1st Grade Levels of Understanding

Revised 11/02/2020

How is my understanding of 1st Grade NBT math standards?

(Numbers in Base Ten)

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.

I am a level 3 when I can do the following on my own:

- ❑ Write numbers to 120 by ones.
- ❑ Count out or draw a set of objects
- ❑ Identify numbers verbally
- ❑ Count to 120 by ones and tens

I am a level 2 progressing toward grade level

- ❑ Count within the range by ones and tens
- ❑ Write numbers within the range using numerals
- ❑ Associate number names with written numerals within the range

1.NBT.2a-c: Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones- called a "ten" b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

I am a level 3 when I can do the following on my own:

- ❑ Express the value of a given two-digit number as a number of tens and ones.

I am a level 2 progressing toward grade level:

- ❑ Recognize or recall specific vocabulary and perform basic processes such as a digit, ones, one's place, place, place value, tens, tens place
- ❑ Describe a group of ones as a single unit called a "ten."
- ❑ Identify the tens place and the one's place of two-digit numbers.
- ❑ Describe numbers in the range as being composed of some tens and ones.

1.NBT.3: Compare two two-digit numbers based on the meanings of the tens and one's digits, recording the results of comparisons with the symbols >,<, or =.

I am a level 3 when I can do the following on my own:

- ❑ Compare the values of two-digit numbers using words and symbols.

I am a level 2 progressing toward grade level:

- ❑ Recognize or recall specific vocabulary and perform basic processes such as: compare, digit, equal to, greater than, less than, ones, one's place, place, place value, tens, tens place.
- ❑ Identify the tens place and the one's place of two-digit numbers.
- ❑ Identify the less than, greater than, and equals symbols.
- ❑ Explain how to use the less than and greater than symbols when comparing two one-digit numbers.

- ❑ Explain that the equal symbol indicates that the numbers on both sides of the symbol have the same value.
- ❑ Compare two sets of objects represented visually (drawings or base ten blocks).

1.NBT.4:Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten.

I am a level 3 when I can do the following on my own:

Add within 100, adding two-digit and one-digit numbers

- ❑ Using models or other strategies
- ❑ Understand that when adding two-digit numbers you add ones and ones, and tens and tens
- ❑ Understand that it is sometimes necessary to compose a new ten with ten ones.

I am a level 2 progressing toward grade level:

- ❑ Recognize or recall specific vocabulary and perform basic processes such as: *addition*, *add*, *sum*, *total*, *addend*, *tens*, *ones*, *tens place*, *ones place*, *equation*, *equals*, *plus*, *digit*, *place value*.

Perform basic processes such as:

- ❑ Count within the range by ones and tens.
- ❑ Interpret the value of a given two-digit number as a number of tens and ones.
- ❑ Represent the addition of two-digit numbers using models or diagrams.
- ❑ Explain that two-digit numbers can be added by adding the like place values of each addend (ones and ones, tens and tens).

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.

I am a level 3 when I can do the following on my own:

- ❑ Mentally find 10 more or 10 less than any given two-digit number without having to count and explain the reasoning used.

I am a level 2 progressing toward grade level:

- ❑ Recognize or recall specific vocabulary and perform basic processes such as more than and less than.
- ❑ Explain that multiples of 10 represent a number of tens with zero ones.

How is my understanding of First Grade OA math standards?

(Operations & Algebraic Thinking)

1.OA.1: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using objects, 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:

- ❑ Change unknown:Use counters or a drawing to solve word problems: 7+ __ = 12
- ❑ Start Unknown: Use counters or a drawing to solve word problems: __ + 5 = 12
- ❑ Result Unknown: Use counters or a drawing to solve word problems: 7 + 5 = __

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: add, addend, difference, equals, equation, minus, plus, subtract, sum, total.
- ❑ Use models and diagrams, such as drawings, tape diagrams, or number bonds, to solve an addition word problem with the result unknown .
- ❑ Use models and diagrams, such as drawings, tape diagrams, or number bonds to solve a subtraction word problem with the result unknown.
- ❑ Create fact family equations.
- ❑ Interpret the language of an addition or subtraction situation to identify which operation to use.

