

Number Sense Interventions

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Chart 1.1. Number Sense Interventions Activities Organized by Learning Goals with Common Core Framing

		Lesson												
		1	2	3	4	5	6	7	8	9	10			
Domain	Number	Standard												
		Count to 100 by ones and tens.	Count orally to 10	Count orally to 10	Count orally to 10	Count orally to 20	Count orally to 20	Count orally to 20	Count orally to 30	Count orally to 30	Count orally to 30	Count orally to 40		
		Count forward beginning from a given number other than 1.						Count to 6 beginning from 5	Count to 7 beginning from 5	Count to 8 beginning from 5	Count to 9 beginning from 5	Count to 10 beginning from 5		
		Write numbers from 0 to 20.	Write numbers: 1, 2	Write numbers: 2, 3	Write numbers: 3, 4	Write numbers: 4, 5	Write numbers: 0-5	Write numbers: 5, 6	Write numbers: 6, 7	Write numbers: 7, 8	Write numbers: 8, 9	Write numbers: 9, 10		
		Represent a number of objects with a written numeral 0-20.	Connect quantity to numerals 0-2	Connect quantity to numerals 0-3	Connect quantity to numerals 0-4	Connect quantity to numerals 0-5	Connect quantity to numerals 0-5	Connect quantity to numerals 0-6	Connect quantity to numerals 0-7	Connect quantity to numerals 0-8	Connect quantity to numerals 0-9	Connect quantity to numerals 0-10		
		When counting objects, say the number names in the standard order, pairing each object with one number (one-to-one correspondence, set enumeration).	Count on fingers to 2	Count on fingers to 3	Count on fingers to 4	Count on fingers to 5	Count on fingers to 5	Count on fingers to 6	Count on fingers to 7	Count on fingers to 8	Count on fingers to 9	Count on fingers to 10		
			Count 1,2 objects	Count 1-3 objects	Count 1-4 objects	Count 1-5 objects	Count 1-5 objects	Count 1-6 objects	Count 1-7 objects	Count 1-8 objects	Count 1-9 objects	Count 1-10 objects		
		Understand that the last number said tells the number of objects counted. Count to answer, "How many?" (cardinality).	How many? 1-2	How many? 1-3	How many? 1-4	How many? 1-5	How many? 1-5	How many? 1-6	How many? 1-7	How many? 1-8	How many? 1-9	How many? 1-10		
	Number relations	Recognize small quantities 1-5 without counting (subitize).	1, 2	1, 2, 3	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5			
		Recognize quantities 6-10 as $5 + n$.						5, 6 Using fingers	5, 6, 7 Using fingers	5, 6, 7, 8 Using fingers and Ten Frames	5, 6, 7, 8, 9 Using fingers and Ten Frames	5, 6, 7, 8, 9, 10 Using fingers and Ten Frames		
		Identify whether the number of objects in one group is more than, less than, or equal to the number of objects in another group.					Compare quantities 1-5 more than	Compare quantities 1-5 less than	Compare quantities 1-5 more than/less than	Compare quantities 1-5 more than/less than	Compare quantities 1-5 more than/less than	Compare quantities 1-10 more than/less than		
		Compare two numbers between 1 and 10 presented as written numerals or objects.				Before and after 1-5	Before and after 1-5	Before and after 1-6	Before and after 1-7	Before and after 1-8	Before and after 1-9	Before and after 1-10		
		Understand that each successive number name refers to a quantity that is one larger.	Build 1 and 2 by adding one more block	Build 1-3 by adding one more block	Build 1-4 by adding one more block	Build 1-5 by adding one more block		Build 1-6 by adding one more block	Build 1-7 by adding one more block	Build 1-8 by adding one more block	Build 1-9 by adding one more block	Build 1-10 by adding one more block		
		Compose and decompose numbers from 11 to 19 into tens and ones.												

