Thinking Strategies for Subtraction Facts

	Strategy descriptions	**Examples**
Removal/Counting back	**Removal** - Decompose numbers into easy-to-remove parts by keeping the "whole" intact and decompose the "part" You can use your counting skills to find the difference between numbers. ***Count backwards*** from the largest number is efficient when the numbers in the problem are close together. • Number lines conceptualize and scaffold student thinking.	8 - 4 = Think: There are two 2s in the number 4, so I am going to take away 2 from 8 first and that's 6, then take away 2 more and that's 4. So 8-4=4. Think: *8 is larger, so I'll start there and count back 4 numbers. Say "8" (catch it, put it in your head…) 7, 6, 5, 4. So, 8-4=4.*
Counting up/Adding up	Count up to subtract when the two numbers are close to each other. ***Count up*** from the number you subtract (the smaller number). • Number lines conceptualize and scaffold student thinking.	6 - 4 = Think: *I can count up from 4 until I get to 6. Say "4" (catch it, put it in your head…) 5, 6. How many numbers did you count until you got to 6; that's the answer.*
Think Addition	Think about addition to subtract.	8 – 3 = Think: *What can I add to 3 to get to 8? (3 + ___= 8) I know that 3 + 5 is 8, so the answer is 5.*
Zero **(Property of Zero)**	When you subtract zero from a number, the difference is that same number. When you subtract a number from itself, the difference is zero.	3 - 0 = Think: *I don't have to take anything away from 3, so the difference is 3.* 3 – 3 = Think: *3 things. 3 things are taken away, so nothing is left.*
One less/Two less (-1/-2)	When you subtract 1 or 2 from a number, it's like counting back. • Number lines conceptualize and scaffold student thinking.	7 - 1 = Think: What is o*ne less than 7? 1 less is 6.* 7 - 2 = Think: What is t*wo less than 7? 2 less is 5.*
Relationship between addition and subtraction (fact families)	Knowing a related addition fact can help you subtract. Numbers always go together! • Triangular flash cards scaffold student thinking. • Part/part/whole models	9 - 4 = Think: *I already know 4+5 is 9. Because I know that, I know the difference is 5.*
Use Doubles/Doubles +1 to subtract	If you know the addition doubles facts, then you also know the related subtraction doubles. • The Doubles Rap, with picture cues/visuals, conceptualizes and scaffolds student thinking.	14 - 7 = Think: *I know 7 and 7 is 14, so the difference is 7.* 13 – 7 = Think: *I know 7 and 6 is 13, so the difference is 6.*
Use Tens to subtract	Sums for ten can help us learn subtraction facts. • A tens anchor chart can serve as a constant reference for students.	10 - 7 = Think: *Ten frame…I know that on a 7 ten frame card there are 3 empty boxes, so 7 and 3 is 10.*
Decompose to a ten	Decompose the "part" (subtrahend) and remove it from the "whole" (minuend) to make (15-7; 7=5+2 so 15-5=10-2=8) • A number line can conceptualize and scaffold student thinking.	16 – 9 = Think: *I can decompose 9 into a 6 and 3. I can take 6 away from 16 to make it a 10 and then take away the remaining 3 which is 7. So, 16-9=7.*

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