**HOME LINK 4·13**

Unit 5: Family Letter

Place Value, Number Stories, and Basic Facts

As their work in mathematics progresses, children are beginning to use larger numbers. In Unit 5, children will begin to explore the system we use for writing large numbers by focusing on the idea of *place value*. For example, in the number 72, 7 is in the tens place, so there are "7 tens," and 2 is in the ones place, so there are "2 ones." Children will use base-10 blocks to represent numbers and to find the sums of two numbers. They will also use place value to determine "greater than" and "less than" relationships.
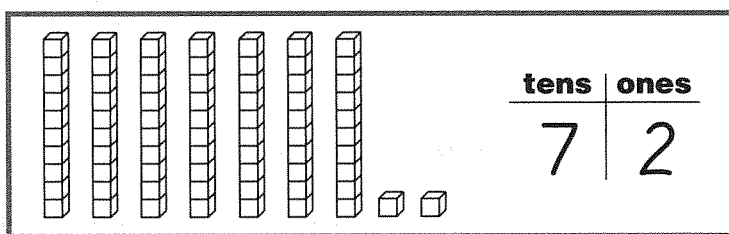
Later in this unit, children will continue to work with addition facts. Shortcuts for learning facts will be introduced. One shortcut is the *turn-around* rule, which states that the order in which numbers are added does not change the sum. For example, 4 + 3 and 3 + 4 both equal 7. Your child will also learn the meaning of adding 0 and 1 to any number. Knowing these shortcuts will make the task of learning addition facts easier.

turn-around addition facts

Children will also practice place value and addition and subtraction facts by acting out number stories. They will act out these stories using concrete objects and will begin to represent the stories with *number models*. (See this unit's vocabulary list for more information on number models.)

Children have explored many number patterns in previous lessons. *"What's My Rule?"* is a routine introduced in this unit and found throughout *Everyday Mathematics* that provides practice with number patterns and number relationships. You will receive more detailed information about this routine when we begin to use it in class.

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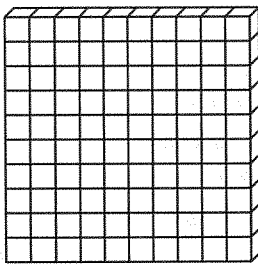
Vocabulary

Important terms in Unit 5:

cube In *Everyday Mathematics*, a base-10 block that represents 1.

long In *Everyday Mathematics*, a base-10 block that represents 10.

flat In *Everyday Mathematics*, a base-10 block that represents 100.

place value In our standard, base-10 system for writing numbers, each place has a value 10 times that of the place to its right and 1 tenth the value of the place to its left. For example, in the number 54, the 5 represents tens, and the 4 represents ones.

254

hundreds   tens   ones
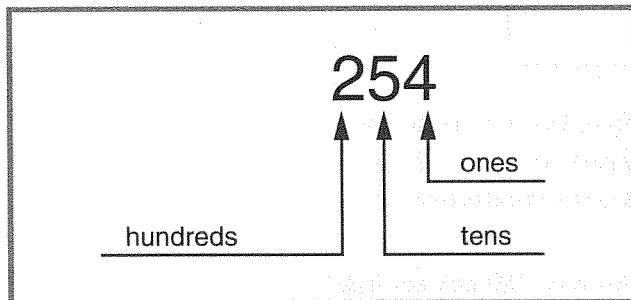
number model A number sentence that models a number story.

For example, $7 + 3 = 10$

Unit
lions

is a number model for the number story:

Seven lions are lying in the sun. Three more lions join them. How many lions are there altogether?

turn-around addition facts A pair of addition facts in which the order of the addends is reversed. For example, $5 + 4 = 9$ and $4 + 5 = 9$ are turn-around addition facts.

doubles addition facts The sum of a 1-digit number added to itself. For example, $5 + 5 = 10$, $2 + 2 = 4$, and $6 + 6 = 12$ are all doubles addition facts. A doubles addition fact does not have a turn-around addition fact partner.

function machine An imaginary device that receives inputs and generates outputs. A number (input) is put into the machine and is transformed into a second number (output) through the application of a rule.

12

in

Rule
+5

out
17
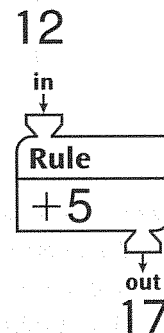
"What's My Rule?" problem
A problem in which two of the three parts of a function (input, output, and rule) are known, and the third is to be found out.

Rule
+5
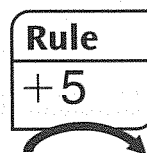
in	out
2	7
5	10
7	12
6	11

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. Tell addition and subtraction number stories to your child. Have your child solve the problems using various household objects, and then record the answers in number models.

2. Encourage your child to make up some number stories.

Building Skills through Games

In this unit, your child will practice addition, subtraction, and place-value skills by playing the following games:

Base-10 Exchange

Players take turns putting base-10 blocks on their Tens-and-Ones Mat according to the roll of a die. Whenever possible, they exchange 10 cubes for 1 long. The first player to get 10 longs wins.

