Grade 2: Midyear
Universal Screener for Number Sense
Detailed Script and Rubrics, *print 1 copy/test administrator*

Number Word Sequences: 2.NBT.A.2   Number Sense: Forward Number Word Sequences
1. **"Count forward starting at 198 and I will tell you when to stop."** (Stop at 202)
   - If student is less than fully fluent with count to 202, say, **"Thanks. This time start counting at 97 and I will tell you when to stop."** (stop at 112)

3	2	1	0
Student is able to count from 198 – 202 with a reasonable degree of fluency and confidence.	Student is able to count from 198 – 202, but has pauses or self-corrections, and student is able to count fluently from 97 – 112.	Student does not count correctly from 198 – 202, but is able to correctly count from 97 – 112 (can be less than fluent and have self-corrections)	Student does not accurately complete either count.
Commentary: Proficient students count forward by ones from any number under 1000. Counting is foundational for developing understanding of the place value system and for addition and subtraction. When students score zero on this task, the assessor should do more diagnostic assessment to ascertain what the student can do. In particular, checking to ensure that a student can fluently count through the teen numbers and up to thirty is absolutely critical. For students who are still struggling with their number word sequences under 100, interventions should be put into place.			

Numeral Identification: 2.NBT.A.3   Number Sense: Numeral Identification
2. **"Read these numbers."** Present cards to student one at a time.

                          550   **111**   **212**

If the student says something like, "five-fifty" ask the student if they have another way to say this. Correct answers are: five hundred fifty, one hundred eleven (accept "a-hundred eleven") and two hundred twelve."

3	2	1
Student read the numbers accurately on first attempt.	Student reads the numbers, but makes self-corrections or reads them correctly on a second attempt.	Student reads at least one number incorrectly.
Commentary: This task samples this skill using only three numbers. For students who score at a level 1 on this task further assessments should be done to determine which numbers (or range of numbers) still need to be learned and/or practiced. **Note:** Many students will insert an "and" after the hundreds (e.g. five hundred *and* twelve). Although some math educators will insist that the word "and " should be reserved for reading decimal numbers, colloquially many people insert an "and" in this way. For this assessment, do not count the response as incorrect if a student inserts an "and" after the hundred. **Language Considerations:** It is important that students are able to read numbers in the language of instruction. However, when students have the ability to read numbers in another language this is a significant asset that should be recognized. Learning to read numbers in a second language should be approached differently, by helping the student to make connections to the other language. For this reason, for students who are bilingual, it is helpful to assess in both languages. For students who are bilingual it is also important not to assume that they are able to read these numbers in their first language.		

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<u>Mental Subtraction - Subtracting Ones: 2.NBT.B.5</u>   <u>Number Sense: Place Value-Mental Math</u>

   3. Present the card 81 - 2. Read this card. (Make sure that the student has read it accurately. Correct the student if they do not.) **"Solve this problem."** If it is not obvious, ask, **"How did you work it out?"** (Teacher may prompt student to make a second attempt)

3	2	1
Student solves the problem accurately on first attempt.	Student solves problem, but makes self-corrections in the process. (Teacher might ask student to solve again if there is a minor counting error.)	Student is unable to solve problem.
Commentary: This problem is constructed to prompt a count back. If a student attempts to use an algorithm (often drawn with a finger on the table), it should be noted, and if the student is able to use that method and arrive at a correct answer, score the response as a three, but ask if they have another way to solve this problem. A count back or "jump back" method is the preferable method for solving this problem, and students who are truly making sense of this problem will normally choose, apply that strategy rather than to do the tedious regrouping necessary for applying a traditional algorithm.		

<u>Contextualized Addition: CCSS: 2.NBT.5</u>   <u>Number Sense: Place Value – Tens and Ones</u>

   4. Place a strip of 10 on the table. **"How many dots do you think are here?"** If student does not answer 10, tell them that there are 10. Allow the student to count the 10 dots. Place a set of 4 dots next to the 10. **"How many are there now?"** (student should automatically answer 14 without needing to count.)

     - If the student starts to count the ten <u>interrupt them</u> and remind them that there are 10 in each strip. If the student persists in counting the 10 to solve the 10 + 4 problem, see rubric for a score of 1 and proceed to problem 5.