1.OA.6: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums

I am a level 3 when I can do the following on my own:

- ❑ Count On: Use the count on instead of counting all to find the sum.
- ❑ Making Ten: Possibly use double ten frames with red/yellow counters to model 8+4 as 10 + 2.
- ❑ Doubles +1: Use the doubles fact plus 1 more.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: addition, add, sum, total, addend, tens, ones, equation, equals, plus.
- ❑ Decompose numbers: Use unifix cubes and/or color counters on a ten-frame to decompose numbers.
- ❑ Count All: Use a part-part-whole model (or number bond) to count all parts.
- ❑ Making Ten: Possibly use a ten-frame to find combinations that add up to 10.

1.OA.8: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

I am a level 3 when I can do the following on my own:

- ❑ Change Unknown: Use counters or drawings to solve problems such as 7 + ___ = 12.
- ❑ Start Unknown: Use counters or drawings to solve problems such as ___ + 5 = 12.
- ❑ Result Unknown: Use counters or drawings to solve problems such as 7 + 5 = _.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: addition, add, addend, sum, total, equation, equals, plus.

Perform basic processes such as:

- ❑ Identify each number in an equation as either an addend or the total.

How is my understanding of First Grade MD math standards?

(Measurement & Data)

1.MD.1: Order three objects by length; compare lengths of two objects indirectly by using a third object.

I am a level 3 when I can do the following on my own:

- ❑ Order three objects by length.
- ❑ Compare two objects by length by using a third object.

I am a level 2 progressing toward grade level:

- ❑ Recognize or recall specific vocabulary and perform basic processes such as endpoint, length, longer, & shorter.
- ❑ Describe the length of an object as the distance between its endpoints.
- ❑ Directly compare the length of two objects.

1.MD.2: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to the context where the object being measured is spanned by a whole number or length units with no gaps or overlaps.

I am a level 3 when I can do the following on my own:

- ❑ Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end;
- ❑ Understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.

I am a level 2 progressing toward grade level:

- ❑ Recognize or recall specific vocabulary and perform basic processes such as endpoint, length, longer, & shorter.

1.MD.3a: Tell and write time in hours and half-hours using digital and analog clocks.

I am a level 3 when I can do the following on my own:

- ❑ Show the time given on a digital clock using a Judy clock.
- ❑ Read the time orally as 11 o'clock or 3 thirty.
- ❑ Write the time modeled on an analog clock.

I am a level 2 progressing toward grade level

- ❑ Explain that each day is divided into two spans of 12 hours each, one in the morning (am) and one in the evening (pm).
- ❑ Explain that each hour is divided into 60 minutes.
- ❑ Explain that time is commonly stated in terms of the amount of time that has passed since the last hour.
- ❑ Identify the components of an analog clock.
- ❑ Demonstrate that over the course of a single hour the minute hand makes one full revolution around the clock while the hour hand moves slowly from the numeral indicating the last whole hour (the current hour) to the numeral indicating the next hour.
- ❑ Explain that the beginning of the hour is expressed using the phrase "o'clock," while a time that is halfway through the current hour can be expressed using the hour and the number of minutes past the hour or as being "half past" the hour.

1.MD.3b Identify the days of the week, the number of days in a week, and the number of weeks in each month.

I am a level 3 when I can do the following on my own:

- ❑ Identify the days of the week and where they are on the calendar.
- ❑ Understand there are seven days in a week, with Monday through Friday being weekdays while Saturday and Sunday are weekend days.
- ❑ Understand most months have four full weeks; however, there are times when months will have more or less, depending on how the days are on the calendar.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: calendar, day, week, month, year, weekend, weekday.
- ❑ Verbally say the days of the week.
- ❑ Verbally say the months of a year.
- ❑ Understand the difference between a day of the week and a month.