Beat the Calculator

A "Calculator" (a player who uses a calculator) and a "Brain" (a player who does not use a calculator) race to see who will be first to solve addition problems.

Difference Game

Players pick a card and collect as many pennies as the number shown on the card. Then players count each other's pennies and figure out how many more pennies one player has than the other.

Digit Game

Each partner draws two cards from a set of number cards. The player whose cards make the larger number takes all of the cards. The player with more cards at the end of the game wins.

Penny-Nickel-Dime Exchange

Partners place 20 pennies, 10 nickels, and 10 dimes into a bank. Players take turns rolling two dice, collecting the amount shown on the dice from the bank. Partners exchange pennies and nickels for dimes until all of the dimes are gone. The player who has more dimes wins.
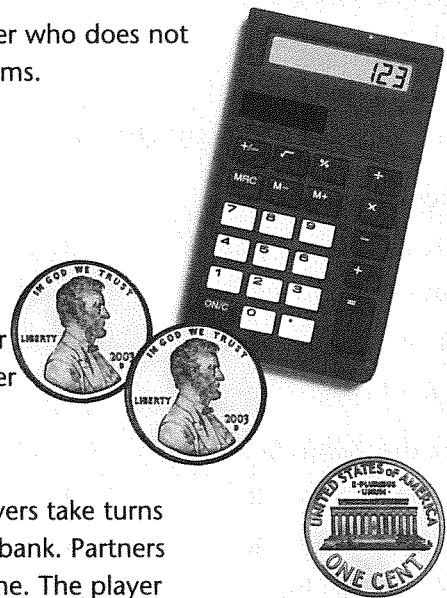
As You Help Your Child with Homework

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

Home Link 5·1

1. 56   **2.** 73   **3.** 12   **4.** 60; 50

Home Link 5·2

1. 30, 40, 50, 70   **2.** 110, 100, 90, 70

3. 78, 68, 48, 38

4. Sample answer: Ⓓ Ⓓ Ⓟ Ⓟ

5. Sample answer: Ⓓ Ⓓ Ⓓ Ⓝ

Home Link 5·3

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

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

7. Answers vary.   **8.** Answers vary.

Home Link 5·4

1. 32, 0.32   **2.** 36, 0.36

3. 38, 0.38

4. ̷H̷H̷T ̷H̷H̷T ̷H̷H̷T ̷H̷H̷T ̷H̷H̷T ̷H̷H̷T, even

Home Link 5·5

1. 8   **2.** 6   **3.** 3

4. 6   **5.** 6   **6.** 9

7. 4   **8.** 8   **9.** 5

10. 4④, 3①, 1⑦, 6⑨

Home Link 5·6

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

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

7.   **8.**

9.   **10.**

Home Link 5·7

1. Bart, 4   **2.** Martha, 7   **3.** Maria, 8

4. 1①5, ⑧0, ⑤5, ①7

Home Link 5·8

1. Your child should write a number story and number model to go with his or her picture.

2. 6   **3.** 10   **4.** 6

Home Link 5·9

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

5. 7   **6.** 9   **7.** ⑧   **8.** ⑫

Home Link 5·10

1. 6 + 3 = 9   **2.** 3 + 6 = 9

3. 5 + 4 = 9   **4.** 4 + 5 = 9

5. 24   **6.** 47

Home Link 5·11

1. Answers will vary.   **2.** Answers will vary.

3. <   **4.** >
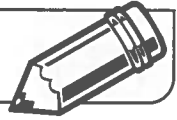
5. <   **6.** =

Home Link 5·12

1. Rule is +1; 20, 10, (last answer will vary)

2. Rule is −2; 10, 19, (last answer will vary)

3. Rule is +10; 35, (last answer will vary)

4. 10   **5.** 14

6. 6   **7.** 18

Home Link 5·13

1. Rule is +3, (answer will vary)

2. 16, 35, (last answer will vary)

