

HOME LINK
9•10

Unit 10: Family Letter



Decimals and Place Value

In this unit, children will review money concepts, such as names of coins and bills, money exchanges, and equivalent amounts. They will pretend to pay for items and to make change.

The unit also focuses on extending work with fractions and money by using decimal notation. Children will use calculators for money problems and estimation.

Later in this unit, children will work with place-value notation for 5-digit numbers. Here, as previously, the focus remains on strategies that help children automatically think of any digit in a numeral in terms of its value as determined by its place. For example, children will learn that in a number like 7,843, the 8 stands for 800, not 8, and the 4 for 40, not 4.

50¢

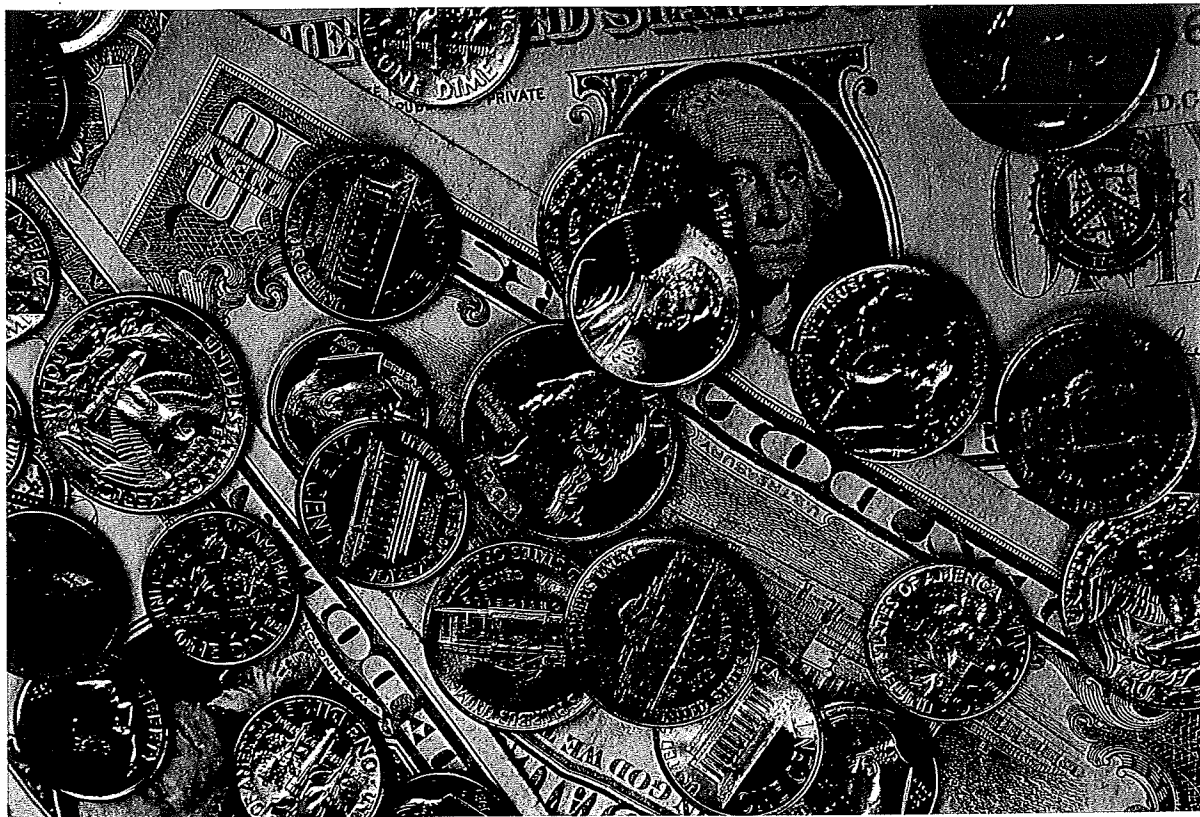
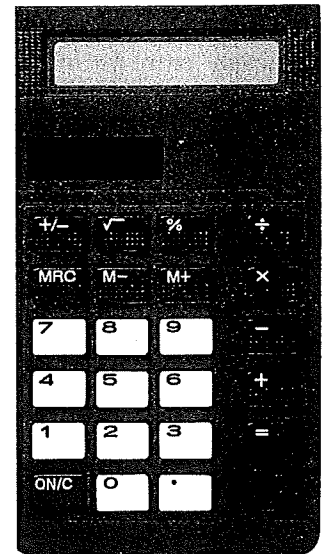
50 cents

