



# 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

## Solving Story Problems

This unit is the 3<sup>rd</sup> of 9 units in first grade. It is part of the K-5 number and operations strand, and is the 2<sup>nd</sup> of units at this grade that focus on addition, subtraction, and the number system. 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: Combinations

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 23)
- Investigation 1 Planner (pp. 24 & 26)

The following activities and information support the key math ideas:

- Teacher Note: About the How Many of Each? Problems in This Unit (p. 177)
- Discussions: How Many Did We Find? (p. 33) and Strategies for Finding Many Combinations of a Number (p. 46)
- Math Workshop: Games About Missing Parts (p. 37) and Discussion: Strategies for How Many Am I Hiding? (p. 39)
- Activities: Introducing Dot Addition (p. 50) and Discussing Dot Addition (p. 53)
- Math Workshop: Games that Encourage Counting On (p. 63) and Discussion: Counting On (p. 65)
- Teacher Notes: Supporting Students as They Solve Story Problems (p. 190) and Supporting Students as They Record Story Problem Work (p. 192)

### Investigation 2: Introducing Subtraction

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 77)
- Investigation 2 Planner (p. 78)

### Preparation

- Materials to Gather and Prepare (pp. 25, 27, 79, 103, 105, 135, 137)
- Learn the variations of Classroom Routine: *Start With/Get To* in Implementing Investigations in Grade 1 (p. 25)
- Learn the game variations of *Roll and Record*, and *Five-in-a-Row* (p. 57)
- Review the routine for solving story problems aloud (p. 60)

### Assessment

- Assessment in This Unit (p. 14)
- Assessment Activity (p. 72) and Teacher Note (p. 194)
- Assessment Activity (p. 128) and Teacher Note (p. 200)
- Assessment Activities (pp. 145, 152, 155, 160)
- Assessment Activity (p. 167) and Teacher Note (p. 205)
- End-of-Unit Assessment Activities (p. 172) and Teacher Note (p. 210)

### Practice & Review

- Classroom Routines (p. 20)
- Practice and Review (p. 21)

The following activities and information support the key math ideas:

- Activity: Subtraction Story Problems (p. 81)
- Activity: Introducing Subtraction Games (p. 82)
- Discussions: Strategies for Subtraction (p. 90), And More Strategies for Subtraction (p. 98)
- Dialogue Box: Naming and Comparing Strategies for Subtracting (p. 229)

### **Investigation 3: Working with Addition and Subtraction**

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 101)
- Investigation 3 Planner (pp. 102 & 104)

The following activities and information support the key math ideas:

- Activity: Solving Story Problems (p. 108)
- Activities: Introducing Today's Number (p. 111) and Discussing Ways to Make Today's Number (p. 115)
- Math Workshop Activity 2C: Games (p. 120)
- Discussions: Strategies for Adding (p. 124) and Strategies for Subtracting (p. 130)

### **Investigation 4: Counting Larger Amounts**

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 133)
- Investigation 4 Planner (pp. 134 & 136)

The following activities and information support the key math ideas:

- Activities: Introducing How Big Are Our Feet? (p. 139) and Covering and Counting (p. 145)
- Discussion: Counting Larger Amounts (p. 146)
- Activities: Counting to 100: Making a 100 Chart (p. 158) and Introducing Missing Numbers (p. 162)
- Math Workshop: More Practice with Higher Numbers (p. 159)

**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.