

Objectives

- Develop an understanding of renaming numbers

Teacher Materials

- Place Value Kit
- Rename 1,000 transparency, page IA8 (CD)
- A picture of Captain Bailey (from the Student Worktext)

Student Materials

- Place Value Kit
- Fact Review—Addition & Subtraction Facts, pages 11–17 (CD)

Practice and Review

Fact Review: Addition & Subtraction Facts

Review addition and subtraction facts using one of the Fact Review pages.

Teach for Understanding

Develop an understanding of renaming numbers

1. Distribute the Place Value Kits.

The Mariner's Sandwich Shoppe is one block from the La Costa Museum. Captain Bailey and many visitors to the museum enjoy having lunch or dinner there. A meal includes a sandwich, a side item, and a dessert. The most popular dessert is the Rocky Road Cookie Bar. A total of 240 Rocky Road Cookie Bars are baked each day at the sandwich shop.

- **How many Rocky Road Cookie Bars are baked each day?** 240
2. Write 240 for display. Choose students to tell the value of each digit. **2 hundreds, 4 tens, 0 ones**
 - **How would you picture this number using the place value kit?** *by using 2 hundreds, 4 tens*
 3. Display 2 hundreds and 4 tens below 240. Direct each student to do the same on his desk.
 - **How can you show 240 using only tens?** *Elicit that each hundred can be renamed as 10 tens.*
 - **Since 1 hundred equals 10 tens, how many tens do you need to show 2 hundreds?** 20
 4. Remove the 2 hundreds and place 20 tens to the left of the displayed 4 tens. Direct each student to do the same.
 - **How many tens are there now?** 24
 5. Point to each ten as you lead in counting them: 10, 20, 30, 40, . . . 220, 230, 240.
 - **What is the total value of 24 tens?** 240
 - **What does this tell you about the value of 24 tens and 240?** *They are equal, or they have the same value.*

Write for display $240 = 24 \text{ tens}$. Tell the students that the zero in the Ones place of 240 indicates that 240 is a multiple of 10; it is 24 groups of 10. Explain that you can mentally substitute a zero for the word *tens* to determine that 24 tens equal 240.

 - **Can 24 tens be renamed as ones? How do you know?** *Yes, each ten can be renamed as 10 ones.*

- **Since 1 ten equals 10 ones, how many ones do you think you would need to show 24 tens?** *Elicit 240.*

(*Note:* Since each student's Place Value Kit contains only 50 ones, you may want to allow groups of students to share their ones as you guide them in renaming 24 tens as ones, one ten at a time.)

6. Display the picture of Captain Bailey.
 - **What are other names that people might call Captain Bailey?** *possible answers: sailor, man, Mr. Bailey, Dad, Grandpa*

Explain that just as a person can have several different names, a value can have different names or be renamed.

 - **In what math operations have you used renaming?** *Addition and subtraction; elicit that renaming is also used in multiplication and division.*
7. Direct attention to the illustrations for 240 on Worktext page 23. Explain that a dot represents 1 one, a line represents 1 ten, a square represents 1 hundred, and a cube represents 1 one thousand.
 - **What do you notice about how the value 240 is shown?** *Elicit that the names for 240 are the same as those you just showed using the Place Value Kit: 2 hundreds and 4 tens, 24 tens, and 240 ones.*
 - **What process did we use to find different names for 240?** *Answers will vary, but elicit that you renamed the 2 hundreds as 20 tens and combined them with the 4 tens for a total of 24 tens, and then you renamed the 24 tens as 240 ones.*

Guide the students in completing the values for 240 below the first illustration, and then in completing the renamed values: **2 hundreds, 4 tens, 0 ones; 24 tens, 0 ones; 240 ones.**

 - **Do 2 hundreds and 4 tens, 24 tens, and 240 ones all equal the same value?** *yes*
8. Direct attention to the first section below 319. Guide the students in drawing the symbols to picture the number of hundreds **3**, tens **1**, and ones **9**, and then in writing the values.
 - **What would you rename first to show 319 another way?** *Rename the hundreds as tens.*
 - **How many tens make 1 hundred?** 10
 - **If you rename 3 hundreds as tens, what is the total number of tens you will have? How do you know?** *31; 3 hundreds renamed as tens equal 30 tens, plus the 1 ten already there makes a total of 31 tens.*

Draw 31 tens for display. Direct the students to do the same in the second section below 319.

 - **What is the value of 31 tens? How do you know?** *310; possible answers: 310 is a multiple of 10 or 31 groups of 10; a zero can be substituted for the word ten.*
 - **What do you need to complete the picture of 319?** *9 ones*

Guide the students in drawing 9 ones after the 31 tens. Demonstrate.

 - **What picture of 319 do you have now?** *31 tens and 9 ones*
 - **Does 31 tens and 9 ones have the same value as 319?** *yes*

Lead in counting each ten and then the ones: 10, 20, 30, . . . 310, 311, 312, . . . 319. Guide the students in writing the renamed values.

 - **Could you rename 31 tens and 9 ones? How?** *Yes; the 31 tens could be renamed as 310 ones for a total of 319 ones.*
9. Explain that you are not drawing the 319 ones because it would require a large space on the page. Guide the students in writing the renamed value: *319 ones.*

