



## Place Value and Fractions

The concept of place value (ones, tens, hundreds, and so on) that children have worked on since *Kindergarten Everyday Mathematics* will be taught on a more formal level in this unit. Patterns on number grids will be used to reinforce place-value concepts. For example, children may be asked to identify a hidden number on the number grid and to describe the strategies used to find and name that number. Once they are able to do this, they will solve number-grid puzzles—pieces of a number grid with all but a few numbers missing. Here are a few examples of number-grid puzzles:

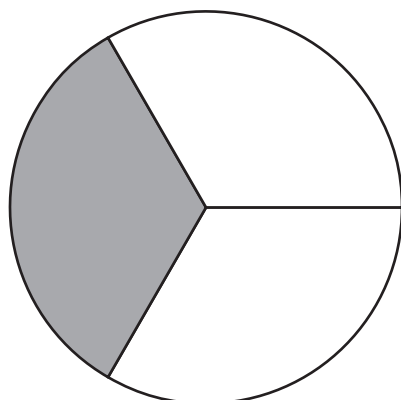
53

23		
43		
73		

	59	
	69	
	79	
		90

Children know that all numbers are written with one or more of these 10 digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. In order to reinforce this understanding, children will identify the place value of different digits in 2- and 3-digit numbers. Help your child remember that these same digits are also used to express quantities less than 1 with fractions.

Later in this unit, children will extend their understanding of fraction concepts as they see relationships among fraction words, meanings, and symbols.



one-third

$$\frac{1}{3}$$

**Please keep this Family Letter for reference as your child works through Unit 9.**

## Vocabulary

Important terms in Unit 9:

**denominator** The bottom number in a fraction. The number of equal parts into which the whole is divided.

$$\frac{2}{4}$$

**numerator** The top number in a fraction. The number of equal parts of the whole that are being considered.

**2-digit numbers** In base 10, numbers from 10 through 99 that have two digits each.

**3-digit numbers** In base 10, numbers from 100 through 999 that have three digits each.

## Do-Anytime Activities

To work with your child on concepts taught in this unit and in previous units, try these interesting and rewarding activities:

1. Ask questions, such as the following: *What is the fraction word for each of 4 equal parts of something?* (fourths) *Each of eight equal parts?* (eighths)
2. Give your child several pieces of paper to fold into halves, fourths, or eighths. He or she can label each part with the appropriate fraction symbol ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ).
3. Using a set of numbers, have your child write the largest and smallest 2- and 3-digit whole numbers possible. For example, using 5, 2, and 9, the largest whole number is 952; the smallest is 259.
4. Say a 2- or 3-digit number. Then have your child identify the actual value of the digit in each place. For example, in the number 952, the value of the 9 is 900, the value of the 5 is 50, and the value of the 2 is 2 ones, or two. An important goal of *Everyday Mathematics* is for children eventually to think of any digit in a multidigit number by its place-value name.

## Building Skills through Games

In Unit 9, your child will practice addition skills by playing the following games:

**Number-Grid Game** See *My Reference Book*, pages 142–143. Each player rolls a die and moves his or her marker on the number grid. The first player to get to 110 or past 110 wins.

**Fact Power Game** Players take turns rolling a die and moving their markers on the game mat. Players then say the sum for the addition fact on the game mat.

## As You Help Your Child with Homework

As your child brings assignments home, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through the Home Links in this unit.

### Home Link 9•1

- Your child should complete the number grid from 101–200.
- 269; 272; 273

### Home Link 9•2

- 41
- 71
- 23
- 72
- 78
- 66
- 65
- 79
- 38
- 31
- 50

### Home Link 9•3

- 43, 63, 73, 83
- 24, 25 (across); 33, 53, 63, 73 (down); 64 (across)
- 59, 69, 89 (down); 78, 80 (across); 88, 90 (across)
- Sample answers: square, rectangle, rhombus, trapezoid

### Home Link 9•4

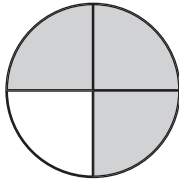
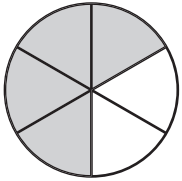
- ; 77
- ; 58
- 71
- 75
- 59
- 20

### Home Link 9•5

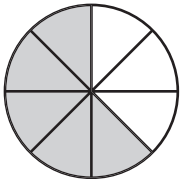
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- 
- 
- 
- 
- no
- no
- no

**Home Link 9•6**

1.  $\frac{1}{5}$       2.  $\frac{2}{3}$       3.  $\frac{5}{6}$   
 4. Sample answer:      5. Sample answer:



6. Sample answer:



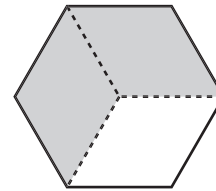
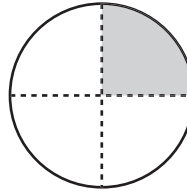
7. Possible answers: window, table, pillow, picture frame

**Home Link 9•7**

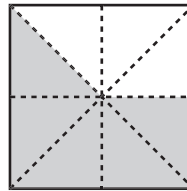
1. Sample answer: A; the half is larger.  
 2.  $\frac{1}{3}$       3.  $\frac{1}{4}$   
 4.  $7 + 6 = 13$ ;  $13 - 6 = 7$ ;  $13 - 7 = 6$

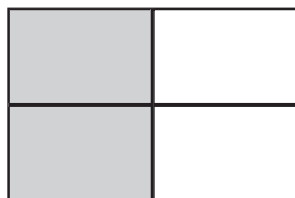
**Home Link 9•8**

1. Sample answer:      2. Sample answer:



3. Sample answer:      4. hexagon, square



5.   $\frac{2}{4}$

6. 569      7. 734