



## CCPS ELEMENTARY MATHEMATICS

### GRADE 3

Mathematics education in Calvert County Public Schools strives to build student skills in mathematical reasoning, strategic competence, conceptual understanding, procedural fluency, and a productive disposition. Grade 3 mathematics instruction is organized into four broad categories as indicated by the *Maryland College and Career-Ready Standards* with much of the content instruction focusing on four critical areas: (1) multiplication and division and strategies for multiplication and division within 100, (2) understanding the structure of rectangular arrays and of area, (3) describing and analyzing two-dimensional shapes, and (4) a conceptual understanding of fractions, especially unit fractions (fractions with a numerator of 1).

#### Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division
- Understand properties of multiplication and the relationship between multiplication and division
- Multiply and divide within 100
- Solve problems involving the four operations and identify and explain patterns in arithmetic

#### Number and Operations in Base Ten

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

#### Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects
- Represent and interpret data
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

#### Geometry

- Analyze and compare properties of two-dimensional shapes
- Connect unit fractions to partitioning of geometric shapes

## Month-by-Month Pacing Overview

The topics listed for each month approximate when instruction in this area will occur.

MONTH	TOPIC
Aug	Introduction to the discourse-driven math classroom
Sep	Use place value to round numbers Add and subtract 3-digit numbers
Oct	Understanding multiplication Multiply within 100 (up to 10x10)
Nov	Multiplication strategies Understanding division Understand how multiplication and division are related
Dec	More work with multiplication and division facts Mathematical patterns and relationships
Jan	Calculating area of rectangles and composite figures
Feb	Solving 2-step problems Scaled graphs Understanding fractions on a number line
Mar	Understand equivalent fractions Comparing the value of fractions
Apr	Using symbols ( $>$ , $=$ , $<$ ) to show comparisons Measure, plot, and analyze lengths on a line plot Elapsed time
May	Liquid volume and mass Classify quadrilaterals Partition shapes in parts with equal areas