Universal Screener for Number Sense

Interview - Detailed Script and Rubrics, print 1 copy/test

Number Word Sequence/Place Value 3.NBT.A.2 Number Sense: Backward Number Word Sequences

- 1. "Let's do some counting. Start at the number three hundred two and count backward. I will tell you when to stop." Stop at 298. If the student makes a minor mistake that you think might be corrected on a second attempt ask the student. "Let me hear that one more time."
 - If still incorrect, "Count forward starting at 98" (stop at 112)

3	2	1	0
Student counts accurately on first attempt. (minor self- corrections allowed)	Student counts accurately but with uncertainties; correct on second attempt, or on first attempt with significant pauses or self-corrections	Counts from 98 -112. Student does not accurately count from 302-298.	Does not accurately count from 98 - 112

Commentary: Backward counts across decade numbers is a skill that is not a "memorization" of the number sequence but reveals an understanding of the number system. It is for that reason that this task aligns with Number in Base Ten.

Represent Multiplication: 3.OA.A.1

Number Sense: Model Multiplication with Materials

2. Have counters available for the student (more than 12). Present the expression 3 x 4. "Read this." Correct the student if they misread. "How could you use these to show 3 times 4?" Probe the student briefly to ensure that they understand that they have created groups.

•	•	
3	2	1
Student creates a 3	Student does show three groups of four or four groups of three	Student does
by 4 array or 3	but only after additional prompting.	not show
groups of 4, or 4	Or student rotely creates an array or some other accurate	<i>eithe</i> r 3 groups
groups of 3 and	configuration, but cannot explain repetitions of equal groupings.	of 4 or 4 groups
explains clearly.		of three.
		I

Commentary: The ability to create a model that matches multiplication (and division) problems is an excellent indicator of a conceptual understanding. This learning is essential to the work of third grade. Any students who are unsuccessful should be given ample opportunities to learn and practice this idea. Note that the rote skill of building groups and/or arrays is a stepping stone in the correct direction. Continued work with visual models, along with opportunities to discuss these visual models, supports the conceptual development.

A common thing is for students to create a group of three and a group of 4, then to attempt to somehow put an x. Usually, the explanation falls apart at this point, yet it isn't unusual that the student has memorized the answer of 12. Score as level 1 if the student is unable to create a multiplicative model.

This problem is not assessing whether the student knows the answer 12. It is about whether the student creates a concrete representation of *why* 3 x 4 is 12. For that reason, if a student says the answer is 12, yet has not created a configuration that reflects 12, it is OK to probe. "I see three here, and four here. You say the answer is 12. I don't see 12 anywhere. Can you show me how this makes 12?" (See score of 2.)



Subtraction with Addition Scaffold: 3.NBT.A.2

Number Sense: Subtraction - Mental Math

- 3. Present the card 200 198 and say, "Read this." Check to ensure that the student has read the problem accurately. "How much is 200 minus 198?"
 - If the student begins to attempt the use of a traditional algorithm (usually evident when the student starts to draw the problem with their finger on the table.) Say, "It looks like you are trying to solve the problem the paper and pencil way. Do you have another way you might use to solve this problem?"
 - If the student is unable to solve 200 198, present the expression, 198 + 2. "Could you use this to help you?"

3	2	1	
Student solves without need for additional prompt.	Student can solve 200 – 198 after presented with 198 + 2	Student cannot solve even when supported with 198 + 2	
Students who understand this prob	Commentary: The continued conceptualization of differences and place value are the targets of this task. Students who understand this problem well will choose to count up from 198 to 200 to find the difference, or count back 199, 198 or will simply know that the 8 + 2 is 10 and so therefore the answer is		

Addition with Scaffold: 3.NBT.A.2

Number Sense: Addition - Mental Math

- 4. Present the expression 299 + 102. "Read this card." Check to ensure that the student has read the problem accurately. Correct students who do not read it correctly. "How much is 299 plus 102?"
 - If the student begins to attempt the use of a traditional algorithm (usually evident when the student starts to draw the problem with their finger on the table.) Say, "It looks like you are trying to solve the problem the paper and pencil way. Do you have another way you might use to solve this problem?"
 - If student is unable to solve, present the card 299 + 2 with the first card. "Could you use this to help you?"

3	2	1		
Student answers 401 without need for additional prompt.	Student can solve after presented with 299 + 2.	Student cannot solve even when supported with 299 + 2.		
Commentary: The ability of students to coordinate hundreds, tens, and ones represents an important developmental milestone for students. Providing anchor problems for students to develop mental				



anchors can support students who are developing this ability.

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Quick Script, print 1 copy/test administrator

Number Word Sequence/Place Value

- 1. "Let's do some counting. Start at the number 302 and count backward. I will tell you when to stop." Stop at 298.
 - If the student makes a minor mistake on their first attempt second attempt, say, "Let me hear that one more time. Start at the number 302 and count backward."
 - If the student is still unsuccessful say, "This time let's count forward. Start at the number 98 and count up. I will tell you when to stop." (Stop at 112)

Represent Multiplication

2. Have counters available for the student (more than 12). Present the expression 3 x 4. "Read this." Correct the student if they misread.

