# Fall Universal Screener for Number Sense 

## Instructions and Guidance:

## The Fall USNS is an interview-based assessment.

Who? Whenever possible, the teacher who works most directly with the child should be the one to administer the interview portion of the screener and score the written portion

Read the entire assessment through in preparation and run through the tasks.
Prepare the materials. Only provide materials as described in the script.
Do not provide the student with paper and pencil.
Set up in a place with as few distractions as possible.
Keep a good pace. Most assessments will take 4-5 minutes.
Limit Questioning: It is usually best to attempt to limit questioning and move at a steady pace through the tasks. This improves the efficiency, but also helps to ensure the consistency of administration, and therefore the reliability of the results.

Be flexible: You might find that you can work most efficiently by administering one task at a time, moving from student to student rather than having them come to a station. This can be done with the counting tasks and numeral ID task. Users of Forefront will find that the interview tool can be switched to focus on tasks. Here is a help article for using the interview tool.

Collaborate: Sometimes groups of students can be reorganized in creative ways to provide one teacher with the ability to sit with individual students.

Watch carefully and take notes: The nuances in behaviors that reveal a child's number sense development are sometimes hard to see and hear.

Smile and do your best to make the situation as stress free as possible. If the child seems particularly timid or nervous, consider trying at another time.

Video tape: Although it is not necessary for the administration of the assessment, recording an assessment or two to discuss with colleagues can be an excellent way to learn together, build consistency in administration and scoring, and communicate with parents.

## Grade 1: Fall

## Number Sense Screener

Note Catcher, print 1 copy/student

Name: $\qquad$
Date: $\qquad$ Teacher: $\qquad$
Language of Assessment: $\square$ English $\square$ Spanish $\square$ Other: $\qquad$ AVMR Assessment(s) Suggested? $\square$ No $\quad$ Yes (see below)

| Number Words and Numerals |  | score |
| :---: | :---: | :---: |
| scoring: correct \& fluent: 3pts, correct on 2 ${ }^{\text {nd }}$ attempt or uncertain: 2pts, unsuccessful: 1 pt |  |  |
| 1. "Start counting from 1 and I will tell you when to stop." (stop at 22) Notes: |  |  |
| 2. "Start counting again. This time start at the number 38." (stop at 42) Notes: |  |  |
| 3. Count by 10s. (Stop at 100) Notes: |  |  |
| 4. Numeral Identification: 8 $\qquad$ 5 $\qquad$ 12 $\qquad$ 17 $\qquad$ 20 $\qquad$ $\square$ correct and fluent: 3 pts $\square$ correct but uncertain: 2 pts $\square$ any unsuccessful: 1 pt Notes: |  |  |
| AVMR Number Words and Numerals Assessment recommended: |  |  |
| Addition and Subtraction |  | score |
| scoring: correct on the first attempt: 3pts, correct on second attempt: 2 pts, unsuccessful: 1 pt |  |  |
| 5. Count 15 counters Notes: |  |  |
| 6. $4+3=7$ with covered counters Notes: |  |  |
| 7. 8-2 = 6 with counters partially covered Notes: |  |  |
| AVMR Addition and Subtraction Assessment recommended? |  |  |
| Structuring Number |  | score |
| scoring: correct/automatic: 3 pts, correct/works out (fingers, counting): 2 pts, incorrect: 1 pt |  |  |
| 8. 5 bears, then 4 covered Notes: |  |  |
| 9. 5 bears, then 2 covered Notes: |  |  |
| AVMR Structuring Number Assessment recommended? |  |  |
| Place Value |  | score |
| 10. 10 dots and 3 more <br> $\square 13$ w/o counting or counts from 10: 3 pts Notes: | $\square \text { correct counts all: } 2 \text { pts } \quad \square \text { incorrect:1 pt }$ |  |
| AVMR Place Value Assessment recommended? |  |  |

Quick Script, print 1 copy for test administrator

## Numerals, Words and Sequences

1. "Start counting from 1 and $I$ will tell you when to stop." (stop at 22) If student is not successful on first attempt, you may ask them to count again.
2. "Start counting again. This time start at the number 38. " (stop at 42) If the student has difficulties getting started say, "Say the number 38." (Child says 38) "Good, now keep counting."
3. "Count by tens." (stop at 100)
4. Numeral Identification Cards: $8,5,12,17,20$.

