

Addition & Subtraction Units in *Investigations*

3-5

Grade 3

2nd Edition

✦ **Trading Stickers, Combining Coins** Addition, Subtraction and the Number System

In this first of three addition, subtraction, and number system unit, students solve addition problems with 2- and small 3- digit numbers, solve subtraction problems involving 2-digit numbers, find combinations of numbers that add to 100, and work with coins and coin values. Their understanding of place value develops as they add and subtract 10s to and from 3-digit numbers, break 3-digit numbers into hundreds tens and ones in different ways, and solve story problems involving hundreds, tens, and ones.

✦ **Collections and Travel Stories** Addition, Subtraction and the Number System

Students practice and refine their strategies for solving addition problems with 3-digit numbers to 400 and subtraction problems with 2- and 3-digit numbers to 300. In addition to solving removal problems, they expand their understanding of subtraction as they solve comparison problems and problems in which they find the missing part of a whole. They increase their understanding of place-value as they extend their work into 3-digit numbers up to 1,000 and study the structure of 1,000.

✦ **How Many Hundreds? How Many Miles?** Addition, Subtraction and the
Number System

In this final addition and subtraction unit in Grade 3, students further refine their addition strategies with problems involving any 3-digit numbers as they identify and name these strategies. They continue to solve a variety of subtraction problem types and examine their strategies for subtraction of any 2- and 3-digit numbers in greater depth. Students extend their work with place value by estimating the sum of 3 digit numbers (will the sum be more or less than 400?) and adding and subtracting multiples of 10 and 100 to and from 3-digit numbers. In this unit, students are assessed on fluency with subtraction facts.

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Grade 4

✦ Landmarks and Large Numbers Addition, Subtraction and the Number System

Students extend their knowledge of the number system by examining the structure of 10,000, and practice and refine strategies for adding and subtracting whole numbers up to 10,000. They continue to study place value by adding and subtracting multiples of 10 and 100 to numbers in the thousands, and consolidate their understanding of the operation of addition by studying a variety of addition strategies and algorithms, including the U.S. algorithm for addition. Students continue their study of subtraction by solving, representing, and discussing their strategies for a variety of subtraction problem types.

Grade 5

✦ Thousands of Miles, Thousands of Seats Addition, Subtraction and the Number System

Students study place value in large numbers by building a 10,000 chart and by adding multiples of 10 to and subtracting multiples of 10 from 4 and 5-digit numbers. Students finalize their study of subtraction by refining and gaining fluency in solving subtraction problems, including a study of the US algorithm for subtraction. Using a context of the capacities of stadiums and arenas, they solve addition and subtraction problems involving 4 and 5- digit numbers. In this unit, students also demonstrate fluency with the division facts up to $144 \div 12$.