## Grade 2



## Fall Universal Screener for Number Sense

### Instructions and Guidance:

The Fall Number Sense Screeners are entirely interview-based assessments.

**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 - 6 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 <u>the interview tool</u>.

**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.



#### Name: \_\_\_\_

Date: \_\_\_\_\_ Teacher: \_\_\_\_

Number Sense Screener

Note Catcher, print 1 copy/student

Language of Assessment: 
□ English 
□ Spanish 
□ Other:\_\_\_\_\_ AVMR Assessment(s) Suggested? 
□ No 
□ Yes (see below)

Number Words and Numerals	score		
scoring: correct & fluent: 3 pts, correct but uncertain: 2 pts, unsuccessful: 1 pt			
1. "Start counting from 27 and I will tell you when to stop." (Stop at 43)			
Notes:			
2. "Start counting from 96 and I will tell you when to stop." (Stop at 120)			
Notes:			
3. Count backwards from 23 to 10			
Notes:			
Notes.			
4. Numeral Identification: 66 71 90 17 54			
$\Box$ correct and fluent: 3 pts $\Box$ correct but uncertain: 2 pts $\Box$ any unsuccessful: 1 pt			
Notes:			
AV/AD Number Mande and Numerale Accesses where a service			
AVMR Number Words and Numerals Assessment recommendation Addition and Subtraction			
	score		
scoring: correct on the first attempt: 3 pts, correct on second attempt: 2 pts, unsuccessful: 1 pt 5. 9 + 6 with covered counters			
Notes:			
6. 14 – 3 with partially covered counters			
Notes:			
AVMR Addition and Subtraction Assessment recomme	nded?		
Structuring Number	score		
scoring: correct and automatic: 3 pts, correct/works out: 2 pts, unsuccessful: 1 pt			
7. Two numbers that make 10: +			
Notes:			
8. Another two numbers that make 10: +			
Notes:			
AVMR Structuring Number Assessment recomme	nded?		
Place Value	score		
9. 10 and 6 more			
□ correct without counting: 3 pts □ counts by ones to solve: 2 pts □ unsuccessful: 1 pt			
Notes:			
10. 16 and 10 more			
□ correct: w/o counting by ones: 3 pts □ correct: counts by ones: 2 pts □ unsuccessful: 1 pt			
Notes:			
AVMR Place Value Assessment recomme	nded?		





Number Sense Screener Quick Script, *print 1 copy for test administrator* 

### Numerals, Words and Sequences

- 1. "Start counting from 27 and I will tell you when to stop." (Stop at 43) You may ask the student to count again to see if they are correct on a second attempt.
- 2. "Start counting from 96 and I will tell you when to stop." (Stop at 120) You may ask the student to count again to see if they are correct on a second attempt.
- 3. "Count backward from 23 and I will tell you when to stop." (stop at 10) If the student at first counts up, interrupt them to correct them, saying, "That is counting up. This time we are counting down, to zero." You may ask the student to count again if they make a mistake.
- **4.** Numeral Identification Cards: 66, 71, 90, 17, 54. Lay the cards out one at a time and ask, **"What number is this?"**

### Addition and Subtraction

5. "Here are 9 counters." (Cover.) "Here are 6 counters." (Cover.) "How many counters are there all together?"

If the student is unsuccessful on the first attempt show the whole task again.

6. Put out 14 counters of one color. (Cover.)
"Here are 14 counters." Remove 3 counters and cover. "I'm taking away 3. How many counters are still under here?" Gesture to the first cover.
If the student is not successful on first attempt pose the question a second time.

### Structures, Flexibility & Fluency

- 7. "Tell me two numbers that go together to make 10." (Prompt for addition.)
- 8. "Tell me another two numbers that go together to make 10." (Prompt for addition.) If the student says 10 and 0 do not score and ask for another combination.