Lay the cards out one at a time and ask, "What number is this?"

## Addition and Subtraction Within 20

5. Put out 15 counters. Ask, "How many counters are there?"

If student is unsuccessful on first attempt say, "Let's check that. Count them again very carefully."
6. Place four counters in front of the student and cover without allowing the student to count. "Here are 4 red counters." Cover three more counters with a second cover. "Here are 3 blue counters. How many counters are there altogether?" Repeat the task if not successful on first attempt.
7. Place 8 red counters in front of the student. "Here are 8 red counters."

Cover without allowing the student to count. Remove 2 counters and leave them uncovered. "How many are left under here?" Point to the cover. If student is unsuccessful on first attempt collect the 8 counters again. Count them aloud, put them in a line, and cover again. Remove two and ask, "How many are still under here?"

## Structures, Flexibility \& Fluency

8. Present bear card. Ask, "How many bears are there?" Confirm that there are 5 . Without child seeing, cover 4 bears.
"How many bears do you see now? How many are hidden?"
9. Present bear card again. "How many bears are there?" Confirm that there are 5 .

Without child seeing, cover 2 bears.
"How many bears do you see? How many are hidden?"

## Place Value

10. "Here I have 10 dots." Put the ten-frame onto the table in front of the child. "Here, I have 3 more. How many are there all together?"

## Grade 1: Fall

## Number Sense Screener

Spanish Script, print 1 copy/test administrator

## Numerals, Words, and Sequences

1. "Comienza a contar desde el 1 y te diré cuándo parar." (stop at 22) If student is not successful on first attempt, you may ask them to count again.
2. "Comienza a contar de nuevo. Esta vez empieza con el número 38. (stop at 42)

If the student has difficulties getting started say, "Diga el numero 38." (Child says 38)
"Bueno, sie contanto."
3. "Cuenta de diez en diez." (stop at 100)
4. Numeral Identification Cards: 8, 5, 12, 17, 20.

Lay the cards out one at a time and ask, "¿Qué número es este?

## Addition and Subtraction Within 20

5. Put out 15 counters. Ask, "¿Cuántas fichas hay?"

If student is unsuccessful on first attempt say, "Vamos a revisar, cuenta de nuevo con mucho cuidado."
6. Place four counters in front of the student and cover without allowing the student to count. "Aquí hay 4 fichas rojas." Cover 3 more counters with a second cover, "Aquí hay 3 fichas azules. ¿Cuántas fichas hay en total?"
Repeat the task if not successful on first attempt.
7. Place 8 red counters in front of the student. "Aquí hay 8 fichas rojas."

Cover without allowing the student to count. Remove 2 counters and leave them uncovered. "¿Cuántas quedan aquí debajo?" Point to the cover. If student is unsuccessful on first attempt collect the 8 counters again. Count them aloud, put them in a line, and cover again. Remove two and ask, "¿Cuántas quedan todavía aquí debajo?"

## Structures, Flexibility \& Fluency

8. Present bear card. Ask, "¿Cuántos osos hay?" Confirm that there are 5. Without child seeing, cover 4 bears.
"¿Cuántos osos ves ahora? ¿Cuántos están escondidos?"
9. Present bear card again. "¿Cuántos osos hay?" Confirm that there are 5. Without child seeing, cover 2 bears. "¿Cuántos osos ves? ¿Cuántos están cubiertos?"

## Place Value

10. "Aquí tengo diez puntos." Put the ten-frame onto the table in front of the child. "Aquí tengo tres más. ¿Cuántos hay en total?"

