



# 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

## Measuring Polygons

This unit is the 5<sup>th</sup> of 9 units in fifth grade. It builds on the work of the previous units in the K-5 geometry and measurement strand. Before teaching this unit, perhaps after working through this *Where to Start*, read *Mathematics in This Unit*, p. 10.

### Investigation 1: Polygons: Names, Properties, and Angles

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 19)
- Investigation 1 Planner (pp. 20 & 22)

The following activities and information support the key math ideas:

- Teacher Note: Classification of Triangles and Quadrilaterals (p. 137)
- Activity: Some Figures Have Many Names (p. 40)
- Discussion: Relationships Among Quadrilaterals (p. 43)
- Activities: Introducing Angles in the Power Polygons (p. 51) and Angles in the Power Polygons (p. 52)
- Dialogue Box: Finding Angle Measures of Power Polygons (p. 163)

### Investigation 2: Finding Perimeter and Area of Related Rectangles

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 65)
- Investigation 2 Planner (pp. 66 & 68)

The following activities and information support the key math ideas:

- Activity: Doubling Squares (p. 77)
- Dialogue Box: Doubling the Dimensions (p. 165)

### Preparation

- Materials to Gather and Prepare (pp. 21, 23, 67, 69)

### Assessment

- Assessment in This Unit (p. 14)
- Assessment Activity (p. 63) and Teacher Note (p. 143)
- Assessment Activity (p. 103) and Teacher Note (p. 149)
- End-of-Unit Assessment Activities (p. 134) and Teacher Note (p. 155)

### Practice & Review

- Ten-Minute Math (p. 16)
- Practice and Review (p. 17)

- Activity: Rearranging Rectangles (p. 90)
- Discussion: Why is the Area the Same? (p. 92)
- Activities: Introducing Fencing a Garden (p. 96) and Fencing a Garden (p. 97)

### Investigation 3: Similarity

These pages provide an overview of this Investigation:

- Mathematical Emphases (p. 105)
- Investigation 3 Planner (p. 106)

The following activities and information support the key math ideas:

- Teacher Note: Similar Shapes (p. 152)
- Activity: Introducing Similarity (p. 109)
- Activity: Building Similar Polygons (p. 111)
- Discussions: Comparing Similar Figures (p. 112) and About Growing Shapes (p. 125)

**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.