     Cover the 14 dots. Put 5 strips of 10 next to the cover. **"I have 50 dots here. I am going to put these with the 14."** Slide the 5 ten strips under the cover. **"How many dots are there under here now?"**

     - If student is unsuccessful, remove the 50 from under the cover and leave them on the table (with the 14 still under the cover) and prompt the student to solve the problem again.

3	2	1
Student is able to solve the problem with all the materials covered.	Student is able to solve the problem with the 5 strips of 10 visible using a count by 10 method, but unable to solve while they are covered.	Student is unable to respond correctly or the student attempts to count all dots by ones. If the student counts all to determine the original 14 dots the response should be scored as 1 and attention needs to be given to help the student understand 10 as a unit.
Commentary: Proficient students mentally solve problems which involve adding any number of 10s to a non-ten number under 100. This ability to use 10s and ones mentally to solve problems is both an indicator of preparedness for the more complex work with larger numbers that comes in the second half of the school year.		

Grade 2: Midyear

<u>Comparison: 2.MD.B.5</u>   <u>Number Sense: Problem Solve - Comparisons</u>

5.   **"The top rectangle here is 7 units long. The rectangle on the bottom is 11 units. How much longer is the bottom rectangle than the top rectangle?"**

Possible alternative phrasings:
Ask they student, **"Which rectangle is longer?"** after they answer that the bottom one is longer say, **"That's right. How much longer?"**
 "What is the difference in the length of the top rectangle and the bottom one?"

3	2	1
Student recognizes the problem as a comparison problem and solves using the numbers. Score as a 3 even if there is a slight calculation error (off by not more than 1.)	A variety of behaviors will be scored as a 2. - Student needs a rephrasing of the problem in order to conceptualize that this is a comparison problem and solve. - Student sees this as a comparison problem, but does not "numerize" the situation and attempts to count the difference without paying attention to the numbers. These students will often be seen using a finger to attempt to count the space between the two rectangles. Please note that even if the student happens to accurately answer 4, but has not shown that they are attending to the numbers given, a score of 2 should be given. - Student subtracts (or attempts to add up), but miscalculates. (e.g. "11 – 7; that is 5.")	Student is unable to conceptualize the idea of the comparison. They might answer something like, "This one goes to 11."
Commentary: Understanding comparison problems represents an important developmental marker in a student's understanding of subtraction. This problem appears to be both linguistic and conceptual. Sometimes clearly language is the issue in understanding this problem. The primary purpose of this problem is to see if the student can conceptualize the idea of difference and comparison, so feel free to reword this one if you think that the wording is the issue. These difficulties with the language of difference problems is also important information. Refrain from any gesturing beyond simply pointing to the rectangles.		

Grade 2: Midyear

Universal Screener for Number Sense

Quick Script, *print 1 copy/test administrator*

Number Word Sequences

1. "Start counting at 198 forward by ones and I will tell you when to stop." (Stop at 202)
> If student is less than fully fluent with count to 202, say, **"Thanks. This time start counting at 97 and I will tell you when to stop."** (stop at 112)

Numeral Identification

2. "Read these numbers." Present cards to student one at a time. (**550, 111, 212**)
> If the student says something like, "five-fifty" ask the student if they have another way to say this.

Mental Subtraction – Subtracting Ones

3. Present the card 81 - 2. **Read this card. (**Make sure that the student has read it accurately. Correct the student if they do not.) **"Solve this problem." "How did you work it out?"** Teacher may prompt student to make a second attempt, if they feel student might be able to correct answer.

Contextualized Addition

4. Place a strip of 10 on the table. Allow the student to count the 10 dots. Place a set of 4 dots next to the 10. **"How many are there now?"** (student should automatically answer 14 without needing to count.
> If the student starts to count the ten <u>interrupt them </u>and remind them that there are 10 in each strip. If the student persists in counting the 10 to solve the 10+4 problem, see rubric for a score of 1 and proceed to problem 5).

Cover the 14 dots. Put 5 strips of 10 next to the cover. **"I have 50 dots here. I am going to put these with the 14."** Slide the 50 under the cover. **"How many dots are there under here now?"**
> If student is unsuccessful, remove the 50 from under the cover and leave them on the table (with the 14 still under the cover) and prompt the student to solve attempt the problem again.

