2nd Grade Levels of Understanding

How is my understanding of 2nd Grade NBT math standards?

(Numbers in Base Ten)

2.NBT.1a: Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.

A: 100 can be thought of as a bundle of ten tens -- called a "hundred".

I am a level 3 when I can do the following on my own:
- ❏ Read a three-digit number.
- ❏ Understand the values in each place of the three-digit number.
- ❏ Create a three-digit number using place-value models.
- ❏ Create place value blocks from a three-digit number.
- ❏ Exchange ten tens for a hundred.

I am a level 2 progressing toward grade level when I:
- ❏ Model place value of ones and tens.
- ❏ Recognize the value of a digit.
- ❏ Use tens and ones to represent a 2- digit number.
- ❏ Make a group of 10 ones to represent a 10 stick/rod.
- ❏ Identify groups of 10. (1 bundle of 10 is 10. 1 ten and 0 ones)

2.NBT.2: Count within 1000; skip-count by 5's starting at any number ending in 5,0. Skip-count by 10s and 100s starting at any number.

I am a level 3 when I can do the following on my own:
- ❏ Count by ones to hundreds and 1,000.
- ❏ Identify the pattern of counting by ones even when adding the place value of 100.
- ❏ Skip count by 5's starting at 0 or 5.
- ❏ Skip by 10's and 100's starting at 0.
- ❏ Use a hundred chart to help describe the position of a number concerning another number.
- ❏ Identify and apply number patterns.
- ❏ Identify the number that comes next in a given pattern and continue the skip counting pattern.
- ❏ Identify patterns in skip counting chart (5 or 10).

I am a level 2 progressing toward grade level when I:
- ❏ Order number from least to greatest.
- ❏ Count to 120.
- ❏ Identifying numbers to 120.
- ❏ Identify the number names, fives, and tens.

2.NBT.3: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

   I am a level 3 when I can do the following on my own:
   - ❏ Read and write number words for numbers 0–1000.
   - ❏ Identify and write three-digit numbers in expanded form, standard form, and number word form.
   - ❏ Model three-digit numbers using base ten.
   - ❏ Connect EF to SF to WF to base ten.

   I am a level 2 progressing toward grade level when I:
   - ❏ Know numbers greater than 20.
   - ❏ Use a hyphen when written out in word form.
   - ❏ Read and write numbers to 120.
   - ❏ Know hundreds, tens, & ones.

2.NBT.4: Compare two three-digit numbers based on the meanings of the hundreds, tens, and one's digits, using >, =, < symbols to record the results of comparisons.

   I am a level 3 when I can do the following on my own:
   - ❏ Compare numbers with the symbols <, >, or =.
   - ❏ Use place value to compare numbers.

   I am a level 2 progressing toward grade level when I:
   - ❏ Compare two-digit numbers.
   - ❏ Count to 120.
   - ❏ Identify <, >, and =.
   - ❏ Order numbers from least to greatest and greatest to least.

2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

   I am a level 3 when I can do the following on my own:
   - ❏ Use a strategy to add three-digit numbers—base ten models, expanded form model, or the algorithm.
   - ❏ Find the missing part of a given quantity and one of its parts by counting on or counting back.
   - ❏ Write and solve an equation that is modeled.
   - ❏ Model an equation that is written.
   - ❏ Add and Subtract three-digit numbers by using an algorithm that is connected to a model or other strategy.

   I am a level 2 progressing toward grade level when I:
   - ❏ Understand the connection between addition and subtraction to help master subtraction facts and developmental math strategies.
   - ❏ Use place-value addition and subtraction.
   - ❏ Use concrete models.
   - ❏ Model drawing.
   - ❏ Adding within 100.
   - ❏ Composing and decomposing numbers.

How is my understanding of 2nd Grade OA math standards?

(Operations & Algebraic Thinking)

2.OA.1: Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g.by using drawings and equations with a symbol for the unknown number to represent the problem.

I am a level 3 when I can do the following on my own:
- ❏ Model addition of numbers with objects/pictures (w/o regrouping).
- ❏ Add two numbers within 100 using equations with symbols or variables for the unknown (w/o regrouping).
- ❏ Solve one-step word problems and compare numbers to find the unknown.
- ❏ Create an addition with 100 using objects/pictures.

I am a level 2 progressing toward grade level when I:
- ❏ Identify the symbols =, +, -.
- ❏ Add one-digit numbers.
- ❏ Find unknowns with single-digit addition.
- ❏ Find the missing part or whole.
- ❏ Model equations with drawings.
- ❏ Solve one-step word problems with one-digit numbers.
- ❏ Identify part and whole.

2.OA.2: Fluently add and subtract within 20 using mental strategies. Know from memory all sums of two one-digit numbers.

I am a level 3 when I can do the following on my own:
- ❏ Fluently add within 20 using mental strategies. Know from memory all sums of two one-digit numbers.
- ❏ Fluently subtract within 20 using mental strategies. Know from memory all sums of two one-digit numbers.

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: add, subtract, sum, difference
- ❏ Use mental strategies for adding and subtracting
- ❏ Add and subtract fluently within 10.

How is my understanding of 2nd Grade MD math standards?

(Measurement & Data)

2.MD.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

I am a level 3 when I can do the following on my own:
- ❏ Select appropriate tool to measure (view vocabulary) standard and metric
- ❏ Use an appropriate unit to measure (Standard and Metric)

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: Recognize or recall specific vocabulary: length and weight
- ❏ Identify the length or weight of the object being measured.
- ❏ Count the number of units contained in the object to be measured.
- ❏ Line up the item to be measured with a ruler on the zero.
- ❏ Measure in whole number lengths.

