

Building on Numbers You Know

(Computation and Estimation Strategies)

Related *SFAW Mathematics* Chapters

Place Value, Adding, and Subtracting (Chapter 1)

Multiplying Whole Numbers and Decimals (Chapter 2)

Dividing with One-Digit Divisors (Chapter 3)

Dividing with Two-Digit Divisors (Chapter 4)

Investigation 1: Exploring Distance Between Numbers

Session 1: Reasoning About Multiples

Session 2: Counting Puzzles

Sessions 3 and 4: Exploring Patterns of Multiples

Session 5: Multiple Towers

Sessions 6 and 7: The Digits Game

Session 8: Subtraction Strategies

SFAW lessons replaced:

1-7 Adding and Subtracting Mentally

1-9 Estimating Sums and Differences

1-11 Adding and Subtracting Whole Numbers

1-15 Problem-Solving Applications: Cruise Ships

SFAW lessons to be taught/incorporated:

1-1 Place Value Through Billions

1-3 Place Value Through Thousandths

1-4 Comparing and Ordering Decimals

1-6 Problem-Solving Skill: Read and Understand

1-8 Rounding Whole Numbers and Decimals

1-10 Problem-Solving Skill: Plan and Solve

1-12 Adding Decimals

1-13 Subtracting Decimals

1-14 Problem-Solving Skill: Look Back and Check

3-10 Factors and Divisibility

3-11 Prime and Composite Numbers

Investigation 2: Multiplication and Division Situations

Sessions 1 and 2: Multiplication and Division Strategies

Session 3: Division Strategies

Session 4: What Should We Do with the Extras?

Sessions 5 and 6: Relating Multiplication to Division

Session 7 (Excursion): Problems About Our School

SFAW lessons replaced:

2-1 Multiplication Patterns

2-5 Choose a Computation Method

3-1 The Meaning of Division

3-2 Division Patterns

3-5 Understanding Division

3-6 Dividing Whole Numbers

3-7 Zeros in the Quotient

3-8 Dividing Larger Dividends

3-9 Dividing Money

3-12 Problem-Solving Skill: Interpreting Remainders

SFAW lessons to be taught/incorporated:

2-6 Problem-Solving Strategy: Make an Organized List

3-4 Problem-Solving Strategy: Look for a Pattern

3-13 Order of Operations

3-14 Graphing Ordered Pairs

3-15 Rules, Tables, and Graphs

3-16 Problem-Solving Applications: High-Speed Trains

Investigation 3: Ways to Multiply and Divide

Sessions 1, 2, and 3: Multiplication Clusters

Sessions 4, 5, and 6: Division Clusters

Sessions 7, 8, and 9: How Did I Solve It?

Session 10: Ways to Multiply and Divide

SFAW lessons replaced:

2-2 Estimating Products

2-3 Mental Math: Using the Distributive Property

2-4 Multiplying Whole Numbers

4-1 Dividing by Multiples of 10

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SFAW lessons to be taught/incorporated:

- 2-7 Decimal Patterns
- 2-8 Estimating Decimal Products
- 2-9 Multiplying Whole Numbers and Decimals
- 2-10 Using Grids to Multiply Decimals by Decimals
- 2-11 Multiplying Decimals by Decimals
- 2-12 Variables and Expressions
- 2-13 Problem-Solving Skill: Translating Words into Expressions
- 2-14 Find a Rule
- 2-15 Solving Equations
- 2-16 Problem-Solving Applications: Weight

Investigation 4 (Excursion): A Million Dots

- Session 1: Arrays of Dots
- Session 2: How Big Is a Million?

SFAW lessons replaced:

- 1-2 Comparing and Ordering Whole Numbers
- 1-5 Place-Value Patterns

Investigation 5: Understanding Operations

- Sessions 1 and 2: The Estimation Game
- Session 3: Solving Difficult Problems
- Sessions 4, 5, and 6: Exploring Operations
- Session 7: Assessing Students' Understanding

SFAW lessons replaced:

- 3-3 Estimating Quotients
- 4-2 Estimating with Two-Digit Divisors
- 4-4 Dividing Whole Numbers by Two-Digit Divisors
- 4-5 Dividing Larger Numbers
- 4-6 Dividing: Choose a Computation Method
- 4-7 Dividing with Zeros in the Quotient
- 4-8 Problem-Solving Skill: Multiple-Step Problems

SFAW lessons to be taught/incorporated:

- 4-3 Problem-Solving Strategy: Try, Check, and Revise
- 4-9 Dividing Decimals by 10, 100, and 1,000
- 4-10 Dividing Money by Two-Digit Divisors
- 4-11 Dividing Decimals by Whole Numbers
- 4-12 Problem-Solving Applications: Animal Speeds

End-of-Unit Assessment Options

- Investigations *Assessment Sourcebook*, pp. 20–24
 - *SFAW Mathematics* Chapters 1, 2, 3, and 4 Tests, Student Book pp. 52, 118, 188, and 246
 - *SFAW ExamView®* Test Generator: Chapters 1, 2, 3, and 4
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