



Topic B

Numbers to 120

1.NBT.1, 1.NBT.2a, 1.NBT.2c, 1.NBT.3, 1.NBT.5

Focus Standards:	1.NBT.1	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.
	1.NBT.2	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: <ul style="list-style-type: none"> a. 10 can be thought of as a bundle of ten ones—called a “ten.” c. 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).
	1.NBT.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
	1.NBT.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
	Instructional Days:	7
Coherence	-Links from:	G1–M4 Place Value, Comparison, Addition and Subtraction of Numbers to 40
	-Links to:	G2–M3 Place Value, Counting, and Comparison of Numbers to 1,000

Topic B extends students’ use of counting sequences and understanding of tens and ones to numbers up to and including 120.

In Lesson 3, students apply their understanding of tens and ones to two-digit numbers greater than 40. Students count by tens and then extra ones to efficiently count large groups of objects. They then use the place value chart to record quantities as tens and ones as well as by their traditional number (**1.NBT.2**).

In Lesson 4, students connect this understanding with its application to addition sentences. Students recognize that numbers such as 67 can be interpreted as 6 tens 7 ones and that the units can be combined to find the total: $60 + 7 = 67$. This work of decomposing and composing 67 into its tens and ones supports the work students do in Topic C, as they decompose two-digit numbers before adding to another two-digit number.

Students continue to consider tens and ones in Lesson 5 when they identify 10 more, 10 less, 1 more, and 1 less than any two-digit number (**1.NT.5**). This work helps students attend to the parts within a two-digit number, a skill that is critical to adding two-digit numbers within 100. Students recognize that when looking at a number such as 37, they focus on the tens place when adding or subtracting 10 and on the ones place when adding or subtracting 1. Students also explore numbers such as 89, where adding 1 more creates another ten.

During Lesson 6, students practice comparing numbers using the symbols $>$, $=$, and $<$ (**1.NBT.3**). They compare numbers such as 65 and 75, as well as numbers in various unit form combinations such as 7 tens 5 ones, 5 ones 7 tens, and 6 tens 15 ones. Through these explorations, students consider ways that each number can be decomposed and recomposed.

In Lesson 7, students work with the counting sequence to 120 (**1.NBT.1**). After counting from 78 to 120, students use Hide Zero cards to build numbers from 100 to 120. Their strong familiarity with counting from 0 to 20 and back is then related to the sequence from 100 to 120, helping students recognize that their prior knowledge can help them succeed at this new level.

Lesson 8 continues the use of the Hide Zero cards, as students use 5-group cards of 10 to write numbers within place value charts. Students represent 100 as 10 tens and then represent 101 as 10 tens and 1 one. This work with the unit form of numbers to 120 supports students' understanding of the written numerals 101 through 109, which are the most challenging to write (**1.NBT.1**).

Following students' work with the unit form of numbers to 120, students then represent a number of objects in Lesson 9, presented concretely and pictorially, with the written numeral (**1.NBT.1**).

A Teaching Sequence Toward Mastery of Numbers to 120

- Objective 1: Use the place value chart to record and name tens and ones within a two-digit number up to 100.**
(Lesson 3)
- Objective 2: Write and interpret two-digit numbers to 100 as addition sentences that combine tens and ones.**
(Lesson 4)
- Objective 3: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number within 100.**
(Lesson 5)
- Objective 4: Use the symbols $>$, $=$, and $<$ to compare quantities and numerals to 100.**
(Lesson 6)
- Objective 5: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120.**
(Lesson 7)
- Objective 6: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart.**
(Lesson 8)
- Objective 7: Represent up to 120 objects with a written numeral.**
(Lesson 9)