Lesson 3: Tens

Getting Started

? Big Ideas

- How does place value work?
- How can we use place value patterns to name, create, and compare large numbers?

Skills

- Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral
- Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones)
- Understand that 10 can be thought of as a bundle of ten ones, called a "ten"

Materials

- ✓ "My Number Grid" page from Lesson 1
- ✓ abacus (kit)
- √ blank paper
- ✓ laminated place value mat (kit)

- ✓ A Fair Bear Share by Stuart J. Murphy
- ✓ base-10 blocks (kit)
- ✓ fine point dry-erase marker (kit)
- ✓ whiteboard (kit)

Introduction

Give your child the whiteboard and a dry-erase marker, and ask him to write numbers as you read the following clues. Read the clues aloud more than once.

- A one-digit number that is greater than 6 and less than 8 (7)
- A one-digit number that is less than 5 and greater than 3 (4)
- A two-digit number that has the digits 3 and 5 and is less than 40 (35)
- A two-digit number that has the digits 4 and 2 and is greater than 30 (42)

Allow him to look at the "My Number Grid" sheet as needed. Once he's written each number, let him check it as you read the clue one more time.

Reading and Questions

Read aloud *A Fair Bear Share* by Stuart J. Murphy. As you read the story, ask your child to count the nuts, berries, and seeds that the bears collect to show that there are groups of tens and groups of ones. When you've finished the story, pose the following questions:

- 1. How is the bears' trick for counting like using base-10 blocks and the abacus?
 - they are making groups of 10
- 2. Why do you think it's a good idea to count groups of 10?
 - it's a faster way to count than counting by ones
- 3. If you collected 15 berries, how many groups of 10 would you have? How many berries would be left over?
 - 1 group of 10, 5 berries left over
- 4. If you collected 20 berries, how many groups of 10 would you have?
 - 2 groups of 10

Activities

Activity 1: Using Tens to Count

Give your child a piece of paper and tell him that he's going to write tally marks for objects of his choosing. For example, he might sit outside and count cars that drive by, or he might count the number of books in a particular room in the house or the number of stickers he has in a sticker collection. Allow him to count something that he's interested in, but make sure that there will be more than 20 of the objects to count. Remind him as needed that tally marks are written in groups of 5 with the fifth tally mark crossing the other four.

When he is finished counting his chosen objects, he will circle groups of ten tally marks on his sheet. Ask, "How many groups of ten did you circle?" "How many are left over?" "How many of the object did you count in all?" His answers will depend on how many objects he counts, but make sure that he understands that grouping by tens can help him count things quickly. Allow him to repeat this process with a new type of object if he's interested in doing so.

Activity 2: Working with Tens

Begin by reviewing one and ten place value using the video at the following web link. Before watching the video, tell your child that the video uses different words for unit blocks and ten rods but that they mean the same thing.

Place Value First Grade: Tens and Ones

www.movingbeyondthepage.com/link/5807/

Using the laminated place value mat, put 4 ten rods in the tens place, and ask, "How many ten rods are in the tens place?" (4) Say, "This shows 4 tens. What number is 4 tens?" Allow your child to count by tens to 40. Write 4 in the tens place and 0 in the ones place. Repeat this process for 50, 60, 70, 80, and 90, adding ten rods, saying how many tens are showing, and writing the correct numbers in the tens place as you go.

Now, ask your child to show counting by 10s on the abacus by first showing 1 group of ten by moving 10 beads to the right on the top wire. Say, "This is 1 ten." Now, tell him to show 2 groups of 10 by moving another 10 beads to the right on the second wire. Say, "This is 2 tens or 20." Ask him to show 3 tens or 30. Repeat this process until he reaches 90, and ask him to say the numbers of tens and the numbers as he goes (for example, "4 tens or forty" and "7 tens or seventy").

Activity 3: Showing Tens

Your child will complete the "Showing Tens" sheet by filling in the missing information in each row. When completed, each row should include a number, the word form for the number, and base-10 blocks showing the number. Allow your child to use base-10 blocks as needed to complete the sheet. The first row provides an example.

"Showing Tens" Answer Key				
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	number	tens	base-IO blocks	
	40	4 tens		
	80	_8_ tens		
	30	3 tens		
	60	6 tens		
	10	1 ten		
	90	<u>9</u> tens		
	20	_2 tens		
	50	5 tens		
	70	<u>7</u> tens		

Wrapping Up

Show the following numbers on the abacus, and ask your child to name them in two different ways. For example, if you show 40 on the abacus, he should say "four tens" and "forty." Show these numbers: 30, 70, 20, 40, 90, and 50.

Showing Tens

number	tens	base-10 blocks
40	4 tens	
80	tens	
	3 tens	
	tens	
	1 ten	
90	tens	
	tens	
	5 tens	
70	tens	