# Family Letter

Unit 5: Place Value in Whole Numbers and Decimals

In Unit 5, children will review place value in whole numbers through ten-thousands and then explore place value to the millions. They will practice reading, writing, and ordering 4- and 5-digit numbers before moving on to larger numbers.

To understand real-life applications of large numbers, children will study population data about U.S. cities. They will also work with large numbers as they approximate their own ages to the minute.
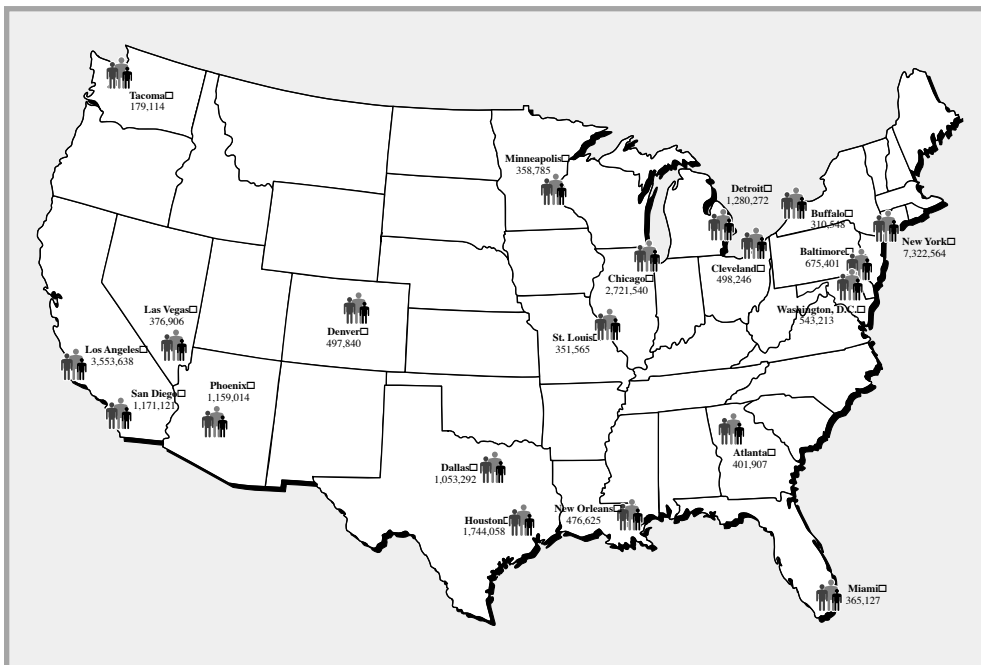
In second grade, children studied decimals to the hundredths place by working with money. In this unit, they will gradually extend their knowledge of decimals through thousandths. First, children will use concrete models, such as base-10 blocks. Then they will write decimal values using three different kinds of notation. For example, 0.1, one-tenth, and $\frac{1}{10}$ are all names for the same number.

Later in this unit, children will compare and order numbers using the less-than ($<$), greater-than ($>$), and equal ($=$) symbols.

Please keep this Family Letter for reference as your child works through Unit 5.

Use with Lesson 4.10.

Vocabulary

Important terms in Unit 5:

The *value* of each digit in a numeral is determined by its *place* in the numeral. Use the following chart to identify the **thousands, hundreds, tens, ones, tenths, hundredths,** and **thousandths** values in the numeral 4,815.904 (read as "four thousand, eight hundred fifteen, and nine hundred four thousandths"):

