



SCOTT FORESMAN Investigations

IN NUMBER, DATA, AND SPACE®

As a way to become familiar with this unit:

- Read the selections
- Try/think through the Activities
- Review the Assessment opportunities
- Do the end-of-unit assessment tasks

How Many Packages? How Many Groups?

This unit is the 8th of 9 units in fourth grade. It is part of the K-5 number and operations strand, and is the 3rd of 3 multiplication and division units at this grade. This unit builds on the work of the previous units in this strand. Before teaching this unit, perhaps after working through this *Where to Start*, read *Mathematics in This Unit*, p. 10.

Investigation 1: Multiplication with 2-Digit Numbers

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 23)
- Investigation 1 Planner (p. 24)

The following activities and information support the key math ideas:

- Activity: Estimating 2-Digit Multiplication Problems (p. 33) and Discussion: Breaking Numbers Apart (p. 36)
- Teacher Note: Breaking Numbers Apart to Solve 2-Digit Multiplication Problems (p. 115)
- Activity: Returning to Cluster Problems (p. 40) and Discussion: Representing 42×38 (p. 41)
- Teacher Note: Representing Multiplication with Arrays (p. 118)

Investigation 2: Strategies for Multiplication

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 59)
- Investigation 2 Planner (p. 60)

The following activities and information support the key math ideas:

- Activity: Making an Easier Problem (p. 63) and Discussion: How Did You Finish the Problem? (p. 64)
- Dialogue Box: How Did You Finish the Problem? (p. 132)

Preparation

- Materials to Gather and Prepare (pp. 25, 61, 87)

Assessment

- Assessment in This unit (p. 14)
- Assessment Activity (p. 51)
- Assessment Activity (p. 83) and Teacher Note (p. 120)
- End-of-Unit Assessment Activities (p. 111) and Teacher Note (p. 126)

Practice & Review

- Ten-Minute Math (p. 20)
- Practice and Review (p. 21)

- Math Workshop: Solving Multiplication Problems (p. 70) and Discussion: Keeping Track of the Groups (p. 75)

Investigation 3: Solving Division Problems

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 85)
- Investigation 3 Planner (p. 86)

The following activities and information support the key math ideas:

- Activity: How Many Teams? (p. 89) and Discussion: How Many Teams? (p. 91)
- Math Workshop: Using Multiples of 10 (p. 95)
- Discussion: Strategies for Solving Division Problems (p. 103)
- Teacher Note: Division Strategies (p. 123)

Teacher Notes and **Dialogue Boxes** are important sources of information about mathematics content and about students' thinking about mathematical ideas. Each time you teach this unit, you can read more of this information.