Comparison

5. "The top rectangle here is 7 units long. The rectangle on the bottom is 11 units. How much longer is the bottom rectangle than the top rectangle?"

> Possible alternative phrasing: **"What is the difference in the length of the top rectangle and the bottom one?"**

Grade 2: Midyear

Universal Screener for Number Sense

Spanish Quick Script, *print 1 copy/test administrator*

Number Word Sequences

1. "Comienza a contar desde 198 hacia Adelante con incrementos de uno y yo te avisare cuando parar." (Stop at 202)

> If student is less than fully fluent with count to 202, say, **"Gracias. Y esta vez comienza contando del 97 y yo ye avisare cuando parar."** (stop at 112)

Numeral Identification

2. "Lee estos números." Present cards to student one at a time. (**550, 111, 212**)

> If the student says something like, "five-fifty" ask the student if they have another way to say this.

Mental Subtraction – Subtracting Ones

3. Present the card 81 - 2. **Read this card. (**Make sure that the student has read it accurately. Correct the student if they do not.) **"Soluciona este problema." "Como lo solucionaste?"** Teacher may prompt student to make a second attempt, if they feel student might be able to correct answer.

Contextualized Addition

4. Place a strip of 10 on the table. Allow the student to count the 10 dots. Place a set of 4 dots next to the 10. **"Cuántos hay ahora?"** (student should automatically answer 14 without needing to count.

> If the student starts to count the ten <u>interrupt them</u> and remind them that there are 10 in each strip. If the student persists in counting the 10 to solve the 10+4 problem, see rubric for a score of 1 and proceed to problem 5).

Cover the 14 dots. Put 5 strips of 10 next to the cover. **"Yo tengo 50 puntos aquí. Los voy a poner con los 14."** Slide the 50 under the cover. **"Cuántos puntos están debajo de aquí ahora?"**
> If student is unsuccessful, remove the 50 from under the cover and leave them on the table (with the 14 still under the cover) and prompt the student to solve attempt the problem again.

Comparison

5. "El rectángulo de aquí arriba es 7 unidades de largo. El rectángulo de abajo es de 7 unidades. ¿Qué más largo es el rectángulo de abajo que el rectángulo de arriba?"

> Possible alternative phrasing: **"Cual es la diferencia en longitud del rectángulo de arriba y el de abajo?"**

Grade 2: Midyear
Universal Screener for Number Sense
Interview Note Catcher, *print 1 copy/student*

Name: _____

Date: _____ Teacher: _____

Language: ☐ English   ☐ Spanish   ☐ Other: _____

Number Word Sequences	*score*
1. "Count forward starting at 198 and I will tell you when to stop." (Stop at 202) if necessary: **"This time start counting at 97 and I will tell you when to stop."** (stop at 112) *Notes:* ☐ *student counts fluently from 198 to 202: 3 pts* ☐ *student less than fully fluent with a count from 198-20 but counts fluently from 97-112: 2 pts* ☐ *student is less than fluent with the counts from 198-202 and 97-112: 1 pt* ☐ *less than fluent with all tasks: 0 pts*	
Numeral Identification	*score*
2. "Read these numbers." (550, 111, 212) *Notes:* ☐ *identifies fluently: 3 pts* ☐ *identifies without fluency: 2 pts* ☐ *one or more mistakes: 1 pt*	
Mental Subtraction	*score*
3. 81 - 2 *Notes:* ☐ *:correct 3 pts* ☐ *correct on second attempt: 2 pts* ☐ *student unable to solve: 1 pt*	
Contextualized Addition	*score*
4. 10 + 4 + 50 *Notes:* ☐ *:correct with covered 3 pts* ☐ *:correct, uncovered 2 pts* ☐ *student cannot solve: 1 pt*	
Comparison	*score*
5. Difference between 11 and 7. *Notes:* ☐ *correct 3 pts* ☐ *see detailed rubric: - 2 pts* ☐ *see detailed rubric: 1 pt*	

81-2

212

111

550

Grade 2: Midyear

7 units

11 units