

# Operations and Algebraic Thinking

## Contents

<b>Lesson 1 Addition Sentences</b> .....	8
<b>Objective:</b> Write and solve addition sentences.	
<b>Manipulative:</b> Cuisenaire® Rods	
<b>Lesson 2 Subtraction Sentences</b> .....	12
<b>Objective:</b> Write and solve subtraction sentences.	
<b>Manipulative:</b> Two-Color Counters	
<b>Lesson 3 Adding Three Numbers</b> .....	16
<b>Objective:</b> Compute the sum of three numbers.	
<b>Manipulative:</b> DecaDots®	
<b>Lesson 4 Associative Property</b> .....	20
<b>Objective:</b> Explore the Associative Property of Addition.	
<b>Manipulative:</b> Cuisenaire® Rods	
<b>Lesson 5 Commutative Property I</b> .....	24
<b>Objective:</b> Explore the Commutative Property of Addition.	
<b>Manipulative:</b> Snap Cubes®	
<b>Lesson 6 Commutative Property II</b> .....	28
<b>Objective:</b> Explore the Commutative Property of Addition.	
<b>Manipulative:</b> Cuisenaire® Rods	
<b>Lesson 7 Fact Families</b> .....	32
<b>Objective:</b> Identify and create fact families.	
<b>Manipulative:</b> Snap Cubes®	
<b>Lesson 8 Finding Missing Addends</b> .....	36
<b>Objective:</b> Identify missing addends by calculating the difference between an addend and the sum.	
<b>Manipulative:</b> DecaDots®	
<b>Lesson 9 Finding Missing Subtrahends</b> .....	40
<b>Objective:</b> Identify missing subtrahends by calculating the difference between the minuend and the difference.	
<b>Manipulative:</b> DecaDots®	
<b>Lesson 10 Explore Counting On</b> .....	44
<b>Objective:</b> Explore “counting on” as an addition strategy.	
<b>Manipulative:</b> Base Ten Blocks	
<b>Lesson 11 Explore Counting Back</b> .....	48
<b>Objective:</b> Explore “counting back” as a subtraction strategy.	
<b>Manipulative:</b> Snap Cubes®	
<b>Lesson 12 Add Doubles</b> .....	52
<b>Objective:</b> Identify and add doubles to sum 20.	
<b>Manipulative:</b> Pattern Blocks	
<b>Lesson 13 Comparison Subtraction</b> .....	56
<b>Objective:</b> Subtract numbers using comparison subtraction.	
<b>Manipulative:</b> Cuisenaire® Rods	
<b>Lesson 14 Connecting Addition and Subtraction</b> .....	60
<b>Objective:</b> Relate addition and subtraction facts.	
<b>Manipulative:</b> Snap Cubes®	
<b>Lesson 15 Making 10 to Add or Subtract</b> .....	64
<b>Objective:</b> Add or subtract using a make-a-10 strategy.	
<b>Manipulative:</b> Snap Cubes®	