

# WHAT YOUR CHILD WILL LEARN THIS SUMMER

## *OUR SUMMER PROGRAM COMMON CORE CURRICULUM*

### COMMON CORE MATHEMATICS

# GRADE 1

## CHAPTER 1

### ADDITION AND SUBTRACTING NUMBERS

Topic A: Embedded Numbers and Decompositions

Topic B: Counting On from Embedded Numbers

Topic C: Addition Word Problems

Topic D: Strategies for Counting On

Topic E: The Commutative Property of Addition and the Equal Sign

Topic F: Development of Addition Fluency Within

Topic G: Subtraction as an Unknown Addend Problem

Topic H: Subtraction Word Problems

Topic I: Decomposition Strategies for Subtraction

Topic J: Development of Subtraction Fluency Within

## **CHAPTER 2**

### **Place Value Through Addition and Subtraction Within 20**

Topic A: Counting On or Making Ten to Solve *Result Unknown* and *Total Unknown* Problems

Topic B: Counting On or Taking from Ten to Solve *Result Unknown* and *Total Unknown* Problems

Topic C: Strategies for Solving *Change* or *Addend Unknown* Problems

Topic D: Varied Problems with Decompositions of Teen Numbers as 1 Ten and Some Ones

## **CHAPTER 3**

### **Ordering and Comparing Length Measurements as Numbers**

Topic A: Indirect Comparison in Length Measurement

Topic B: Standard Length Units

Topic C: Non-Standard and Standard Length Units

Topic D: Data Interpretation

## **CHAPTER 4**

### **Ordering and Comparing Length Measurements as Numbers**

Topic A: Tens and Ones

Topic B: Comparison of Pairs of Two-Digit Numbers

Topic C: Addition and Subtraction of Tens

Topic D: Addition of Tens or Ones to a Two-Digit Number

Topic F: Addition of Tens and Ones to a Two-Digit Number

## **CHAPTER 5**

### **Identifying, Composing, and Partitioning Shapes**

Topic A: Attributes of Shapes

Topic B: Part–Whole Relationships Within Composite Shapes

Topic C: Halves and Quarters of Rectangles and Circles

Topic D: Application of Halves to Tell Time

## **CHAPTER 6**

### **Place Value, Comparison, Addition and Subtraction to 100**

Topic A: Comparison Word Problems

Topic B: Numbers to 120

Topic C: Addition to 100 Using Place Value Understanding

Topic D: Varied Place Value Strategies for Addition to 100

Topic E: Coins and Their Values

Topic F: Varied Problem Types Within 20

Topic G: Culminating Experiences

# GRADE 2

## CHAPTER 1

### **Sums and Differences to 100**

Topic A: Foundations for Fluency with Sums and Differences Within 100

Topic B: Initiating Fluency with Addition and Subtraction Within 100

## CHAPTER 2

### **Addition and Subtraction of Length Units**

Topic A: Understand Concepts About the Ruler

Topic B: Measure and Estimate Length Using Different Measurement Tools

Topic C: Measure and Compare Lengths Using Different Length Units

Topic D: Relate Addition and Subtraction to Length

## CHAPTER 3

### **Place Value, Counting, and Comparison of Numbers to 1,000**

Topic A: Forming Base Ten Units of Ten, a Hundred, and a Thousand

Topic B: Understanding Place Value Units of One, Ten, and a Hundred

Topic C: Three-Digit Numbers in Unit, Standard, Expanded, and Word Forms

Topic D: Modeling Base Ten Numbers Within 1,000 with Money

Topic E: Modeling Numbers Within 1,000 with Place Value Disks

Topic F: Comparing Two Three-Digit Numbers

Topic G: Finding 1, 10, and 100 More or Less Than a Number

## **CHAPTER 4**

**Addition and Subtraction Within 200 with Word Problems to 100**

Topic A: Sums and Differences Within 100

Topic B: Strategies for Composing a Ten

Topic C: Strategies for Decomposing a Ten

Topic D: Strategies for Composing Tens and Hundreds

Topic E: Strategies for Decomposing Tens and Hundreds

Topic F: Student Explanations of Written Methods

## **CHAPTER 5**

**Addition and Subtraction Within 1,000 with Word Problems to 100**

Topic A: Strategies for Adding and Subtracting Within 1,000

Topic B: Strategies for Composing Tens and Hundreds Within 1,000

Topic C: Strategies for Decomposing Tens and Hundreds Within 1,000

Topic D: Student Explanations for Choice of Solution Methods

## **CHAPTER 6**

### **Foundations of Multiplication and Division**

Topic A: Formation of Equal Groups

Topic B: Arrays and Equal Groups

Topic C: Rectangular Arrays as a Foundation for Multiplication and Division

Topic D: The Meaning of Even and Odd Numbers

## **CHAPTER 7**

### **Problem Solving with Length, Money, and Data**

Topic A: Problem Solving with Categorical Data

Topic B: Problem Solving with Coins and Bills

Topic C: Creating an Inch Ruler

Topic D: Measuring and Estimating Length Using Customary and Metric Units

Topic E: Problem Solving with Customary and Metric Units

Topic F: Displaying Measurement Data

## **CHAPTER 8**

### **Time, Shapes, and Fractions as Equal Parts of Shapes**

Topic A: Attributes of Geometric Shapes

Topic B: Composite Shapes and Fraction Concepts

Topic C: Halves, Thirds, and Fourths of Circles and Rectangles

Topic D: Application of Fractions to Tell Time



# GRADE 3

## CHAPTER 1

### **Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10**

Topic A: Multiplication and the Meaning of the Factors

Topic B: Division as an Unknown Factor Problem

Topic C: Multiplication Using Units of 2 and 3

Topic D: Division Using Units of 2 and 3

Topic E: Multiplication and Division Using Units of 4

Topic F: Distributive Property and Problem Solving Using Units of 2–5 and 10

## CHAPTER 2

### **Place Value and Problem Solving with Units of Measure**

Topic A: Time Measurement and Problem Solving

Topic B: Measuring Weight and Liquid Volume in Metric Units

Topic C: Rounding to the Nearest Ten and Hundred

Topic D: Two- and Three-Digit Measurement Addition Using the Standard Algorithm

Topic E: Two- and Three-Digit Measurement Subtraction Using the Standard Algorithm