### <u>Place Value</u>

- 9. Put a 10-frame on the table. "I have some dots here. How many do you think there are?" If student doesn't know, take note and have the student count. Confirm that there are 10 dots. Slide them under a cover. "I put these 10 dots under here, and now I am going to add 6 more." Show the 6 dots. Slide them under the cover. "How many are under here now?"
- 10. Confirm that there are 16. (If student was unsuccessful, reveal all the dots and demonstrate a count like this. "There are 16. Look, 10 (gesturing to the strip of ten) 11, 12, 13, 14, 15, 16." (pointing to the six dots). Ten and six is sixteen." Cover again.
  "There are 16 dots under here. I am going to put another strip of 10." Show the strip of 10 and slide it under with the 16 "How many are under here now?"



Number Sense Screener Spanish Script, *print 1 copy for test administrator* 

### Numerals, Words & Sequences

- 1. "Comienza a contar desde el 27 y yo te diré cuándo parar." (Stop at 43) You may ask the student to count again to see if they are correct on a second attempt.
- 2. "Comienza a contar desde el 96 y yo te diré cuándo parar." (Stop at 120) You may ask the student to count again to see if they are correct on a second attempt.
- 3. "Cuenta hacia atrás desde el 23 y yo te diré cuándo parar." (stop at 10) If the student at first counts up, interrupt them to correct them, saying, "Eso es contar hacia arriba.
  Estamos contando hacia abajo, hacia el cero." You may ask the student to count again if they make a mistake.
- 4. Numeral Identification Cards: 66, 71, 90, 17, 54.Lay the cards out one at a time and ask, "¿Qué número es este?"

### Addition and Subtraction Within 20

- 5. "Aquí hay 9 fichas." (Cover.) Aquí hay 6 fichas." (Cover.) "¿Cuántas fichas hay en total?" If the student is unsuccessful on the first attempt show the whole task again.
- 6. Put out 14 counters of one color. (Cover.)
  "Aquí hay 14 fichas." Remove 3 counters and cover. "Voy a quitar 3. ¿Cuántas fichas hay todavía aquí debajo?" Gesture to the first cover.
  If the student is not successful on first attempt pose the question a second time.

### Structures, Flexibility & Fluency

- 7. "Dime dos números que juntos sumen 10." (Prompt for addition.)
- 8. "Dime otros dos números que juntos sumen 10." (Prompt for addition.) If the student says 10 and 0 do not score and ask for another combination.

### Place Value

- 9. Put a 10-frame on the table. "Tengo algunos putos aquí. ¿Cuántos piensas que hay?" If student doesn't know, take note and have the student count. Confirm that there are 10 dots. Slide them under a cover. "Puse estos 10 puntos debajo y ahora voy a sumar 6 más." Show the 6 dots. Slide them under the cover. "¿Cuántos hay aquí debajo ahora?"
- 10. Confirm that there are 16. (If student was unsuccessful, reveal all the dots and demonstrate a count like this. "Hay 16. Mira, 10 (gesturing to the 10-frame) 11, 12, 13, 14, 15, 16." (pointing to the six dots). Diez y seis es dieciseis." Cover again.
  "Hay 16 puntos aquí debajo. Voy a poner otros 10." Show the 10-frame and slide it under with the 16. "¿Cuántos hay ahora?"



Administration Guide Scoring Guide, *print 1 copy/test administrator* 

### Count from 27 to 43

### Number Sense: Forward Number Word Sequence

**1. "Start counting from 27 and I will tell you when to stop"** (Stop at 43) You may ask the student to count again to see if they are correct on a second attempt.

3	2	1
Correct and fluent: Student	Correct, but uncertain: The	Unsuccessful: Student is unable
starts counting and continues to	student is able to complete the	to count starting at 27, or makes
count correctly without long	count, but looks to the teacher	mistakes in the sequence. If you
pauses or self-corrections.	for reassurance, has longer	feel that the student has made
	pauses for thinking, or makes	these mistakes and would be
	self-corrections.	able to self-correct on a second
	Or student counts correctly on	attempt, prompt the student to
	2 <sup>nd</sup> attempt.	start over and if student is
		correct, score as 2.
Commentary: The ability to count within 100 starting from any number in the sequence is a		

Commentary: The ability to count within 100 starting from any number in the sequence is a kindergarten expectation. This is indicative of not only a skill, but also important foundational conceptual development.

