

Family Support Materials

Numbers to 99

In this unit, students develop an understanding of place value for numbers up to 99. This unit is the first introduction to the base-ten system. The understanding students develop about units of tens and ones will be the foundation for base-ten work, including decimals, that continues through grade 5.

Section A: Units of Ten

In this section, students use connecting cubes organized in towers of 10. Students count and represent collections. The total number of objects in each collection is a multiple of 10. They develop an understanding that counting the same group by one or by ten gives them the same number. Through the section, students make sense of base-ten representations (towers of 10, base-ten drawings, words, and numbers).

For example, the two diagrams each show 40.



Students add and subtract multiples of ten and see that 3 tens and 2 tens is 5 tens.



Section B: Units of Ten and Units of One

In this section, students use the same representations from the previous section to make sense of two-digit numbers. For example, these are representations for 73:

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Students are introduced to addition expressions to represent two-digit numbers. To ensure that students have a deep understanding of decomposing numbers, they are asked to consider expressions like 3 + 70 in addition to the traditional standard form (70 + 3). Students use their base-ten understanding of two-digit numbers to add multiples of ten to any two-digit number and mentally find 10 more or 10 less than any number (that is, 52 + 10 or 32 - 10). They see that the value of the tens digit changes based on the number of tens added or subtracted, but the value of the ones digit remains the same.

Section C: Compare Numbers to 99

In this section, students compare and order numbers to 99. They use their place value understanding to compare numbers and may recognize that the digit in the tens place is more important than the digit in the ones place when comparing two-digit numbers. Students are introduced to the < and > symbols.



Section D: Different Ways to Make a Number

In this section, students dive deeper into place value understanding by breaking apart two-digit numbers using different amounts of tens and ones. The focus of this section is for students to see that there are different ways to decompose a number into tens and ones. These representations show that 62 is the same as 5 tens and 12 ones.



Students extend comparison work by using the <, =, or > signs to compare numbers broken apart in different ways.

Try it at home!

Near the end of the unit ask your student to do the following with the number 62:

- Draw a representation of 62.
- What are two different ways that you can make 62 with tens and ones?
- What is 10 more? What is 10 less?

Questions that may be helpful as they work:

- Can you tell me how your drawing shows 62?
- Is (number) more or less than 62? How do you know?