# Write Numbers in Different Ways

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|---|---|
| **Objective** Represent whole numbers up to 1,200 in standard form, word form, and expanded form. | **Materials** base-ten blocks (1 thousands cube, 9 hundreds flats, 9 tens rods, 9 ones units), thousands place-value charts |

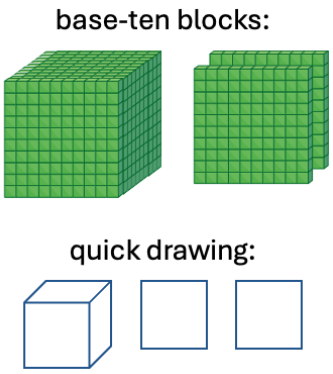
Students have learned that whole numbers can be represented in different ways, including standard form, word form, and expanded form. In this activity, students will use these forms to represent three- and four-digit numbers up to 1,200. This work with place value will prepare students to compare and order three- and four-digit numbers.

## Step by Step

15–20 minutes

### 1 Model and represent whole numbers.

- Provide the student with base-ten blocks and a thousands place-value chart. Present the student with this scenario: *Julia plays a game that has play money. She has 1 thousands bill and 2 hundreds bills.*
- Have the student use base-ten blocks (or a quick drawing) to model the total value of the play money. Ask: *How does your model show the value of Julia's play money?* (The thousands cube shows the value of the thousands bill. The 2 hundreds flats show the value of the 2 hundreds bills.)




- Next, have the student show the thousands, tens, hundreds, and ones in a place-value chart. Elicit discussion about how the student knew which digit to write in each place.

| Thousands | Hundreds | Tens | Ones |
|---|---|---|---|
| 1 | 2 | 0 | 0 |

- Have the student write the value of Julia's money using standard form, word form, and expanded form. (1,200; one thousand, two hundred; 1,000 + 200) Ask the student how each form shows the number of thousands, hundreds, tens, and ones.
- Repeat the previous steps with different three- and four-digit numbers up to 1,200, such as 506 and 1,084.

**Support English Learners** Use visual aids to provide support for language associated with base-ten blocks or quick drawings. Provide the student with a labeled example of each type of base-ten block (or quick drawing) that they can refer to throughout the activity: *thousands cube*, *hundreds flat*, *tens rod*, and *ones unit*.

## 2 Practice with number riddles.

- Read the following riddles. For each riddle, ask the student to write the number in standard form and expanded form and read the number aloud. Provide base-ten blocks and a place-value chart if the student struggles. It may be helpful to work through the first riddle alongside the student and then have them try the rest independently.

  I have 3 hundreds, 8 tens, and 5 ones. What number am I? (385; 300 + 80 + 5; three hundred eighty-five)
  I have 1 thousand, 1 hundred, 6 tens, and 4 ones. What number am I? (1,164; 1,000 + 100 + 60 + 4; one thousand, one hundred sixty-four)
  I have 6 hundreds and 9 ones. What number am I? (609; 600 + 9; six hundred nine)
  I have 1 thousand, 1 ten, and 3 ones. What number am I? (1,013; 1,000 + 10 + 3; one thousand thirteen)
  I have 4 hundreds and more tens than ones. What number could I be? (Possible answer: 452; 400 + 50 + 2; four hundred fifty-two)
  I have 1 thousand, 1 hundred, and fewer tens than ones. What number could I be? (Possible answer: 1,127; 1,000 + 100 + 20 + 7; one thousand, one hundred twenty-seven)

- Challenge the student to write their own number riddle for whole numbers up to 1,200, such as 830 (Possible answer: I have 8 hundreds and 3 tens. What number am I?) and 1,004 (Possible answer: I have 1 thousand and 4 ones. What number am I?).

## Check for Understanding

Provide the student with base-ten blocks and a place-value chart to use as needed. Then present the riddle below. Have the student write the number in standard form, word form, and expanded form.

*I have 9 hundreds, 5 tens, and 4 ones. What number am I?* (954; nine hundred fifty-four; 900 + 50 + 4)

For the student who struggles, use the chart below to help pinpoint where extra help may be needed.

| If you observe… | the student may… | Then try… |
|---|---|---|
| the student has difficulty writing the standard form | not understand the structure of the place-value system. | having them write the number of hundreds, tens, and ones in a place-value chart and then use the chart as an aid to write the standard form. |
| the student has difficulty writing the expanded form | not understand how to determine or show the value of each digit. | having the student model the number with base-ten blocks and then write a number to represent the value of each type of block, for example, writing 900 for 9 hundreds flats. |
| the student has difficulty writing the word form | struggle with the words for the decade or teen numbers. | working with the student to list the word names of these numbers, for example, writing *twenty* for 20 and *thirty* for 30. |