Students who score a 1 on this task should be recommended for an AVMR Number Words & Numerals assessment.

## <u>Count from 96 to 120</u>

Number Sense: Forward Number Word Sequence

**2. "Start counting from 96 and I will tell you when to stop."** (Stop at 120) You may ask the student to count again to see if they are correct on a second attempt.

3	2	1
Correct and fluent: Student	Correct, but uncertain: The	Unsuccessful: Student is unable
starts counting and continues to	student is able to complete the to count starting at 96 or ma	
count correctly without long	count, but looks often to the	mistakes in the sequence.
pauses for thinking or self-	teacher for reassurance, has	
corrections.	longer pauses for thinking, or	
	makes self-corrections.	
	Or student counts correctly on	
	2 <sup>nd</sup> attempt.	

Commentary: The ability to count within 120 starting from any number in the sequence is a 1<sup>st</sup> Grade (1.NBT.A.1) expectation. This is indicative not only of a skill, but also important foundational conceptual development.

Students who score a 1 on this task should be recommended for an AVMR Number Words & Numerals assessment.



Count Back from 23 to 10Number Sense: Backward Number Word Sequence3. "Count backward from 23 and I will tell you when to stop." (stop at 10) If the student at first<br/>counts up, interrupt them to correct them, saying, "That is counting up. This time we are<br/>counting down, to zero." You may ask the student to count again if they make a mistake.

3	2	1	
Correct and fluent: Student	Correct, but uncertain: The	Unsuccessful: Student is unable	
starts counting down and	student is able to complete the	to count starting at 27 or makes	
continues to count correctly	count, but looks often to the	mistakes in the sequence.	
without long pauses for thinking	teacher for reassurance, has		
or self-corrections.	longer pauses for thinking, or		
	makes self-corrections.		
	Or student counts correctly on		
	2 <sup>nd</sup> attempt.		
Commentary: The ability to count within 100 starting from any number in the sequence is a			
kindergarten expectation. This is indicative of not only a skill, but also important foundational			
conceptual development.			

Students who score a 1 on this task should be recommended for an AVMR Number Words & Numerals assessment.

### Numeral ID to 100

Number Sense: Numeral ID

4. Numeral Identification Cards: 66, 71, 90, 17, 54.

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

3	2	1	
Correct and fluent:	Correct, but uncertain: The student	Unsuccessful: Student makes a	
Student correctly	reads the numbers correctly, but perhaps	mistake when reading one or	
reads the number with	looks to the teacher for reassurance, has	more numbers (see the possible	
certainty.	longer pauses for thinking, or makes self-	exception for 17 or 90). Student	
	corrections.	makes errors indicative of	
	If the child appears to say "70" when	issues with reading numbers	
	presented with the number 17, or	under 100.	
	nineteen when shown the 90, take note		
	and score as a 2.		
Commentary: The ability to read numbers under 100 is a 1 <sup>st</sup> Grade Standard. Given that students will			

Commentary: The ability to read numbers under 100 is a 1<sup>st</sup> Grade Standard. Given that students will be working extensively with numbers to 100 in 2<sup>nd</sup> Grade, knowing number names and being able to read and write numbers is an essential, fundamental skill for accessing the grade level curriculum. This is a very brief sampling of numbers under 100. If there is any doubt, further assessment should happen.

Students who score a 1 on this task should be recommended for an AVMR Number Words & Numerals assessment.



9 Covered and 6 More

Number Sense: Covered Task - Addition

5. "Here are 9 blue counters." (Cover.) "Here are 6 red counters." (Cover.) "How many counters are there all together?"

If the student is unsuccessful on the first attempt show the whole task again.

If strategy is not obvious ask, "How did you figure that out?"