2. MD.2: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

I am a level 3 when I can do the following on my own:
- ❏ Measure the same object with different units.
- ❏ Discuss the similarities and differences in the measurements.
- ❏ Discuss how the measurement of an object differs when using different units (such as in. to cm.) to measure.

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: standard and metric units, measurement
- ❏ Measure length.
- ❏ Measure using different units.
- ❏ Recall that inches are larger than centimeters

2.MD.3: Estimate lengths using units of inches, feet, centimeters, and meters.

I am a level 3 when I can do the following on my own:
- ❏ Estimate and then measure lengths using units of inches or feet, centimeters, and meters.
- ❏ Estimate using objects similar to units for measurement.
- ❏ Measure using appropriate tools after they estimate and compare.

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: Recognize or recall specific vocabulary: inches, feet, centimeters, and meters.
- ❏ Measure in whole numbers.
- ❏ Compare the lengths of two objects.
- ❏ The approximate size of inches, feet, centimeters, and meters.

2.MD.6: Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, …, and represent whole-number sums and differences within 100 on a number line diagram.

I am a level 3 when I can do the following on my own:
❏ Construct a number line that has equally spaced parts starting with 0.
❏ Use skip counting strategies starting at 0.
❏ Use a number line to model one- and two-digit addition within 100.
❏ Use a number line to model one- and two-digit subtraction within 100.

I am a level 2 progressing toward grade level when I:
❏ Model 1 digit addition on a number line.
❏ Model 1 digit subtraction on a number line.
❏ Count to 100.
❏ Addition and subtraction.

2.MD.7: Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

I am a level 3 when I can do the following on my own:
❏ Tell and write time from a digital and an analog clock.
❏ Write the time to the nearest 5 minutes on a digital-analog clock.
❏ Identify and Apply a.m. and p.m.

I am a level 2 progressing toward grade level when I:
❏ Recognize or recall specific vocabulary: Time, am, pm, analog, digital, minute, hour, hand, seconds, colon
❏ Count by 5s.
❏ Count on from a given number by 5s.
❏ Tell and write time in hours and half hours on an analog and digital clock.

2.MD.8: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.

I am a level 3 when I can do the following on my own:
❏ Identify the value of dollar bills and coins.
❏ Add and subtract coins and bills to find the total value.
❏ Solve word problems using money.
❏ Use $ and ₵ symbols appropriately.

I am a level 2 progressing toward grade level when I:
❏ Recognize or recall specific vocabulary: Dollar, coin, penny, nickel, dime, quarter, bill, add, subtract, cost, value
❏ Understand two-digit numbers is the same as adding cents. The difference is the cent symbol or the decimal and dollar sign.
❏ Subtracting two-digit numbers is the same as subtracting cents The difference is the cent symbol or dollar sign and decimal point.
❏ Identify the value of all U.S. coins.
❏ Count U.S. coins up to $1.00.

I am a level 3 when I can do the following on my own:
- ❏ Draw a picture graph with a single-unit scale to represent a data set with up to four categories
- ❏ Draw a bar graph with a single-unit scale to represent a data set with up to four categories
- ❏ Solve simple put-together, take-apart, and compare problems using information presented in a bar graph

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: graph, bar graph, pictograph, data, information, survey, category, tally mark, tally chart, table, key, symbol, compare, greater/more than, fewer/less than
- ❏ Answer explicit questions using data on a graph.
- ❏ Identify that models can represent information (data).

(Geometry)

2.G.1: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

I am a level 3 when I can do the following on my own:
- ❏ Recognize and draw two-dimensional shapes based on specific attributes.
- ❏ Recognize three-dimensional shapes based on specific attributes.
- ❏ Describe the attributes of shapes.
- ❏ Identify the number of sides, angles, and vertices.
- ❏ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes based on attributes.

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: Triangles, rectangle, quadrilaterals, pentagons, hexagons, cube, angles, faces, partition, rows, columns, circle, equal shares, halves, thirds, half of, third of, fourths, two halves, three thirds, four fourths, wholes, horizontal, vertical.
- ❏ Know the names and faces of objects (e.g. rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles).
- ❏ Build and draw shapes.

2.G.2: Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

I am a level 3 when I can do the following on my own:
- ❏ Divide a rectangle into equal rows and columns
- ❏ Count the total number of squares.

I am a level 2 progressing toward grade level when I:
- ❏ Recognize or recall specific vocabulary: Recognize or recall specific vocabulary: Triangles, rectangle, quadrilaterals, pentagons, hexagons, cube, angles, faces, partition, rows, columns, circle, equal shares, halves, thirds, half of, third of, fourths, two halves, three thirds, four fourths, wholes, horizontal, vertical.
- ❏ Partition rectangles into equal squares.
- ❏ Identify rows as horizontal.
- ❏ Identify columns as vertical.

2.G.3: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words, halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

I am a level 3 when I can do the following on my own:
- ❏ Describe the terms: halves, thirds, half of, a third of, fourths, etc.
- ❏ Create equal parts of a shape
- ❏ Divide circles and rectangles into two, three, or four equal parts.
- ❏ Demonstrate that equal parts of an identical whole do not need to have the same shape. (vertically and horizontally)
- ❏ Partition shapes in equal parts that do and do not have the same shape. (circle will not be broken into circles)

I am a level 2 progressing toward grade level when I:

- ❏ Recognize or recall specific vocabulary: Recognize or recall specific vocabulary: Triangles, rectangle, quadrilaterals, pentagons, hexagons, cube, angles, faces, partition, rows, columns, circle, equal shares, halves, thirds, half of, third of, fourths, two halves, three thirds, four fourths, wholes, horizontal, vertical.
- ❏ Identify equal parts.
- ❏ Identify halves.
- ❏ Decompose a shape into equal parts to make smaller parts.
- ❏ Identify rectangles and describe them as halves, fourths, and quarters.