Domain	Number operations	Represent and solve addition and subtraction problems with objects, fingers, and equations.	Story problems 2 family	Story problems 3 family	Story problems 4 family (1 + 3, etc.)	Story problems 4 family (2 + 2, etc.)		Story problems 5 family (plus) on Five Frames	Story problems 5 family (minus) on Five Frames	Story problems 5 + (1, 2, 3)	Story problems 5 + (1, 2, 3, 4)	Story problems 5 - (1, 2, 3, 4, 5)
			Number sentences 2 family	Number sentences 3 family	Number sentences 4 family (1 + 3, etc.)	Number sentences 4 family (2 + 2, etc.)	Number sentences 5 family (plus)	Number sentences 5 family (plus)	Number sentences 5 family (minus)	Number sentences 5 + (1, 2, 3)	Number sentences 5 + (1, 2, 3, 4)	Number sentences 5 - (1, 2, 3, 4, 5)
		Decompose numbers less than or equal to 10 into pairs.	Finding partners: 2	Finding partners: 3	Finding partners: 4 (1/3)	Finding partners: 4 (2/2)	Finding partners: 5 on Five Frames			Finding partners: 6, 7, 8 as 5 + n on Ten Frames	Finding partners: 6, 7, 8, 9 as 5 + n on Ten Frames	Finding partners: 6-10 as 5 + n on Ten Frames
		Fluently add and subtract within 5.	Number sentences 1 and 2 families	Number sentences 2 and 3 families	Number sentences 2, 3, 4 (1/3) families	Number sentences 4 family (2 + 2, etc.)	Number sentences 5 family (plus)	Number sentences 5 family (plus)	Number sentences 5 family (minus)	Review	Review	Review

		Lesson											
Standard		11	12	13	14	15	16	17	18	19	20		
Domain	Number	Count to 100 by ones and tens.	Count orally to 40	Count orally to 40	Count orally to 50	Count orally to 80, by tens to 100	Count orally to 90, by tens to 100	Count orally to 100, by tens to 100	Count orally to 100, by tens to 100	Count orally to 100, by tens to 100	Count orally to 100, by tens to 100	Count orally to 100	
		Count forward beginning from a given number.	From 11	From 11	From 21	From 45, 55, 65	From 65, 75, 85	From 76, 86	From 25, 47, 54, 66, 78	From 57, 64, 76, 88	From 25, 67, 74, 86, 95	From 25, 36, 47, 55, 66, 77, 85, 96	
			Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	Count to 6-10 beginning from 5	
						Count on to solve sums of 6	Count on to solve sums of 7	Count on to solve sums of 8	Count on to solve sums of 9	Count on to solve sums of 10	Count on using fingers	Count on using fingers	
		Write numbers from 0 to 20.	Write number sentences	Write number sentences	Write number sentences	Write number sentences	Write number sentences	Write number sentences	Write number sentences	Write number sentences	Write number sentences	Two-digit numbers Write number sentences	Two-digit numbers Write number sentences
		Represent a number of objects with a written numeral 0-20.									Write number sentence for story problem	Write number sentence for story problem	
		When counting objects, say the number names in the standard order, pairing each object with one number (one-to-one correspondence, set enumeration).		Count on fingers to 12	Count on fingers to 13	Count on fingers to 14	Count on fingers to 15	Count on fingers to 16	Count on fingers to 17	Count on fingers to 18	Count on fingers to 19	Count on fingers to 20	
Count 1-11 objects	Count 1-12 objects		Count 1-13 objects	Count 1-14 objects	Count 1-15 objects	Count 1-16 objects	Count 1-17 objects	Count 1-18 objects	Count 1-19 objects	Count 1-20 objects			

Domain	Number	Understand that the last number said tells the number of objects counted (cardinality).	How many? 11	How many? 11-12	How many? 11-13	How many? 11-14	How many? 11-15	How many? 11-16	How many? 11-17	How many? 11-18	How many? 11-19	How many? 11-20	
		Recognize small quantities 1-5 without counting (subitize).											
		Recognize quantities 6-10 as $5 + n$.		5-10 using fingers and Ten Frames		5-10 using fingers and Ten Frames	5-10 using fingers and Ten Frames	5-10 using fingers and Ten Frames	5-10 using fingers and Ten Frames	5-10 using fingers and Ten Frames	5-10 using fingers and Ten Frames	5-10 using fingers and Penny Ten Frames	5-10 using fingers and Nickel and Penny Ten Frames
	Number relations	Identify whether the number of objects in one group is more than, less than, or equal to the number of objects in another group.		Compare quantities 1-10									
		Compare two numbers between 1 and 10 presented as written numerals.	Bigger/smaller (1-10)		Bigger/smaller (1-10)	Bigger/smaller (1-10)	Bigger/smaller (1-10)		Bigger/smaller (1-10)		Bigger/smaller (1-10)		
			Before and after 1-10	Before and after 1-10	Before and after 1-10	Before and after 1-10		Before and after 1-10	Before and after 1-10	Before and after 1-10	Before and after 1-10	Before and after 1-10	Before and after 1-10
			After on Number list		Before on Number list								
		Understand that each successive number name refers to a quantity that is one larger.	Build 11 as 10 and 1 more	Build 11 and 12 by adding 1	Build 11-13 by adding 1	Build 11-14 by adding 1	Build 11-15 by adding 1	Build 11-16 by adding 1	Build 11-17 by adding 1	Build 11-18 by adding 1	Build 11-19 by adding 1	Build 11-20 by adding 1	
				Plus 1 on number list		Minus 1 on number list	Plus 1, minus 1 on number list	Review game $n + 1/-1$		Review game $n + 1/-1$		Review game $n + 1/-1$	
	Compose and decompose numbers from 11 to 19 into tens and ones.	Build 11 as a stick of 10 plus 1	Build 12 as a stick of 10 plus 2	Build 13 as a stick of 10 plus 3	Build 14 as a stick of 10 plus 4	Build 15 as a stick of 10 plus 5	Build 16 as a stick of 10 plus 6	Build 17 as a stick of 10 plus 7	Build 18 as a stick of 10 plus 8	Build 19 as a stick of 10 plus 9	Build 20 as 2 sticks of 10		
	Number operations	Represent and solve addition and subtraction problems.	Story problems 5 $+/- n$	Story problems 5 $+/- n$	Story problems 5 $+/- n$			Story problems Drawing models	Story problems Drawing models	Story problems Drawing models	Story problems	Story problems	
			Number sentences 5 $+/- n$; 2-5 families	Number sentences 5 $+/- n$; 2-5 families	Number sentences 5 $+/- n$; 2-5 families	Vertical problems; mixed	Vertical problems; $+1/-1$				Write number sentences for story problems	Write number sentences for story problems	
		Decompose numbers less than or equal to 10 into pairs.											
		Fluently add and subtract within 5.	Review	Review	Review	Review	Review	Review	Review	Review	Review	Review	

