter Review	5.5 Weeks
		Lesson 8-5: Intro to Volume & Calculating Volume	
		Lesson 8-6: Volume in the Real World	