



WELCOME TO THIRD GRADE MATH!

In third grade, your child will move away from just adding and subtracting to mastering multiplication, division, and fractions. By the end of the year, here is what students should be able to do:



Multiplication and Division

- ✓ **Understanding the Concept of Multiplication:** Explain that 5 times 3 is the same as 5 groups of 3 (or $3 + 3 + 3 + 3 + 3$).
- ✓ **Understanding the Concept of Division:** Explain a context in which a number of equal shares or a number of groups can be expressed as $56 \div 8$.
- ✓ **Word Problems:** Solve multiplication and division word problems within 100.
- ✓ **Determine the Unknown:** Understand the relationship between multiplication and division (e.g., if you know 8 times $? = 24$, you also know 24 divided by $8 = ?$).
- ✓ **Fluency:** Multiply and divide within 100. By the end of the year, students should know all products of two one-digit numbers (up to 9 times 9).
- ✓ **Advanced Word Problems:** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity.

Geometry



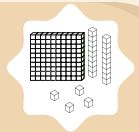
- ✓ **Categorize Shapes:** Understand that shapes in different categories (like rectangles and rhombuses) may share attributes (like having four sides), and that those shared attributes can define a larger category (like quadrilaterals).
- ✓ **Partitioning:** Understand how to use fraction notation to describe how a shape has been partitioned.

Fractions



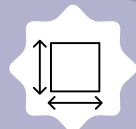
- ✓ **Parts of a Whole:** Understand that a fraction is represented by the number of equally sized parts of a whole and the size of the parts.
- ✓ **Number Line:** Place fractions on a number line.
- ✓ **Equivalence:** Recognize simple equivalent fractions (like $1/2 = 2/4$) and compare two fractions with the same numerator or same denominator.
- ✓ **Whole Numbers:** Understand how to show whole numbers as fractions (e.g. $3=3/1$, or $4/4=1$).

Base Ten System



- ✓ **Rounding:** Round any two-digit or three-digit number to the nearest 10 or 100.
- ✓ **Addition/Subtraction:** Add and subtract within 1,000.
- ✓ **Multiplying by Tens:** Multiply one-digit numbers by multiples of 10 (9 times 80 or 5 times 60).

Measuring



- ✓ **Time:** Tell and write time to the nearest minute and solve problems about "elapsed time" (e.g., "If lunch starts at 11:15 and lasts 45 minutes, when is it over?").
- ✓ **Volume and Mass:** Measure and estimate liquid volumes and masses of objects using grams (g), kilograms (kg), and liters (l).
- ✓ **Graphs:** Draw picture graphs and bar graphs to represent a set of data. Solve "how many more" and "how many less" problems based on data.
- ✓ **Line Plots:** Represent measurement data by creating a line plot.
- ✓ **Area:** Understand area as the space inside a flat shape. Find the area of a rectangle by counting unit squares or by multiplying the side lengths (length times width).
- ✓ **Perimeter:** Find the distance around a shape by adding the lengths of all the sides.