

Contents

<i>Foreword by Francis (Skip) Fennell</i>	ix
<i>Introduction</i>	xi
<i>How to Use This Book</i>	xiii
<i>Essential Strategies</i>	xiv
<i>Correlation with NCTM's Principles and Standards and Curriculum Focal Points</i>	xix

Chapters

1	The Problem with Partitioning: It's Not Just About Counting the Pieces	1
2	Top or Bottom: Which One Matters? Helping Students Reason About Generalizations Regarding Numerators and Denominators	15
3	Understanding Equivalency: How Can Double Be the Same?	31
4	Fraction Kits: Friend or Foe?	47
5	Is $\frac{1}{2}$ Always Greater than $\frac{1}{3}$? The Importance of Context in Identifying the Unit	61
6	How Come $\frac{1}{5} \neq .15$? Helping Students Make Sense of Fraction and Decimal Notation	73
7	The Multiple Meanings of Fractions: Beyond Pizzas and Pies	89
8	Comparing Fractions: Do You Always Need a Common Denominator? . . .	101
	<i>Acknowledgments</i>	115
	<i>Appendix: Correlations with Curricula</i>	117
	<i>Everyday Mathematics</i>	117
	<i>Investigations in Number, Data, and Space</i>	119
	<i>EnVision Math</i>	121

Reproducibles

- 1a: Shading or Showing Fractional Parts: Unpartitioned/124
- 1b: Shading or Showing Fractional Parts: Unpartitioned/125
- 1c: Shading or Showing Fractional Parts: Partitioned/126
- 1d: Shading or Showing Fractional Parts: Unequally Partitioned/127
- 1e: Fractions with Cuisenaire Rods/128

- 2a: 12-cm Number Lines/130
- 2b: Left Half of Two-Unit Number Lines/131
- 2c: Right Half of Two-Unit Number Lines/132

- 3a: Measuring with Cuisenaire Rods/133
- 3b: Left Half of Two-Unit Number Line/134
- 3c: Right Half of Two-Unit Number Line/135
- 3d: Centimeter-Squared Paper/136
- 3e: Equivalent Fractions on the Number Line/137
- 3f: Equivalent Fraction Cards/139
- 3g: Equivalent Fraction Cards/140

- 4a: Brick by Brick/141
- 4b: Pattern Block Fractions/143

- 5a: “What Do You Call the _____?”/144

- 6a: Double Number Lines/145
- 6b: Fraction/Decimal Cards/146
- 6c: Fraction/Decimal Cards/147
- 6d: Fractions and Decimals on the Number Line/148
- 6e: Fractions and Decimals Flip Cards/149

- 7a: Fraction Representation Cards/150

- 8a: Left Half of Number Line/151
- 8b: Right Half of Number Line/152
- 8c: Fraction Cards/153
- 8d: Fraction Cards/154

References 155

Index 159