 $\frac{1}{2}$ of a dollar

\$0.50

fifty cents

(D) (D) (D) (D) (D)

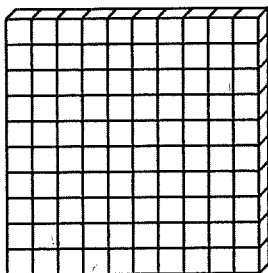


Vocabulary

Important terms in Unit 10:

decimal point A mark used to separate the ones and tenths places in decimals. A decimal point separates dollars from cents in money notation. The mark is a dot in the U.S. customary system and a comma in Europe and some other countries.

flat In *Everyday Mathematics*, the base-10 block consisting of one hundred 1-centimeter cubes.



long In *Everyday Mathematics*, the base-10 block consisting of ten 1-centimeter cubes.



cube In *Everyday Mathematics*, the smaller cube of the base-10 blocks, measuring 1 centimeter on each edge.



place value A system that gives a digit a value according to its position in a number. In our standard *base-10* (decimal) system for writing numbers, each place has a value 10 times that of the place to its right and one-tenth the value of the place to its left. The chart below illustrates the place value of each digit in 7,843.

thousands	,	hundreds	tens	ones
7	,	8	4	3

Building Skills through Games

In Unit 10, your child will build his or her understanding of fractions and money by playing the following games:

Fraction Top-It

Players turn over two fraction cards and compare the shaded parts of the cards. The player with the larger fraction keeps both cards. The player with more cards wins.

Money Exchange Game

Players roll a die and put that number of \$1 bills on their Place-Value Mats. Whenever possible, they exchange ten \$1 bills for one \$10 bill. The first player to make an exchange for one \$100 bill wins.

Pick-a-Coin

Players create coin collections based on rolls of a die. Players try to get the largest possible values for their collections.

Spinning for Money

Players "spin the wheel" to find out which coins they will take from the bank. The first player to exchange his or her coins for a dollar wins.

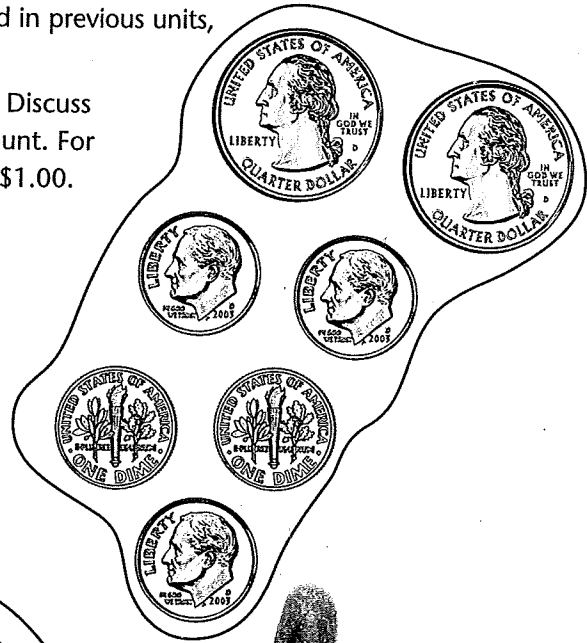
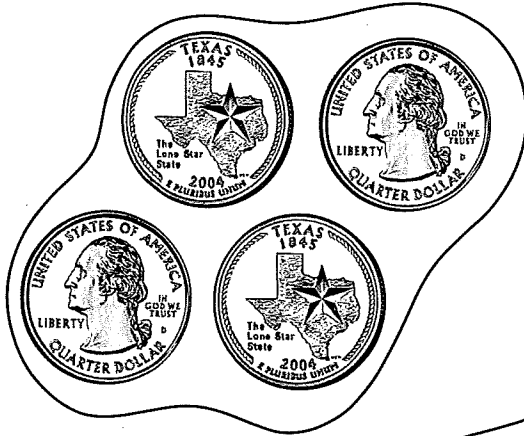
Equivalent Fractions Game

Players take turns turning over Fraction Cards and try to find matching cards that show equivalent fractions.