## Grade 1: Fall

## Administration Guide

Scoring Guide, print 1 copy/test administrator

Count to 22
Number Sense: Forward Number Word Sequences

1. "Start counting from one and I will tell you when to stop." (Stop at 22) Listen carefully. If a student appears to skip a number, have them try again. Sometimes it helps to ask the student to count slowly and loudly.

| 3 | 2 | 1 |
| :---: | :--- | :--- |
| Correct/fluent <br> on 1 $1^{\text {st }}$ attempt | Correct, but uncertain: Enter a <br> score of 2 if the student is hesitant <br> or makes self-corrections, or if <br> student is correct on 2 ${ }^{\text {nd }}$ attempt. | Unsuccessful: Student is unable <br> to complete the count to 22 <br> without errors. |

Commentary: By the end of kindergarten students are expected to be able to count to 100 starting from any number in the sequence. The ability to be able to count is an important foundational skill and one that is highly indicative success in first grade. Students who are unable to count to 22 should immediately be considered for targeted instruction and their progress should be monitored.

For students who score 1 or 2 on this task consider the Add+Vantage Math Recovery Assessment Number Words and Numerals.

Count from 38 to 42
Number Sense: Forward Number Word Sequences
2. "Start counting again. This time start at the number 38." (stop at 42)

If the student has difficulties getting started say, "Say the number 38." (Child says 38) "Good, now keep counting."

| $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{1}$ |
| :--- | :--- | :--- |
| Correct/fluent: Student <br> counts from 38-42 without <br> delays or self-corrections. | Correct, but uncertain: <br> Student is able to complete <br> the count but makes-self <br> corrections, is hesitant, or <br> needs to drop back for a <br> "running start." | Unsuccessful: Student is <br> unable to complete the <br> count. |
| Commentary: The ability to start a count starting at any number in the sequence is a <br> foundational skill for using counting on for addition and counting back for subtraction. <br> For students who score 1 on this task consider administering the Add+Vantage Math <br> Recovery Assessment Number Words and Numerals. |  |  |

## Grade 1: Fall

Count by 10s
Number Sense: Skip Count by 10s
3. "Count by tens." (Stop at 100) If a student is unsure what the prompt means and hesitates to start or starts counting 10, 11, 12, etc. it is ok to support the student by saying, "Count by tens, like this 10,20 ..." (do not go past 20 with this additional prompt.) If the student makes mistakes you may as the student to count again.

| 3 | 2 | 1 |
| :--- | :--- | :--- |
| Correct/fluent: Students <br> counts by tens without <br> significant pauses. Minor <br> self-corrections are ok. | Correct, but uncertain: Student makes <br> longer pauses, and or makes self- <br> corrections. If the student makes <br> mistakes on the first count and you ask <br> them to try again and they are successful <br> on a second attempt enter a 2. | Unsuccessful: Stu <br> dent is unable to <br> count by 10s to <br> 100. |

Commentary: The ability to count by 10s is critical for the development of place value concepts. Although the student might not yet have a full understanding of tens, fluency with the verbal sequence will support later conceptual development. This is a skill that all students should continue to master in first grade as they move beyond 100 in their counts and as they learn to add 10 to any number under 100.

## Numeral ID to 20

Number Sense: Numeral ID
4. Numeral Identification: Present each numeral card one at a time in this order.
"What number is this?" $8,5,12,17,20$

| 3 | 2 | 1 |
| :--- | :--- | :--- |
| All correct, confident: <br> Student responds to <br> each card promptly <br> with the correct <br> answer. | All correct, but uncertain: Student expresses <br> uncertainty, self corrects or otherwise shows <br> that they need more practice with reading <br> numerals under 20. | Any <br> Incorrect: Student <br> is unable to read <br> one or more of the <br> numbers. |
| If the student reads 17 as 70 make note. If |  |  |
| this is the only mistake score as a 2. |  |  |$\quad$|  |
| :--- |

Commentary: This quick sampling of numerals is used to determine quickly if a student is confident with reading numbers to 20. Use this screener to determine which students to assess for their ability to read all numbers under 20 quickly and easily.

For students who score 2 or 1 consider using AVMR Number Words and Numerals Assessment.