		Lesson				
		Standard	21	22	23	24
Domain	Number	Count to 100 by ones and tens.	Count orally to 100	Count orally to 100	Count orally to 100	Count orally to 100
		Count forward beginning from a given number.	From 25, 36, 47, 55, 66, 77, 85, 96	From 25, 36, 47, 55, 66, 77, 85, 96	From 25, 36, 47, 55, 66, 77, 85, 96	From 25, 36, 47, 55, 66, 77, 85, 96
			Count on to solve sums 7-9	Count on to solve sums 8-10	Count on to solve sums 6-10	Count on to solve sums 6-10
		Write numbers from 0 to 20.	Two-digit numbers Write number sentences	Two-digit numbers Write number sentences	Two-digit numbers Write number sentences	Two-digit numbers Write number sentences
		Represent a number of objects with a written numeral 0-20.	Write number sentence for story problem	Write number sentence for story problem	Write number sentence for story problem	Write number sentence for story problem
		When counting objects, say the number names in the standard order, pairing each object with one number (one-to-one correspondence, set enumeration).	Count 21 objects			
		Understand that the last number said tells the number of objects counted (cardinality).	Solve story problems by finger counting	Solve story problems by finger counting	Solve story problems by finger counting	Solve story problems by finger counting
		Recognize small quantities 1-5 without counting (subitize).	Make 1-10 on fingers without counting	Make 1-10 on fingers without counting	Make 1-10 on fingers without counting	Make 1-10 on fingers without counting
	Recognize quantities 6-10 without counting as $5 + n$.	5-10 using fingers and Nickel and Penny Ten Frames	5-10 using fingers and Nickel and Penny Ten Frames	5-10 using fingers and Nickel and Penny Ten Frames	5-10 using fingers and Nickel and Penny Ten Frames	
	Number relations	Identify whether the number of objects in one group is more than, less than, or equal to the number of objects in another group.				
		Compare two numbers between 1 and 10 presented as written numerals.	Bigger/smaller (1-10)		Bigger/smaller (1-10)	
				Before and after 1-10		Before and after 1-10
		Understand that each successive number name refers to a quantity that is one larger.	Review game $n + 1/-1$ $n = 1-19$	Review game $n + 1/-1$ $n = 1-20$	Review game $n + 1/-1$ $n = 1-30$	Review game $n + 1/-1$ $n = 1-30$
	Compose and decompose numbers from 11 to 19 into tens and ones.	Build 21 as 2 sticks of 10 plus 1	Build numbers to 100 as a decade plus a unit	Build numbers to 100 as a decade plus a unit	Build numbers to 100 as a decade plus a unit	
	Number operations	Represent and solve addition and subtraction problems.	Solve combinations with sums 7-9	Solve combinations with sums 8-10	Solve combinations with sums 6-10	Solve combinations with sums 6-10
			Write number sentences for story problems	Write number sentences for story problems	Write number sentences for story problems	Write number sentences for story problems
Decompose numbers less than or equal to 10 into pairs.						
	Fluently add and subtract within 5.	Review	Review	Review	Review	