Common Core Math Standards for 3rd Grade

NUMBER & OPERATIONS IN BASE TEN

Use place value understanding and properties of operations to perform multi-digit arithmetic.

Round numbers to the nearest 10 or 100. Fluently add numbers with sums to 1000.

Fluently subtract from numbers to 1000. Subtract by relating to addition. Multiply one-digit numbers by multiples of 10 up to 90.

NUMBER & OPERATIONS WITH FRACTIONS

Develop understanding of fractions as numbers. [Use denominators of 2, 3, 4, 6, and 8.]

Write a fraction to represent one or more equal parts of a whole unit. Write fractions to represent lengths of intervals on a number line. Write fractions to represent locations on a number line. Recognize that equivalent fractions are the same size. Recognize and generate simple equivalent fractions. Recognize fractions equivalent to whole numbers. Compare two fractions with the same numerator or denominator.

GEOMETRY

Reason with shapes and their attributes.

Categorize quadrilaterals including rhombuses, rectangles, and squares by their attributes.

Partition shapes into parts with equal areas to represent unit fractions.

MEASUREMENT & DATA

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Write time to the nearest minute. Measure time intervals in minutes. Solve word problems involving time intervals. Measure and estimate liquid volume in liters. Solve word problems involving liquid volume. Measure and estimate mass in grams and kilograms. Solve word problems involving mass.

Represent and interpret data.

Draw a bar graph using an appropriate scale. Solve problems using information from graphs. Make line plots of data measured using rulers to 1/4 inch.

Understand concepts of area and relate area to multiplication and to addition.
Understand that area is measured in square units. Count unit squares to measure area.
Relate area of a rectangle to multiplication. Solve real-world problems involving area.
Represent products as rectangular areas. Use area models to represent the distributive property. Find areas by decomposing figures to make rectangles.

Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Find the perimeter of a polygon. Find an unknown side length in a polygon. Compare perimeters of two rectangles with the same area. Compare areas of two rectangles with the same perimeter.

OPERATIONS & ALGEBRAIC THINKING
Represent and solve problems involving multiplication and division.
Interpret multiplication as the total of equal groups. Interpret division as sharing equally or making equal shares. Use multiplication and division to solve word problems. Find the missing number in a multiplication or division equation.

Understand properties of multiplication and the relationship between multiplication and division.
Apply the commutative and associative properties for multiplication. Apply the distributive property when learning basic facts. Relate division to finding a missing factor.

Multiply and divide within 100.
Fluently multiply to find products of two one-digit numbers. Fluently divide numbers to 100 by one-digit numbers.

Solve problems involving the four operations, and identify and explain patterns in arithmetic.
Represent and solve two-step word problems using addition and/or subtraction. Represent and solve two-step word problems using multiplication and/or division. Represent and solve two-step word problems using any two operations. Identify and explain arithmetic patterns.