

Vertical Progression:

TS Gold	<p>20b. Quantifies</p> <p>6. Makes sets of 6-10 objects and then describes the parts; identifies which part has more, less, or the same (equal); counts all or counts on to find out how many.</p>
Kindergarten	<p>K.NBT.A Work with numbers 11-19 to gain foundations for place value.</p> <ul style="list-style-type: none"> ○ K.NBT.A.1 Compose and decompose numbers from 11-19 into tens and some further ones. e.g. by using objects or drawings and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
1st Grade	<p>1.NBT.B Understand place value</p> <ul style="list-style-type: none"> ○ 1.NBT.B.2: Understand that the two digits of a two-digit number represent amounts of tens and ones. ○ 1.NBT.B.3: Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
2nd Grade	<p>2.NBT.A Understand place value.</p> <ul style="list-style-type: none"> ○ 2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundred, tens and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: 2.NBT.A.1a) 100 can be thought of as a bundle of ten tens – called a “hundred” 2.NBT.A.1.b) The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). ○ 2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Students will demonstrate command of the ELG by:

- Identifying tens and ones in any two-digit number.
- Creating and explaining a “ten.”
- Showing and explaining tens and ones in any two-digit number.
- Organizing a group of objects into tens and ones and telling what number it represents.
- Explaining a comparison of two two-digit numbers and recording the results using symbols for greater than, less than, and equal to.
- Understanding the value of the digits in a two-digit number by independently modeling a two-digit number with a visual representation or manipulatives.
- Representing a two-digit number in multiple ways (e.g., 32 can be represented as 3 tens and two ones, two tens and 12 ones, 1 ten and 22 ones, or 32 ones).

Vocabulary:

- bundle
- compose
- digit
- equal to
- greater than
- less than
- one-digit number
- ones
- place value
- tens
- two-digit number

Sample Instructional/Assessment Tasks:

1) Standard: 1.NBT.2.a

Source: grade1commoncoremath.wikispaces.hcpss.org/Assessing+1.NBT.2a

Directions:

1. Using base ten blocks or digi-blocks, place about 15 tens and about 15 ones in front of the student.
2. Ask the student to show ten. Once they have made it one way (10 ones or a complete ten), ask them if they can show it another way.
3. Hold up a ten and ask the student what the name for it is (a ten).
4. Ask the student how many of these (tens) they would need to make 20? 50? 80? 100? 120?
5. Ask the student: "If I have 4 tens, what number would that make?" 7 tens? 9 tens? 10 tens? 12 tens?

Correct Answer/Considerations:

- If the student is just rearranging the ones to make a ten a 2nd way, do they have success when you remove the ones and just leave the tens? Does the student show you 10 tens?
- Is the student able to identify a bundle of ten ones as a "ten"? If not, can they finish the statement: "If this is a one (holding up a one), then we would call this (holding up a ten) a ____"
- Can the student tell you the number a certain amount of tens would make? If they are struggling, can they do it when you show them the number using tens? Do they count each ten or see it as a whole?

2) Standard: 1.NBT.2.c

Source: Howard County Public Schools

Directions:

1. Have students roll two dice (tens and ones) and then build a model of it using base ten blocks or digi-blocks that represent that total rolled, placing the blocks on a place value mat.
2. Once the students have a solution, encourage them to produce a second and third representation of equal value.
3. Have students record their data by drawing a picture or writing about their data.

Correct Answer/Considerations: Look for students to represent the totals in in a variety of different ways.

3) Standard: 1.NBT.3

Source: <http://commoncoretasks.ncdpi.wikispaces.net/1.NBT.2-1.NBT.3+Tasks>

Materials: BLM comparison cards:



$42 \square 51$ 1	$89 \square 78$ 2
$36 \square 36$ 3	$50 \square 60$ 4

Task:

Cut out the comparison cards and the symbol cards. Show the student card #1 ($42 \square 51$). Then show the student the symbol cards ($>$, $=$, $<$). Say: *Which symbol do you need to use to make this sentence true?*

After the student selects and places the symbol card, say: read your sentence to me.

Repeat with cards #2-4.

Developing Understanding:

- Uses an incorrect symbol for one or more items.
- Uses symbols correctly but reads one or more equations incorrectly.
- Uses incorrect symbol but reads the sentence as a true equation (e.g., $42 > 51$ and reads “42 is less than 51”).

Complete Understanding:

- Uses the correct symbol for all items.
- Reads all equations correctly.