5th Grade Math Curriculum

In fifth grade, students will be building on their arithmetic abilities with whole numbers and fractions as they move into the world of decimals. Fifth graders also are introduced to the metric of measurement and basic geometry concepts like circles, quadrilaterals, and composite shapes.

A fifth-grade math curriculum starts with place value, then moves into calculating decimal numbers from fractions. Students begin to understand that fractions are really just little division problems as they create decimal equivalents for fractions and mixed numbers. The following information will explain the steps you should take to meet your child's 5th grade math goals.

What Math Should a 5th Grader Already Know?

A fifth-grade math student should be able to perform all four operations (addition, subtraction, multiplication and division) with whole numbers *and* fractions. Students should also have memorized the multiplication table through 12, so it's easy to move onto the next level in math without getting hung up on basic multiplication. Fifth graders also are able to measure in the standard system of measurement and work with those measurements to solve real-world problems.

What Do 5th Graders Learn in Math?

The major math concepts covered for a fifth-grade curriculum are:

- Multiplication Table (if not memorized yet)
- Place Value
- Converting Fractions to Decimals
- Operations with Decimals (addition, subtraction, multiplication and division)
- Converting Mixed Numbers and Improper Fractions to Decimals
- Working with numbers to the thousandths place
- Determine the Least Common Multiple and the Greatest Common Factor
- Representing Word Problems with Math
- Measuring Angles using a Protractor
- Finding the Perimeter and Area of Geometric Shapes
- Measurement in the Metric System

A YEAR AT A GLANCE Be sure to include a bit of wiggle room in case your student needs extra time with a math topic. Also note that students may do Geometry at any time during the year. The sequence below is our recommendation for a full year course:

Summer Term: Review

- Multiplication Table Workshop (For numbers 1-12 as needed)
- <u>Arithmetic Workshop Review</u> (Review before starting Decimals)

September	October	November	December
Decimals Session #1:	Decimals Session #2:	Decimals Session #3:	Two weeks of extra
Place Value	Converting Decimals	Adding, Subtract, and	practice if needed.
	& Fractions	Multiply Decimals	
January	February	March	April
Decimals Session #4:	Decimals Session #5:	Decimals Session #6:	Decimals Session #7:
Multiplying Decimals	Dividing Decimals	Dividing Decimals	Review Operations
	Part 1	Part 2	with Decimals
May	June	July	August
<u>Geometry</u>	Math Camp	Decimals #1-4:	Decimals #5-7
Sessions #1-2		Advanced Level Labs	Advanced Level Labs

5th Grade Math Lesson Plan (34 weeks)

Summer Term: Review

Spend 2-3 weeks as needed:

- <u>Multiplication Table Workshop</u> (For numbers 1-12 as needed)
- <u>Arithmetic Workshop Review</u> (Review before starting Decimals)

Monthly Class Format: Students watch a math lesson (live or recorded), work on their assignment: first 2 weeks are workbooks, then 1 week on projects, and one final week on games, puzzles, and activities for every session.

Fall Term: Decimals

Spend one month on each of the following:

- <u>Session #1:</u> Place Value
- <u>Session #2:</u> Converting Decimals
- <u>Session #3:</u> Adding & Subtracting Decimals

Winter / Spring Term: Decimals *Spend one month on each of the following:*

- <u>Session #4:</u> Multiplying Decimals
- <u>Session #5:</u> Dividing Decimals Part 1
- <u>Session #6:</u> Dividing Decimals Part 2
- <u>Session #7:</u> Review Operations with Decimals

Spring Term: Geometry Spend one week on each of the following:

- <u>Session #1:</u> Lines & Angles
- <u>Session #2:</u> Rectangles & Parallelograms
- <u>Session #2:</u> Triangles & Trapezoids

Summer Term: Advanced Labs

Optional: These are bonus real-world applications of the skills mastered this year.

Advanced Labs 1-7