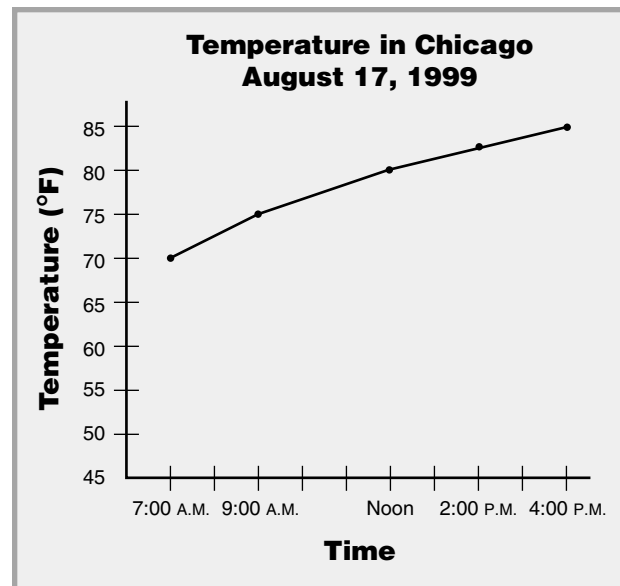| thousands	hundreds	tens	ones		tenths	hundredths	thousandths
4	8	1	5	.	9	0	4
Each thousand is equal to one thousand times the unit value.	Each hundred is equal to one hundred times the unit value.	Each ten is equal to ten times the unit value.	Each one is equal to the unit value.		Each tenth is equal to $\frac{1}{10}$ of the unit value.	Each hundredth is equal to $\frac{1}{100}$ of the unit value.	Each thousandth is equal to $\frac{1}{1,000}$ of the unit value.
(4,000)	(800)	(10)	(5)		$\left(\frac{9}{10}\right)$	$\left(\frac{0}{100}\right)$	$\left(\frac{4}{1,000}\right)$

maximum The largest amount, or the greatest number in a set of data.

millimeter In the metric system, a unit of length equivalent to $\frac{1}{10}$ of a centimeter and $\frac{1}{1,000}$ of a meter.

pie graph A graph in which a circle is divided into parts to represent the parts of a set of data. The circle represents the whole set of data.
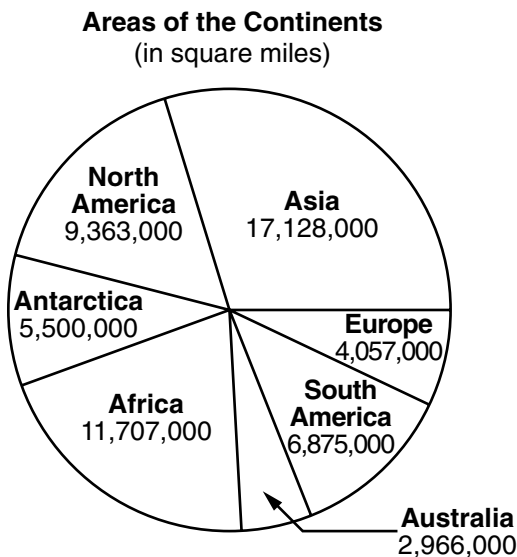
line graph A drawing that shows the relationships among data by using a set of points connected by line segments; often used to show trends.

Areas of the Continents
(in square miles)

North America 9,363,000
Asia 17,128,000
Antarctica 5,500,000
Europe 4,057,000
Africa 11,707,000
South America 6,875,000
Australia 2,966,000

Temperature in Chicago
August 17, 1999

Use with Lesson 4.10.

Do-Anytime Activities

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

1 Dictate large numbers for your child to write. *Examples:* 4,123; 10,032; 2,368,502.

2 Display similar multidigit numbers on a calculator for your child to read.

3 Together, write 5 multidigit numbers in order from smallest to largest.

4 Start at any whole number and, using a calculator, count on by increments of 0.01 or 0.1.

Building Skills through Games

In Unit 5, your child will practice numeration and computation skills by playing the following games. For detailed instructions, see the *Student Reference Book.*

Baseball Multiplication

Players use multiplication facts to score runs. Team members take turns "pitching" by rolling two dice to get two factors. Then players on the "batting" team take turns multiplying the two factors and saying the product.

