

Syllabus

Grade 5 Mathematics

Course Description: 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, problem-solving 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.

Time Commitment: This 30-week (60 lesson) course includes 2 in-class hours each week and 1-2 hours of homework each lesson, corresponding to a full-year course.

Grading: Grades in this course will be computed using a percentage-based system. All assignments completed by students will be categorized into the following weight categories:

- 10% Classwork
- 15% Homework
- 25% Quizzes (2 lowest scores are dropped)
- 40% Assessments (1 lowest score is dropped)
- 10% Final Exam

Note: If a student misses class, it is his or her responsibility to (1) view or request the recording of the previous lesson and (2) complete any missed work. **NO MAKEUP LESSONS** will be provided for any reason.

Content:

Unit	Name	Lessons	Length
0	Place Value & Rounding	Lesson 0-1 Student/Parent Orientation	1 Lesson
1	Order of Operations	Lesson 1-1 Writing and Evaluating Expressions	2 Weeks
		Lesson 1-2 Grouping Symbols and Parentheses	
		Lesson 1-3 Translating Expressions	
		Lesson 1-4 Review and Assessment	
2	Multiplication & Division	Lesson 2-1 Multiplying with Multiples of 10 and Area Models	3 Weeks
		Lesson 2-2 Standard Algorithm and Product Estimation	
		Lesson 2-3 Dividing with Multiples of 10 and Area Models	
		Lesson 2-4 Division with Partial Quotients & Quotient Estimation	
		Lesson 2-5 Standard Algorithm of Division & Problem Solving	
		Lesson 2-6 Problem Solving/Review and Assessment	
3	Decimal Place Value	Lesson 3-1 Value of a Digit & Decimal Place Value	2 Weeks
		Lesson 3-2 Read and Write Decimals in Word and Expanded Form	
		Lesson 3-3 Comparing, Ordering, and Rounding Decimals	
		Lesson 3-4 Review and Assessment	
4	Operations with Decimals	Lesson 4-1 Estimating and Modeling Sums and Differences	3.5 Weeks
		Lesson 4-2 Add and Subtract Decimals	
		Lesson 4-3 Multiply Decimals by Multiples of 10 and Whole Numbers	
		Lesson 4-4 Multiplying Decimals	
		Lesson 4-5 Dividing Decimals with Multiples of Ten and Models	
		Lesson 4-6 Decimal Quotients	
		Lesson 4-7 Problem Solving/Review and Assessment	

5	Add and Subtract Fractions	Lesson 5-1	Fraction Concepts Review	3 Weeks
		Lesson 5-2	Modeling & Estimating Addition/Subtraction of Fractions	
		Lesson 5-3	Add and Subtract Like/Unlike Fractions	
		Lesson 5-4	Add and Subtract Mixed Numbers	
		Lesson 5-5	Problem Solving with Adding and Subtracting Fractions	
		Lesson 5-6	Review and Assessment	
6	Multiply and Divide Fractions	Lesson 6-1	Multiplication Scaling & Modeling Fractions	3.5 Weeks
		Lesson 6-2	Multiplying Whole Numbers and Fractions	
		Lesson 6-3	Multiplying Mixed Numbers	
		Lesson 6-4	Fractional Side Lengths and Fractions as Division	
		Lesson 6-5	Divide Unit Fractions by Whole Numbers	
		Lesson 6-6	Multiplying and Dividing Fractions Problem Solving	
		Lesson 6-7	Problem Solving/Review and Assessment	
7	Coordinate Planes and Patterns	Lesson 7-1	Coordinate Systems	2.5 Weeks
		Lesson 7-2	Distance between 2 Points and Coordinate WP	
		Lesson 7-3	Interpreting Data and Extending Patterns	
		Lesson 7-4	Function Tables, Graphing Patterns, and WP	
		Lesson 7-5	Review and Assessment	
8	Classifying Shapes/Geometry	Lesson 8-1	Classifying Polygons & Regular/Irregular Polygons	2 Weeks
		Lesson 8-2	Classifying Triangles	
		Lesson 8-3	Attributes and Classifying Quadrilaterals	
		Lesson 8-4	Review and Assessment	
9	Data and Measurement	Lesson 9-1	Customary Conversions	2.5 Weeks
		Lesson 9-2	Metric Conversions and Time	
		Lesson 9-3	Metric and Customary Conversions Problem Solving	
		Lesson 9-4	Line Plots	
		Lesson 9-5	Review and Assessment	
10	Volume	Lesson 10-1	Intro to Volume and Volumetric Cubes	3 Weeks
		Lesson 10-2	Variations of the Volume Formula	
		Lesson 10-3	Volume Practice and Word Problems	
		Lesson 10-4	Volume of Composite Figures	
		Lesson 10-5	Volume of Composite Figures Practice	
		Lesson 10-6	Review and Assessment	
11	Standardized Exam Prep & Course Conclusion	Lesson 11-1	Gr5 Math Review 1	2.5 Weeks
		Lesson 11-2	Gr5 Math Review 2	
		Lesson 11-3	Gr5 Math Review 3	
		Lesson 11-4	Gr5 Math Review 4	
		Lesson 11-5	Final Exam	