1.MD.4:Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

I am a level 3 when I can do the following on my own:

- ❑ Organize, represent, and interpret data with 3 categories.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: title, categories, category labels, tallies or other symbols representing data points of a given chart or graph.

Perform basic processes such:

- ❑ Identify the components of a given chart or graph.
- ❑ Identify the category to which a specified tally or other symbol belongs when given a chart or graph.
- ❑ Explain that the number of data points belonging to a particular category can be determined by counting the number of tallies or other symbols associated with that category.
- ❑ Organize a set of data into different categories.
- ❑ Record the number of data points in one category using tallies or other symbols.

1.MD.5:Identify the value of all U.S. coins (penny, nickel, dime, quarter, half-dollar, and dollar coins). Use appropriate cent and dollar notation (e.g., 25¢, $1).

I am a level 3 when I can do the following on my own:

- ❑ Identify each U.S. coin by its color. (e.g., A penny is the only coin that is copper, and a dollar coin is the only coin that can be gold. All other coins are silver.)
- ❑ Identify each coin according to other identifying characteristics (e.g., size, Presidents, etc.).
- ❑ Identify the value of each coin.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: coin, dollar bill, penny, nickel, dime, quarter, half-dollar, dollar coin.

Perform basic processes such:

- ❑ Understand that US currency is expressed in dollars and cents.
- ❑ Understand the $ and ¢ symbols.

How is my understanding of First Grade G math standards?

(Geometry)

1.G.1: Distinguish between defining attributes (e.g. triangles are closed and three-sided) versus non-defining attributes (e.g. color, orientation, overall size); build and draw shapes to possess defining attributes.

I am a level 3 when I can do the following on my own:

- ❑ Build and draw shapes to possess defining attributes.
- ❑ Distinguish between attributes.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: angle, circle, closed, corner, curved, equal sides, hexagon, open, rectangle, rhombus, right angle, side, square, straight, trapezoid, triangle, two-dimensional.

Perform basic processes such:

- ❑ Explain that shapes belonging to the same category have some attributes that can vary and some that cannot.
- ❑ Identify circles, triangles, squares, rectangles, rhombuses, trapezoids, and regular hexagons.
- ❑ Identify "square corners" (right angles).
- ❑ Identify sides of equal length.
- ❑ Identify closed and open figures.

1.G.2: Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter- circles) or three-dimensional shapes (cubes, rectangular prisms, cones, and cylinders) to create composite shapes, and compose new shapes from the composite shape.

I am a level 3 when I can do the following on my own:

- ❑ Compose two-dimensional shapes to create a composite shape and compose new shapes from the composite shape.
- ❑ Compose three-dimensional shapes to create composite shapes and compose new shapes from the composite shape.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: cone, cube, curved, cylinder, edge, equal faces, face, point, right angle, sphere, straight, three-dimensional, vertex.

Perform basic processes such:

- ❑ Identify spheres, cubes, cylinders, and cones.
- ❑ Count the sides and angles of a given two-dimensional figure.
- ❑ Sort a given set of two-dimensional figures according to color or number of sides.
- ❑ Identify attributes shared by each figure in a given set of two-dimensional figures.
- ❑ Distinguish between two-dimensional and three-dimensional figures.
- ❑ Sort three-dimensional figures by their attributes.
- ❑ Describe the attributes (curved and straight sides, number of sides, equal sides, right angles) of a given two-dimensional figure.

1.G.3:Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

I am a level 3 when I can do the following on my own:

- ❑ Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of.
- ❑ Describe the whole as two of, or four of the shares.
- ❑ Understand for these examples that decomposing into more equal shares creates smaller shares.

I am a level 2 progressing toward grade level

- ❑ Recognize or recall specific vocabulary such as: circle, equal portions, equal shares, fourth, half, halves, quarter, rectangle, whole.

Perform basic processes such:

- ❑ Demonstrate that a circle and rectangle can be partitioned into a specified number of equal portions in more than one way.
- ❑ Determine if a circle or rectangle is divided into equal or unequal parts