3	2	1
Correct on first attempt: Correct on second attempt: A Unsuccessful: Student		Unsuccessful: Student is unable
Student may use a variety of variety of strategies are to accurately determine that		
strategies to solve this problem. acceptable. the sum is 15.		the sum is 15.
Commentary: This problem is indicative of ability to operate off of a given value. The ability to solve this		
problem demonstrates a significant conceptual development and can be considered a milestone. Students who		

problem demonstrates a significant conceptual development and can be considered a milestone. Students who are unsuccessful with this task should be recommended for an Add+Vantage Math Addition & Subtraction assessment.

## 14 Counters Remove 3

Number Sense: Covered Task - Subtraction

6. Put out 14 counters of one color in front of the child by do not allow them to count (Cover.) **"Here are 14 counters."** Remove 3 counters and cover. **"I'm taking away 3. How many counters are still under here?"** 

If the student is not successful on first attempt pose the entire task a second time.

3	2	1
Correct on first attempt:	Correct on second attempt: A	Unsuccessful: Student is unable
Student may use a variety of	variety of strategies are	to accurately determine that
strategies to solve this problem.	acceptable.	the difference is 11.
Commentary: Like the previous problem, the ability to solve this problem is indicative of ability to operate off of		
a given value and demonstrates a significant conceptual development and can be considered a milestone.		
Students who are unsuccessful with this task should be recommended for an Add+Vantage Math Addition $\&$		
Subtraction assessment.		

### Partitions of 10

### Number Sense: Structures, Flexibility & Fluency

7. "Tell me two numbers that go together to make 10." (Prompt for addition.)

8. "Tell me another two numbers that go together to make 10." (Prompt for addition.)

If the student says 10 and 0 do not score and ask for another combination.

3	2	1
Correct and	Correct/Works out: Student is able to produce	Unsuccessful: Student is unable
Automatic:	combinations of ten, but significant think time is	to accurately provide a
Fluent recall.	necessary, counting of fingers, or self-corrections	combination of two numbers
	all indicate a level 2 type response.	that combine to make 10.
Commenter v. Knowing combination of numbers that combine to make 10 is critical for the		

Commentary: Knowing combination of numbers that combine to make 10 is critical for the development of more sophisticated computational strategies. Students who score less than 3 on these two tasks should be recommended for AVMR Structuring Numbers Assessment.



Ten Dots and Six More

Number Sense: Place Value - Ones, Tens, and Hundreds

**9. "I have a strip of dots here. How many do you think there are?"** If student doesn't know, take note and have the student count. Confirm that there are 10 dots. Slide them under a cover. "**I put these 10 dots under here, and now I am going to add 6 more."** Show the 6 dots. Slide them under the cover. "**How many are under here now?**"

Allow the student to answer, then confirm that there are 16. (If student was unsuccessful, reveal all the dots and demonstrate a count like this. **"There are 16. Look, 10** (gesturing to the strip of ten) **11, 12, 13, 14, 15, 16."** (pointing to the six dots). **Ten and six is sixteen."** Cover again and do not remove the items. Proceed to the next task.

3	2	1
<b>Correct, no counting by ones:</b> To score a 3 on this task the student should respond 16.	<b>Correct-counts by ones:</b> The student counts by ones to solve either by counting from 1 or counting on from 10.	<b>Unsuccessful:</b> Student does not answer 16.

Commentary: Place value as it relates to tens and ones is essential to the work of 2<sup>nd</sup> grade. It is critical that students who know that a ten and some more ones create teen numbers. This problem has close ties to the Structuring Number section above and should also be considered within that context. It could be also proposed that this question is similar enough to Addition & Subtraction that it should be considered with those problems in mind.

Many students who are unsuccessful with this task likely would have already been recommended for an AVMR assessment in one of the previous two sections.