## **CHAPTER 3**

### **Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10**

Topic A: The Properties of Multiplication and Division

Topic B: Multiplication and Division Using Units of 6 and 7

Topic C: Multiplication and Division Using Units up to 8

Topic D: Multiplication and Division Using Units of 9

Topic E: Analysis of Patterns and Problem Solving Including Units of 0 and 1

Topic F: Multiplication of Single-Digit Factors and Multiples of 10

## **CHAPTER 4**

### **Multiplication and Area**

Topic A: Foundations for Understanding Area

Topic B: Concepts of Area Measurement

Topic C: Arithmetic Properties Using Area Models

Topic D: Applications of Area Using Side Lengths of Figures

## **CHAPTER 5**

### **Fractions as Numbers on the Number Line**

Topic A: Partitioning a Whole into Equal Parts

Topic B: Unit Fractions and Their Relation to the Whole

Topic C: Comparing Unit Fractions and Specifying the Whole

Topic D: Fractions on the Number Line

Topic E: Equivalent Fractions

Topic F: Comparison, Order, and Size of Fractions

## **CHAPTER 6**

### **Collecting and Displaying Data**

Topic A: Generate and Analyze Categorical Data

Topic B: Generate and Analyze Measurement Data

## **CHAPTER 7**

### **Geometry and Measurement Word Problems**

Topic A: Solving Word Problems

Topic B: Attributes of Two-Dimensional Figures

Topic C: Problem Solving with Perimeter

Topic D: Recording Perimeter and Area Data on Line Plots

Topic E: Problem Solving with Perimeter and Area

# GRADE 4

## CHAPTER 1

### **Place Value, Rounding, and Algorithms for Addition and Subtraction**

Topic A: Place Value of Multi-Digit Whole Numbers

Topic B: Comparing Multi-Digit Whole Numbers

Topic C: Rounding Multi-Digit Whole Numbers

Topic D: Multi-Digit Whole Number Addition

Topic E: Multi-Digit Whole Number Subtraction

Topic F: Addition and Subtraction Word Problems

## CHAPTER 2

### **Place Value, Rounding, and Algorithms for Addition and Subtraction**

Topic A: Place Value of Multi-Digit Whole Numbers

Topic B: Comparing Multi-Digit Whole Numbers

Topic C: Rounding Multi-Digit Whole Numbers

Topic D: Multi-Digit Whole Number Addition

Topic E: Multi-Digit Whole Number Subtraction

Topic F: Addition and Subtraction Word Problems

## **CHAPTER 3**

### **Multi-Digit Multiplication and Division**

Topic A: Multiplicative Comparison Word Problems

Topic B: Multiplication by 10, 100, and 1,000

Topic C: Multiplication of up to Four Digits by Single-Digit Numbers

Topic D: Multiplication Word Problems

Topic E: Division of Tens and Ones with Successive Remainders

Topic F: Reasoning with Divisibility

Topic G: Division of Thousands, Hundreds, Tens, and Ones

Topic H: Multiplication of Two-Digit by Two-Digit Numbers

## **CHAPTER 4**

### **Angle Measure and Plane Figures**

Topic A: Lines and Angles

Topic B: Angle Measurement

Topic C: Problem Solving with the Addition of Angle Measures

Topic D: Two-Dimensional Figures and Symmetry

## **CHAPTER 5**

### **Fraction Equivalence, Ordering, and Operations**

Topic A: Decomposition and Fraction Equivalence

Topic B: Fraction Equivalence Using Multiplication and Division

Topic C: Fraction Comparison