Count 15 Objects
Number Sense: One to One Correspondence
5. Put out 15 counters for the child to count. Can be multiple colors or all one color. "How many counters are here?" If student is unsuccessful on first attempt say, "Let's check that. Count them again very carefully."

| $\mathbf{\| c \|}$ | $\mathbf{c \|} \mathbf{2}$ | 1 |
| :--- | :--- | :--- |
| Correct on first attempt: <br> Student demonstrates one-to- <br> one correspondence and a solid <br> number word sequence to 15. | Correct on 2nd attempt: <br> Student makes minor <br> errors in counting that <br> lead to inconsistency. | Unsuccessful: Student is unable <br> to count a set of 15 objects. |

The ability to enumerate a set of up to 20 objects is indicative of not only an important skill, but also critical cognitive development. Students who are unable to count a set of up to 20 objects should receive targeted instruction and progress should be monitored.
If there is any doubt that the student has not yet developed cardinality, after the student has completed the count ask, "So, how many are there?" If the student proceeds to count again take note of this. Students need to know that the last number said when counting represents the total number of objects in the set. If, when asked, the student counts the set again it is likely that some explicit instruction is necessary. Telling the student directly, "When we count, the last number we say is how many are there. So how many counters are there?" This will support students in developing this understanding.

For students who are unsuccessful, consider administering AVMR Addition and Subtraction assessment.

## 4 and 3 Covered

Number Sense: Covered Tasks - Addition 6. Put 4 counters all of the same color in front of the child. "Here are four counters." Cover them without allowing the child to count. Put out 3 more counters of a different color next to the 4 . "I am putting 3 more counters here." Cover them without allowing the child to count. Using your hand to indicate both groups, "How many are there altogether?"

| $\mathbf{c \|}$ | 2 | $\mathbf{1}$ |
| :--- | :--- | :--- |
| Correct on first attempt: <br> Student correctly answers 7. A <br> variety of solution strategies <br> are possible and all are valid. | Correct on second attempt: Student is <br> unsuccessful on the first attempt, but is <br> able to find the correct answer on 2nd <br> attempt. Any solution strategy is <br> acceptable. | Unsuccessful: <br> Student is <br> unable to solve <br> the task <br> successfully. |

This task is a strong number sense indicator, in that it is a simple task within finger range. Students who are unsuccessful with this task would likely benefit from prompt targeted instruction. The ability to solve this task is indicative of cognitive development that is foundational for success in 1st grade.

## Grade 1: Fall

## Eight Counters - Remove 2

Number Sense: Covered Tasks - Subtraction
7. Place 8 red counters in front of the student. "Here are 8 red counters" (Cover without allowing the student to count.) Remove 2 counters and leave them uncovered. "I took two counters back out. How many are still under here?" Point to the cover.

If the student is unsuccessful, collect the counters and lay them down again, putting them into a line as you count them aloud. "1,2,3,4,5,6,7.8" Cover them again. "There are 8 counters under here. I am removing two. How many are still under here?"

| $\mathbf{3}$ | $\mathbf{1}$ | $\mathbf{1}$ |
| :--- | :--- | :--- |
| Correct on first <br> attempt: Student <br> correctly answers 6 <br> on first attempt. | Correct on second attempt: <br> With the additional support of <br> counting and structure <br> student answers correctly. | Unsuccessful: After the 2nd <br> presentation, student is still <br> unable to solve. |

Subtraction is a difficult topic to teach and to learn. Students who score 1 on this task will need additional instructional supports when subtraction is introduced in 1st grade, which is often early in the year. Consider the drawn and material supports that can support students in arriving at accurate solutions, but also for developing conceptual understanding. These same students will also likely benefit from targeted instruction. To further determine where the instructional starting point is, consider presenting a smaller number of counters ( 4 or 5 ) and remove one to see if the student is able to answer.

## Grade 1: Fall

5 Bears, Some Hiding
Number Sense: Structures, Flexibility and Fluency
8. Present bear card. Ask, "How many bears are there?" Allow the student to count if necessary and confirm that there are 5 . Without child seeing, cover 4 bears. "How many bears do you see now? How many are hidden?"
9. Present bear card again. "How many bears are there?" Confirm that there are 5. Without child seeing, cover 2 bears. "How many bears do you see? How many are hidden?

| 3 | 2 | 1 |
| :---: | :---: | :---: |
| Correct and Automatic: <br> Student quickly is able to identify the number of hidden bears without signs of counting. | Correct/Works out: Student is able to tell the numbers of hidden bears, but needs to count and/or use fingers to work out. | Unsuccessful: Student is unable to accurately determine the number of hidden bears. |

Commentary: Knowing combinations to 5 is a critical milestone on the road to fluency with addition and subtraction.