Number Top-It

As players pick each card, they must decide in which place-value box (from ones to ten-thousands at first, and then on to hundred-thousands) to place the card so that they end up with the largest number.

Beat the Calculator

A "Calculator" (a player who uses a calculator) and a "Brain" (a player who solves the problem without a calculator) race to see who will be first to solve multiplication problems.

Division Arrays

Players make arrays with counters using number cards to determine the number of counters and a toss of a die to determine the number of rows.

As You Help Your Child with Homework

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

Home Link 5.1

1. 7,889; 8,889; 9,889; 10,889; 11,889; 12,889

2. 8,789; 8,889; 8,989; 9,089; 9,189; 9,289

3. 8,879; 8,889; 8,899; 8,909; 8,919; 8,929

Home Link 5.2

1. <   **2.** >   **3.** <

4. <   **5.** >   **6.** <

7. 3,689   **8.** 9,863   **10.** 4 thousands, or 4,000

11. 5 ten-thousands, or 50,000

12. 0 tens, or 0

13. 50,100; 51,100; 52,100; 53,100

Home Link 5.3

1. largest: 7,654,321
smallest: 1,234,567
total: 8,888,888

3.   7,037,562   **4.** 42,876
7,000,007
4,056,211   **5.** 7,037,562
104,719
42,876   **6.** 4,056,211
25,086
9,603   **7.** 7,000,007
784

Home Link 5.4

1. 7 continents   **2.** Asia   **3.** Australia

4. Antarctica, North America, and South America

5. Europe

6. North America

7. Africa

Home Link 5.7

1. $\frac{3}{10}$ or $\frac{30}{100}$; 0.3 or 0.30   **2.** $\frac{9}{100}$; 0.09

3. $\frac{65}{100}$; 0.65   **4.** 0.3; 0.65; 0.65

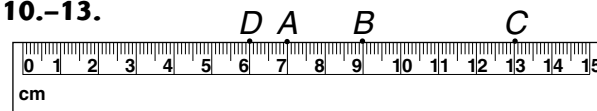**5.**   **6.**   **7.**
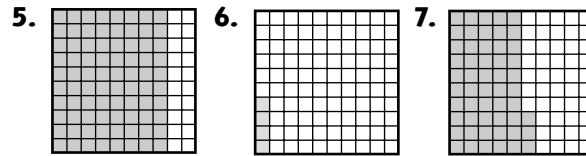
8. 0.04, 0.53, 0.8

Home Link 5.8

1. 57 hundredths; 5 tenths 7 hundredths

2. 70 hundredths; 7 tenths 0 hundredths

3. 4 hundredths; 0 tenths 4 hundredths

4. 0.23   **5.** 8.4   **6.** 30.20   **7.** 0.05

8. 0.4, 0.5, 0.6   **9.** 0.04, 0.05, 0.06

10. 1.00, 1.10, 1.20   **11.** 0.10, 0.11, 0.12

12. twelve-hundredths   **13.** six and one-tenth

Home Link 5.9

4. 0.6   **5.** 0.4   **6.** 0.17

7. 0.53   **8.** 0.2   **9.** 0.99

10.–13.

Home Link 5.10

2. a. 2 **b.** 10 **c.** 20 **d.** 100 **e.** 200 **f.** 600

3. a. 30 centimeters **b.** 0.3 meter **c.** 300 millimeters

Home Link 5.11

1. <   **2.** <   **3.** >   **4.** =

5. >   **6.** <   **7.** =   **8.** <

9. 9 hundredths, or 0.09   **10.** 3 ones, or 3

11. 8 thousandths, or 0.008 **12.** 6.59, 6.60, 6.61

13. 1.03, 1.13, 1.23   **14.** 3.009, 3.010, 3.011

15. 4.4   **16.** 4.17   **17.** 9.0   **18.** 6.03

19. 8.1   **20.** 5.53   **21.** 2.9   **22.** 7.2