

# Contents

<b>Series Editor's Foreword .....</b>	<b>v</b>
<b>Preface .....</b>	<b>ix</b>
<b>Chapter 1: Effectively Teaching to the CCSSM Standards .....</b>	<b>1</b>
An Inclusive Classroom Environment .....	1
A Problem-Solving Approach.....	2
Engaging with Mathematics .....	5
<b>Chapter 2: Operations and Algebraic Thinking .....</b>	<b>7</b>
Properties and Structures of Operations.....	8
Interpreting Reasonableness .....	20
Generating Patterns .....	23
Syntax of Expressions .....	26
<b>Chapter 3: Number and Operations in Base Ten .....</b>	<b>33</b>
Teaching and Learning Number and Operations in Base Ten .....	34
Rounding .....	36
Computation Using Base-Ten Principles.....	41
Reading, Writing, and Comparing Numbers .....	48
Understanding How the Base-Ten System Works .....	52
Conclusion .....	55
<b>Chapter 4: Number and Operations—Fractions .....</b>	<b>57</b>
Unit Fractions .....	60
Fraction Equivalence .....	66
Adding and Subtracting Fractions .....	68
Developing Understanding of Multiplying Fractions .....	72
Developing Understanding of Dividing Fractions .....	74
<b>Chapter 5: Measurement and Data.....</b>	<b>77</b>
Measurement and Conversion .....	79
Geometric Measurement.....	84
Representing and Interpreting Data .....	93
<b>Chapter 6: Geometry .....</b>	<b>99</b>
Classifying and Reasoning with Shapes and Their Attributes .....	101
Drawing and Identifying Lines and Angles and Classifying Shapes.....	110
Coordinate Geometry .....	112
<b>Appendix:</b> <b>CCSS Overview for Mathematics in Kindergarten through Grade 5 .....</b>	<b>117</b>
<b>References .....</b>	<b>121</b>