"How could you use these to show 3 times 4?" Probe the student briefly to ensure that they understand that they have created groups.

Subtraction with Addition Scaffold

3. "Read this," present 200 – 198. Check to ensure that the student has read the problem accurately. "How much is 200 minus 198?"

If the student begins to attempt the use of a traditional algorithm (usually evident when the student starts to draw the problem with their finger on the table.) Say, "It looks like you are trying to solve the problem the paper and pencil way. Do you have another way you might use to solve this problem?"

If the student is unable to solve 200 – 198, present the expression, 198 + 2. "Could you use this to help you?"

Addition with Scaffold

4. Present the expression 299 + 102. "Read this card." Check to ensure that the student has read the problem accurately. "How much is 299 plus 102?"

If the student begins to attempt the use of a traditional algorithm (usually evident when the student starts to draw the problem with their finger on the table.) Say, "It looks like you are trying to solve the problem the paper and pencil way. Do you have another way you might use to solve this problem?"

If student is unable to solve, present the card 299 + 2 with the first card. "Could you use this to help you?"



Universal Screener for Number Sense

Spanish Quick Script, print 1 copy/test administrator

Number Word Sequence/Place Value

1. "Vamos a contar. Comienza del número 302 y cuenta hacia atrás. Yo te avisare cuando parar." Stop at 298.

If the student makes a minor mistake that you think might be corrected on a second attempt, ask the student. "déjame escuchar eso una vez mas."

Represent Multiplication

2. Have counters available for the student (more than 12). Present the expression 3×4 . "Lee esto." Correct the student if they misread.

"¿Como podrías usar esto para demostrar 3 veces 4?" Probe the student briefly to ensure that they understand that they have created groups.

Subtraction with Addition Scaffold

3. "Lee esto," present 200 – 198. Check to ensure that the student has read the problem accurately. "¿Cuánto es 200 menos 198?"

If the student begins to attempt the use of a traditional algorithm (usually evident when the student starts to draw the problem with their finger on the table.) Say, "Parece que estas tratando de resolver el problema en la manera de papel y lápiz. ¿Tienes otra manera que podrías usar para resolver este problema?"

If the student is unable to solve 200 – 198, present the expression, 198 + 2. "¿Podrías usar esto para ayudarte?"

Addition with Scaffold

4. Present the expression 299 + 102. "Lee esta tarjeta." Check to ensure that the student has read the problem accurately. "¿Cuánto es 299 más 102?"

If the student begins to attempt the use of a traditional algorithm (usually evident when the student starts to draw the problem with their finger on the table.) Say, "Parece que estas tratando de resolver el problema en la manera de papel y lápiz. ¿Tienes otra manera que podrías usar para resolver este problema?"

If student is unable to solve, present the card 299 + 2 with the first card. "¿Podrías usar esto para ayudarte?"

Universal Screener for Number Sense

Interview Note Catcher, print 1 copy/student

Name:		
Date:	_Teacher:	
Language: English	□ Spanish	□ Other:

Number Word 9	Sequenes (Place Value)		score
1. Count back t	from 302 (stop at 298) If unsuccessful,	count up 98 - 112	
□ correct: 3 pts	\square correct 2nd attempt or uncer	tain: 2 pts	
□ counts 98 - 11.	2 1pt □ incorrect count 98 - 112 0	ots.	
Operations and	Algebraic Thinking		score
2. Show 3 x 4			
□ correct 3 pts	□ Correct after prompting or rote array of	construction: 2pts 🗀 incorrect: 1 pt	
	perations in Base Ten	,	score
3. 200 – 198 (g	give 198 + 2 if necessary)		
□ solves: 3 pts	☐ solves with additional prompt: 2 pts	□ cannot solve: 1 pt	
	ive 299+ 2 if necessary)	a carmot solve. I pt	
	•		
□ colvec: 2 into	Decline with additional presents 2	December column 1 mt	
□ solves: 3 pts	□ solves with additional prompt: 2 pts	□ cannot solve: 1 pt	I

299+102

198 + 2

200-198

3 x 4

299 + 2

Midyear Universal Screeners for Number Sense

Overall Performance Levels 2022-2023

Performance levels should be calculated using the performance levels for each task or task set. Digital tasks will be configured for this school year to follow that same methodology.

Kindergarten

Well Below Basic	Below Basic	Basic	Proficient
11-13	14-17	18-29	30-36

First Grade

Well Below Basic	Below Basic	Basic	Proficient
6-11	12-17	18-29	30-36

2nd Grade

Well Below Basic	Below Basic	Basic	Proficient
10-16	17-23	24-39	40-48

3rd Grade

Well Below Basic	Below Basic	Basic	Proficient
9-15	16-22	23-36	37-45

4th Grade

Well Below Basic	Below Basic	Basic	Proficient
9-17	18-26	27-44	45-54

5th Grade

Well Below Basic	Below Basic	Basic	Proficient
8-15	16-22	23-36	37-45

6th Grade

Well Below Basic	Below Basic	Basic	Proficient
8-10	11-13	14-22	23-27