

# Contents

<b>INTRODUCTION</b>	<b>1</b>
Using The Book	2
Reinforcing Activities and Games	3
The Whole Group Interview	5
Informed By Research	6
<b>Foundational Experiences</b>	<b>8</b>
Introducing Fractions—The Fraction Kit	10
Finding Relationships	13
Exploring Mixed Numbers	16
Equivalency	18
Relationship of Mixed Numbers and Improper Fractions	23
<b>Working Flexibly with a Variety of Fraction Representations</b>	<b>26</b>
Representing and Naming Fractional Parts	28
Common Fractions on a Number Line	31
Comparing Common Fractions	36
<b>Conceptual Approaches to Fraction Computation</b>	<b>40</b>
Extending to Fraction Division—Dividing by Unit Fractions	42
Investigating Division Patterns and Algebraic Properties	44
Dividing a Fraction by a Whole Number	48
Investigating Fractions as Quotients	51
Adding and Subtracting Fractions	54
Missing Addend Problems	61
Multiplying Fractions—Equal Grouping Model	64
Multiplying Fractions—Area Model	68
Mixed Number Multiplication—Area Model	71
<b>Decimal Fractions</b>	<b>76</b>
Connecting Common and Decimal Fractions	78
Connecting Tenths to Hundredths	82
Exploring One-Third and Two-Thirds	87
Decimal Fractions on a Number Line	90
Comparing Decimal Fractions	95
Adding Decimal Fractions	98
Subtracting Decimal Fractions	103
Multiplying Decimal Fractions—Tenths & Hundredths	110
Decimal Fraction Division	118

# Contents

<b>Activity Sheets</b>	<b>122</b>
Number Line BLM	124
All About Tenths BLM	125
Still Tenths BLM	126
All About Hundredths BLM	127
Linking Tenths and Hundredths BLM	128
<b>Card Sets</b>	<b>130</b>
Investigating Equivalencies	132
Mixed Number—Improper Fraction Equivalencies	135
Fractions of Regions, Number Words, and Symbols	138
Common Fraction Number Line Representations	141
Division Language—Picture	144
Common Fraction Division Language	147
Addition of Common Fractions	150
Mixed Number Subtraction	153
Missing Addend	156
Common Fraction Multiplication	159
Tenths	162
Decimal Fractions and Common Fractions	165
Decimals on a Number Line	168
Common and Decimal Fractions on a Number Line	171
Bridge to One with Decimals	174
Decimal Area Multiplication	177
Decimal Fraction Division Language	180
Card Template	183
<b>Appendix</b>	<b>184</b>
Appendix A: Pre-Experiences—Making Equal-Sized Pieces	186
Appendix B: Whole Number Multiplication—Area Model	188
Appendix C: Sample Whole Group Interview Assessment Prompts	193
<b>References</b>	<b>196</b>