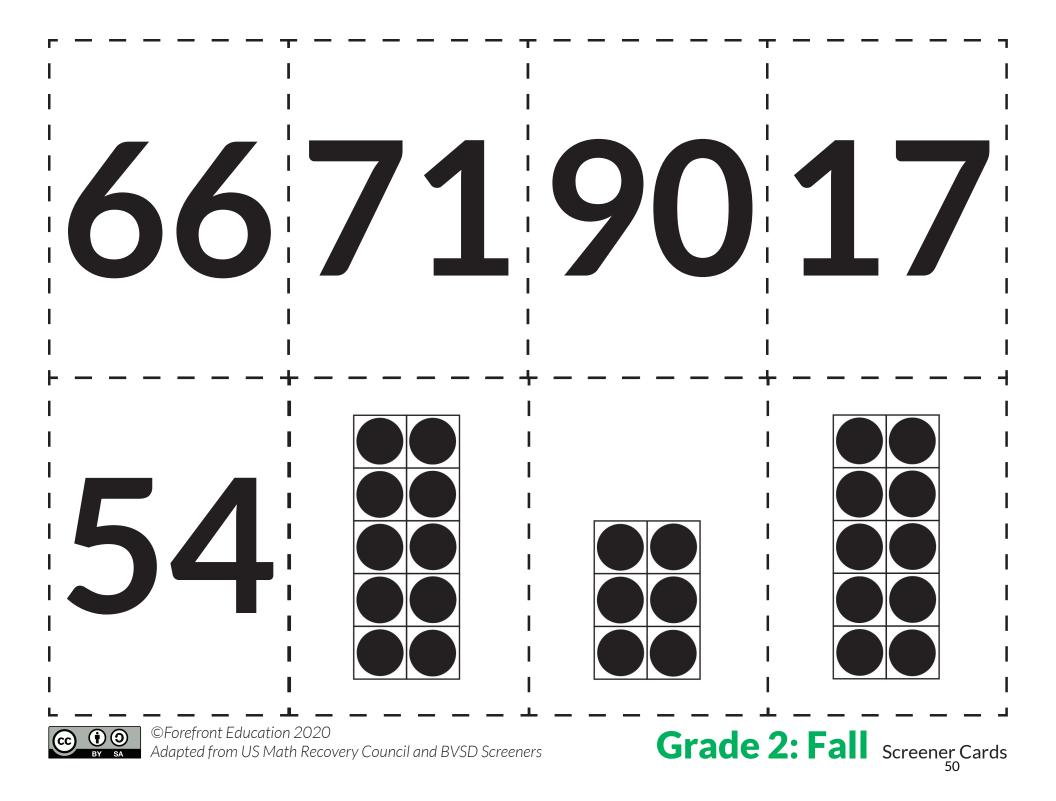
### Sixteen and Ten More

Number Sense: Place Value - Ones, Tens, and Hundreds

**10.** "There are 16 dots under here. I am going to put another strip of 10." Show the strip of 10 and slide it under with the 16. "How many are under here now?"

3	2	1	
<b>Correct, w/o count by ones:</b> To score a 3 on this task the student should respond 26.	<b>Correct-counts by ones:</b> The student counts by ones to solve.	<b>Unsuccessful:</b> Student does not answer 26.	
Commentary: Place value as it relates to tens and ones is essential to the work of 2 <sup>nd</sup> grade. It is critical that students can add tens to any number under 100. This problem, which is the most challenging task of the assessment is nevertheless indicative of an understanding of place value that is foundational to the work of the grade. If students are unsuccessful with this task, the AVMR Place Value assessment would reveal more about their understanding, but that assessment would not be recommended for students who were also unsuccessful with tasks #4 and #7 & 8. For those students use the AVMR Addition and			





## 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
- □ Copies of the Quick Script: One for the teacher
- □ Copies of the detailed script: As necessary for the teacher
- □ Number cards
- □ Counters: At least 15 including at least 8 of a single color and 3 of another color
- □ An opaque cover for the counters (a thin foam sheet, or card stock work well)

### Second Grade:

- □ 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
- □ Counters: 14 of one color 6 of a second color
- □ Two opaque covers for the counters (thin foam sheets, or card stock work well)

#### **Third Grade:**

- □ 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
- □ Cards for question prompts
- □ Counters: 12 of one color

#### Fourth Grade:

- □ 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
- □ Pencil and paper for student
- □ Number lines: One for each student

#### Fifth Grade:

- 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 other cards
- □ Number lines: One for each student



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# 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	25 - 30
Third Grade			
10 - 14	15 - 19	20 - 24	25 - 30
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