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. Collect a variety of coins and help your child count them. Discuss what other coin combinations would equal the same amount. For example, each group of coins shown on this page equals \$1.00.



2. Write a 4-digit number, such as 2,581. Have your child tell you the place value of each digit. Rearrange the digits several times, pointing out the change in place value for each of the new number's digits. In 2,581, the 2 stands for 2,000; the 5, 500; the 8, 80; and the 1, 1.
3. Ask your child to add up grocery receipts by using a calculator.

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 10•1

- 10 pennies = 10¢, or \$0.10
10 nickels = 50¢, or \$0.50
10 dimes = \$1.00
10 quarters = \$2.50
10 half-dollars = \$5.00
Total = \$9.10

Home Link 10•2

- \$3.57 2. \$3.55 3. \$0.52 4. \$0.08
- Sample answers: $\$1$ $\$1$ \textcircled{Q} \textcircled{Q} \textcircled{D} \textcircled{P} \textcircled{P} \textcircled{P} \textcircled{P} or
 $\$1$ \textcircled{Q} \textcircled{Q} \textcircled{Q} \textcircled{Q} \textcircled{D} \textcircled{D} \textcircled{D} \textcircled{D} \textcircled{N} \textcircled{N} \textcircled{N} \textcircled{N} \textcircled{P} \textcircled{P} \textcircled{P} \textcircled{P}
- 180 7. 55

Home Link 10•3

- \$0.06; \$0.50; \$1.30; \$1.50; \$3.36
- 303 4. 197

Home Link 10•4

- 1.09; 2.5; 0.98; 3.18; 0.06
- 76 4. 72 5. 44 6. 18

Home Link 10•5

- \$0.70 2. \$2.60 3. \$1.00
- \$1.30 5. \$4.00 6. \$1.20
- \$2.30 8. $\$1.30 + \$0.50 = \$1.80$
- $\$0.80 + \$0.40 = \$1.20$
- $\$0.70 + \$0.90 = \$1.60$
- $\$1.40 + \$0.80 = \$2.20$

Home Link 10•7

- 17 sq cm 2. 23 cm² 3. 11 square cm
- 9 cm² 5. 85 6. 29

Home Link 10•8

- ④62 2. ①, ③26 3. ⑤, ⑦06 4. ⑧69
- ⑤, ②, ③04 6. ④, ⑤67 9. 1,183 10. 1,204
- 158 12. 188 13. 29 14. 380

Home Link 10•9

- 0; 100; 200; 300; 400; 500; 600; 700; 800; 900; 1,000
- 0; 1,000; 2,000; 3,000; 4,000; 5,000; 6,000; 7,000; 8,000; 9,000; 10,000

3.

Number	10 More	100 More	1,000 More
32	42	132	1,032
146	156	246	1,146
309	319	409	1,309
1,468	1,478	1,568	2,468
10,037	10,047	10,137	11,037

Home Link 10•10

- 72,469 4. 72,569; 75,469; 72,369; 69,469
- 76 6. 49 7. 225 8. 170

Home Link 10•11

- 9 2. 15 3. 13 4. 6
- $13 - (9 + 2) = 2$
- $(28 - 8) - 4 = 16$
- $(150 - 70) - 40 = 40$
- $800 - (200 + 300) = 300$

9. **15**

$$\begin{aligned} &\cancel{25 - (15 + 5)} \\ &(25 - 15) + 5 \\ &(17 - 9) + 7 \\ &\cancel{17 - (9 + 7)} \\ &(3 + 6) + 6 \\ &3 + (6 + 6) \end{aligned}$$

10. **100**

$$\begin{aligned} &(50 + 150) - 100 \\ &50 + (150 - 100) \\ &\cancel{400 - (300 - 200)} \\ &\cancel{(400 - 300) + 200} \end{aligned}$$