Topic D: Fraction Addition and Subtraction

Topic E: Extending Fraction Equivalence to Fractions Greater Than 1

Topic F: Addition and Subtraction of Fractions by Decomposition

Topic G: Repeated Addition of Fractions as Multiplication

Topic H: Exploring a Fraction Pattern

## **CHAPTER 6**

### **Decimal Fractions**

Topic A: Exploration of Tenths

Topic B: Tenths and Hundredths

Topic C: Decimal Comparison

Topic D: Addition with Tenths and Hundredths

Topic E: Money Amounts as Decimal Numbers

# **CHAPTER 7**

## **Exploring Measurement with Multiplication**

Topic A: Measurement Conversion Tables

Topic B: Problem Solving with Measurement

Topic C: Investigation of Measurements Expressed as Mixed Numbers

# GRADE 5

## CHAPTER 1

### Place Value and Decimal Fractions

Topic A: Multiplicative Patterns on the Place Value Chart

Topic B: Decimal Fractions and Place Value Patterns

Topic C: Place Value and Rounding Decimal Fractions

Topic D: Adding and Subtracting Decimals

Topic E: Multiplying Decimals

Topic F: Dividing Decimals

## CHAPTER 2

### Multi-Digit Whole Number and Decimal Fraction Operations

Topic A: Mental Strategies for Multi-Digit Whole Number Multiplication

Topic B: The Standard Algorithm for Multi-Digit Whole Number Multiplication

Topic C: Decimal Multi-Digit Multiplication

Topic D: Measurement Word Problems with Whole Number and Decimal Multiplication

Topic E: Mental Strategies for Multi-Digit Whole Number Division

Topic F: Partial Quotients and Multi-Digit Whole Number Division

Topic G: Partial Quotients and Multi-Digit Decimal Division

Topic H: Measurement Word Problems with Multi-Digit Division



## **CHAPTER 3**

### **Addition and Subtraction of Fractions**

Topic A: Equivalent Fractions

Topic B: Making Like Units Pictorially

Topic C: Making Like Units Numerically

Topic D: Further Applications

## **CHAPTER 4**

### **Multiplication and Division of Fractions and Decimal Fractions**

Topic A: Line Plots of Fraction Measurements

Topic B: Fractions as Division

Topic C: Multiplication of a Whole Number by a Fraction

Topic D: Fraction Expressions and Word Problems

Topic E: Multiplication of a Fraction by a Fraction

Topic F: .....Multiplication with Fractions and Decimals as Scaling and  
Word Problems

Topic G: Division of Fractions and Decimal Fractions

Topic H: Interpretation of Numerical Expressions

## CHAPTER 5

### Addition and Multiplication with Volume and Area

Topic A: Concepts of Volume

Topic B: Volume and the Operations of Multiplication and Addition

Topic C: Area of Rectangular Figures with Fractional Side Lengths

Topic D: Drawing, Analysis, and Classification of Two-Dimensional Shapes

## CHAPTER 6

### Problem Solving with the Coordinate Plane

Topic A: Coordinate Systems

Topic B: Patterns in the Coordinate Plane and Graphing Number  
Patterns from Rules

Topic C: Drawing Figures in the Coordinate Plane

Topic D: Problem Solving in the Coordinate Plane

Topic E: Multi-Step Word Problems

Topic F: The Years In Review: A Reflection on *A Story of Units*

**FOR GRADES 6, 7 AND 8 MATH, WE USE CORE CONNECTIONS  
COURSE 1, 2 AND 3 PUBLISHED BY CMP. THE TEXTBOOKS ARE  
CURRENTLY USED BY MOST PUBLIC SCHOOL.**