Tilstock Calculation Policy Subtraction KS1

EYFS	**Reception: ELG 2021** • Have an understanding of number to 10, linking names of numbers, numerals, their value, and their position in the counting order. • Subitise (recognise quantities without counting) up to 5. • Automatically recall number bonds for numbers 0-5 and *for 10*, including corresponding partitioning facts. • Automatically recall double facts up 5+5 • Compare sets of objects up to 10 in different contexts, considering size and difference. • Explore patterns of numbers within numbers up to 10, including evens and odds.	
Year	1	2
Layers of vocabulary  **Appendix 1a** Beck's Tiers of Vocabulary **Appendix 1b:** Vocabulary book	**Basic to subject specific (Beck's Tiers):** take away, distance between, difference between, less than. How many more? How much greater? How many fewer? how much more is…? – subtract, take (away), minus, leave, how many are left/left over? how many have gone? one less, two less, ten less… how many fewer is… than…? how much less is…? difference between half, halve = equals, sign, is the same as **Instructional vocabulary:** start from, start with, start at look at point, to show me	**Basic to subject specific (Beck's Tiers):** subtract, subtraction, take (away), minus leave, how many are left/left over? one less, two less… ten less… one hundred less how many fewer is… than…? how much less is…? difference between half, halve = equals, sign, is the same as tens boundary difference, partition, rearrange, inverse, place value **Instructional vocabulary:** tell me, describe, name, pick out, discuss, talk about, explain, explain your method, explain how you got your answer, give an example of… show how you…
NC 2014	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	Using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods

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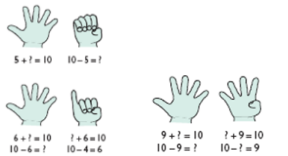
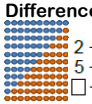
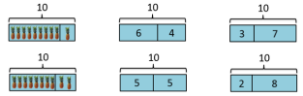
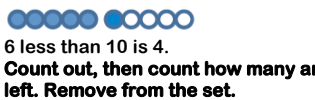
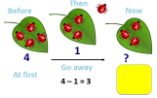
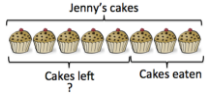
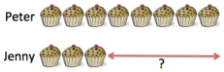
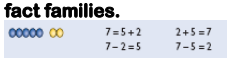
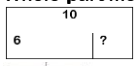
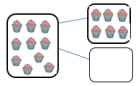
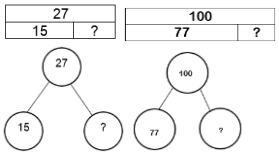
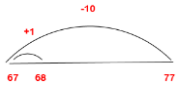
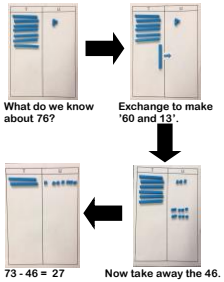
	Concrete, pictorial, abstract			Concrete, pictorial, abstract			
Developing Conceptual/ Procedural Understanding	**Number bonds**  Ten Frames Difference between 7 and 10.  2 + ☐ = 10 10 - ☐ = 3 5 + ☐ = 10 10 - ☐ = 9 ☐ + 4 = 10 10 – 0 = ☐ Use the pattern to complete the number sentences.   6 less than 10 is 4. **Count out, then count how many are left. Remove from the set.** 7 – 4 = 3 	**Count back on a number track.** 15 – 6 = 9  **Difference between.** 13 - 8 = __ 8+ __ = 13  **Subtraction-take away**   8-3=? **Subtraction-finding the difference**  How many more cakes does Peter have than Jenny? 8-3=?	**Develop knowledge of fact families.**  **Whole-part model**     Fill in the missing numbers	**Whole-part model**  Fill in the missing numbers All answers to be recorded in a number sentence following any informal recording. **Adjustment strategy** 77 - 9 = 77-10 +1 =67+ 1 =68  **(Round and adjust)** What is the nearest 10? 55 – 27 = 55 – 30 +3 =25 + 3 = 28 91 – 48 = 91-50 +2=41 +2 =43	**Re-arranging** 35 - 8 = Tell me what you know about 8, e.g. 2 + 6, 5 + 3 35 - 8= Rearrange the 8 into 5 + 3 So 35 - 5 - 3= 30 - 3 =27 55 - 27 = Partition the 27 into 20 +7 and rearrange the 7 into 5 + 2. So 55 – 27 = 55 -20 -5 -2 = 35 – 5 - 2 = 28 **Taking away and exchanging** 73 – 46 =  What do we know about 76? Exchange to make '60 and 13'. 73 - 46 = 27 Now take away the 46.	**Subtract mentally pairs of multiples of 10 using known facts** 60 – 20 = 40 because 6 – 2 = 4 **Partitioning of the second number strategy** 74 – 47 74 – 40 = 34 34 – 4 – 3 = 27 Whole part model for 60 + 14 **Balance in the equation** 35 - ☐ = 31 ☐ - 12 =34 20 - ☐ = 14 - 3 (Open-ended) 18 - ☐ = 15 - ☐ **Decision making** 27 - ☐ = 12 Sam works out 27 – 15 = 12. How could he have done this?
Known facts	Represent & use number bonds and related subtraction facts within 20 Add and subtract 1 digit and 2 digit numbers to 20, including zero			Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.			
Essential knowledge	1 less		Number bonds: subtraction 5 and 6	10 less		Number bonds: subtraction 20,12 and 13	
	Count back		Number bonds: subtraction 7 and 8	Subtract 1 digit from 2 digit by bridging		Number bonds: subtraction 14 and 15	
	Subtract 10.		Number bonds: subtraction 9 and 10	Partition second number and count back in tens then ones.		Number bonds: subtraction 16 and 17	
	Teens subtract 10		Difference between	Subtract 10 and multiples of 10.		Number bonds: subtraction 18 and 19	
				Subtract near multiples of 10.		Difference between	
				Add near multiples of 10.			

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