3. Answers vary.
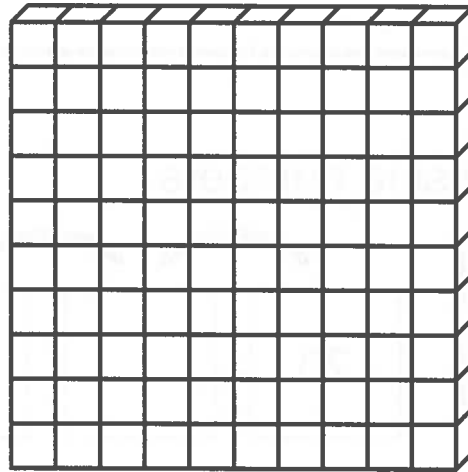
4. 40, 38, 36, 34, 32, 30, 28, 26, 24

LESSON 5·1

Base-10 Blocks

Base-10 Blocks

Cube
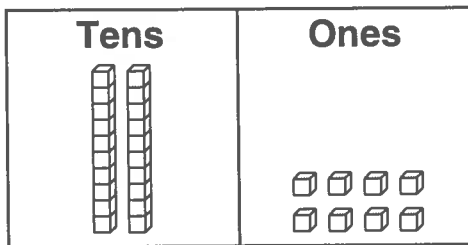1

Long
10

Flat
100

## HOME LINK
5·1

Tens-and-Ones Riddles

Family Note We have begun to work on place value using base-10 blocks. The blocks shown in the tens columns are called *longs* and the blocks shown in the ones columns are called *cubes*. It takes 10 cubes to make 1 long. On this page, your child is writing numbers shown with longs and cubes.
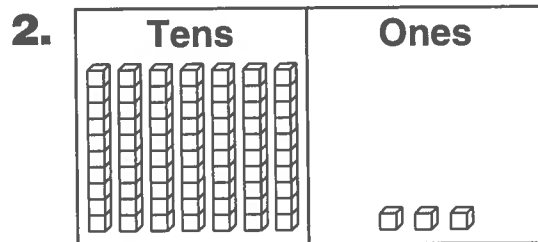
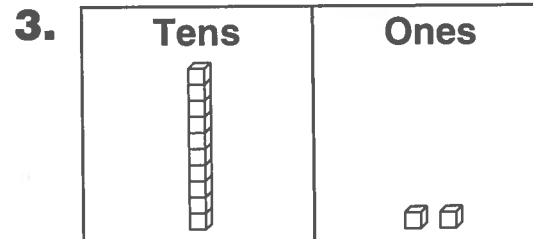*Please return this Home Link to school tomorrow.*

Example:

Tens	Ones

What number am I? __28__

1.

Tens	Ones

What number am I? _____

2.

Tens	Ones

What number am I? _____

3.

Tens	Ones
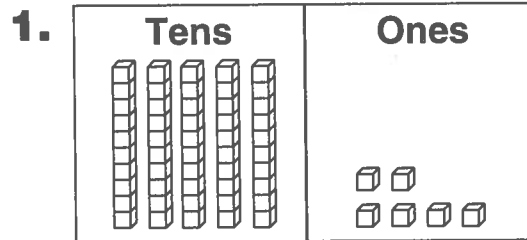
What number am I? _____

Practice

4. Fill in the missing numbers.

Rule
Count back by 10s

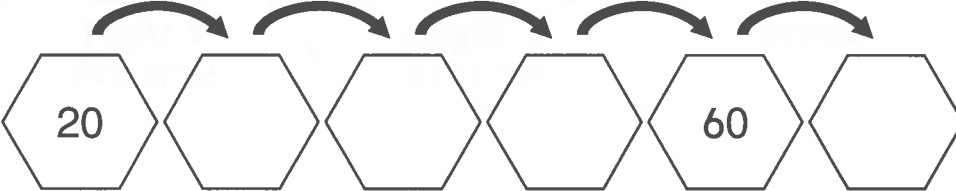70 → ▢ → ▢ → 40

120
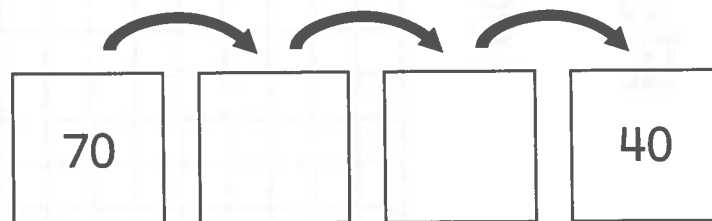
Frames-and-Arrows Diagrams

> **Family Note** Children continue to work with place value and base-10 blocks. In this lesson, children counted up and back by 10s from any number. On this page, your child will continue to explore what happens to the digits in a numeral when counting by 10s.
>
> *Please return this Home Link to school tomorrow.*
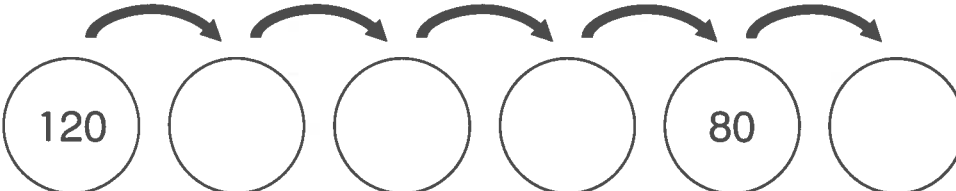
Fill in the missing numbers.

1.

Rule
+10

20 〈〉 〈〉 〈〉 60 〈〉
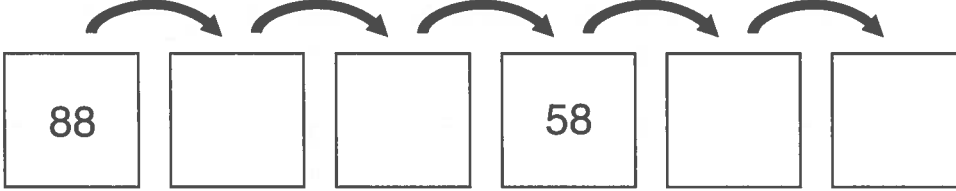
2.

Rule
−10

120 ◯ ◯ ◯ 80 ◯

3.

Rule
Count back
by 10s

88 ☐ ☐ 58 ☐ ☐

Practice

4. Use notes and coins to show 16 dirhams.

5. Use notes and coins to show 12 dirhams.