Students who are unsuccessful with these tasks will need ample opportunities for them to develop this fluency if they are going to reach the end of 1st grade goal, which is fluency within 10.

## Ten and three more

Number Sense: Place Value: Ones, Tens and Hundreds
10. "Here I have 10 dots." Put the ten-frame onto the table in front of the child. "Here, I have 3 more. How many are there all together?"

| 3 | $\mathbf{c \|}$ 2 | 1 |
| :--- | :--- | :--- |
| Correct, counts from 10 or <br> answers without counting: <br> Student operates off the ten <br> without needing to count the <br> ten. | Correct, Counts All: Student <br> counts the ten and the three <br> to answer 13 | Unsuccessful: Student does <br> not answer 13 |

Commentary: The ability to operate off of 10 is foundational for much of the work related to place value in $1^{\text {st }}$ grade. Learning to do this takes time and this ability is an important developmental landmark. For students who score at a level 1 on this task, there is important work to do related to 1:1 correspondence and targeted supports are likely necessary.

Students who score 1 on his task should be further assessed, an Add+Vantage Math Recovery Addition \& Subtraction test is recommended.


## Materials Preparation Checklist for Fall Screeners

## Kindergarten:

Copies of the note catchers: One per student
Copies of the Quick Script: One for the teacher
Copies of the detailed script: As necessary for the teacher
Number and dot cards
7 counters of one color, 3 counters of another color
A piece of paper or a plate for the counter tasks
First Grade:
Copies of the note catchers: One per student
$\square$ Copies of the Quick Script: One for the teacher
$\square$ Copies of the detailed script: As necessary for the teacher
$\square$ Number cards
$\square$ Counters: At least 15 including at least 8 of a single color and 3 of another color
$\square$ An opaque cover for the counters (a thin foam sheet, or card stock work well)

## Second Grade:

$\square$ Copies of the note catchers: One per student
$\square$ Copies of the Quick Script: One for the teacher
$\square$ Copies of the detailed script: As necessary for the teacher
$\square$ Number and dot cards
$\square$ Counters: 14 of one color 6 of a second color
$\square$ Two opaque covers for the counters (thin foam sheets, or card stock work well)
Third Grade:
$\square$ Copies of the note catchers: One per student
$\square$ Copies of the Quick Script: One for the teacher
$\square$ Copies of the detailed script: As necessary for the teacher
$\square$ Cards for question prompts
$\square$ Counters: 12 of one color
Fourth Grade:
$\square$ Copies of the note catchers: One per student
$\square$ Copies of the Quick Script: One for the teacher
$\square$ Copies of the detailed script: As necessary for the teacher
Number and dot cards
$\square$ Pencil and paper for student
Number lines: One for each student

## Fifth Grade:

$\square$ Copies of the note catchers: One per student
$\square$ Copies of the Quick Script: One for the teacher
$\square$ Copies of the detailed script: As necessary for the teacher
$\square$ Number and other cards
$\square$ Number lines: One for each student

## Fall Overall Performance Bands

Kindergarten

| $7-9$ | $10-13$ | $14-17$ | $18-21$ |
| :---: | :---: | :---: | :---: |

First Grade

| $10-14$ | $15-19$ | $20-24$ | $25-30$ |
| :---: | :---: | :---: | :---: |

Second Grade

| $10-14$ | $15-19$ | $20-24$ |
| :---: | :---: | :---: |

Third Grade

| $10-14$ | $15-19$ | $20-24$ |
| :---: | :---: | :---: |

Fourth Grade

| $9-12$ | $13-17$ | $18-22$ | $23-27$ |
| :---: | :---: | :---: | :---: |

Fifth Grade

| $9-12$ | $13-17$ | $18-22$ | $23-27$ |
| :---: | :---: | :---: | :---: |

Sixth Grade

| $9-11$ | $12-14$ | $15-21$ | $22-27$ |
| :---: | :---: | :---: | :---: |

