St. Mary's Calculation Policy KS1: SUBTRACTION: Summer 2020
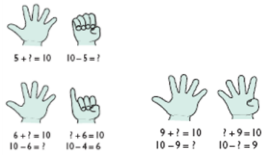
EYFS **Appendix 2:** Pupil target grids	**Reception: ELG** Numbers to 20: place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and **subtract two single-digit numbers and count on or back to find the answer.** They solve problems, including doubling, halving and sharing. **Exceeding:** Estimation and checking quantities by counting up to 20. Combining groups of 2, 5 or 10 or sharing into equal groups.	
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, subtract, take (away), minus, leave, one less, two less, ten less… difference, halve, equals, sign, is the same as, How many more? How much greater? How many fewer? How much more is…? How many are left/left over? How many have gone? How many fewer is… than…? How much less is…? **Instructional vocabulary:** start from, start with, start at, look at point, to show me **NFER– language of tests and questions** match, tick, draw, complete, write, circle, share, jumps, count on, use a ruler	**Basic to subject specific (Beck's Tiers):** subtract, subtraction, take (away), minus leave, one less, two less… ten less… one hundred less, difference, halve, equals, sign, is the same as, tens boundary, difference, partition, rearrange, inverse, place value, How many are left/left over? How many fewer is… than…? How much less is…? **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… **NFER– language of tests and questions** tick, match, count, tick two, circle, write, draw, complete, use these numbers, shade, write, make, choose, circle the three, complete, write, tick all, complete the number sentence, put a digit, How many…?
NC 2014	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	Recording subtraction in columns supports place value and prepares for formal written methods with larger numbers.

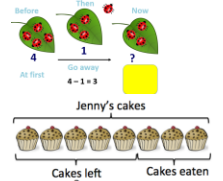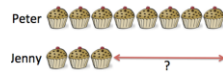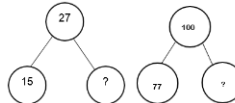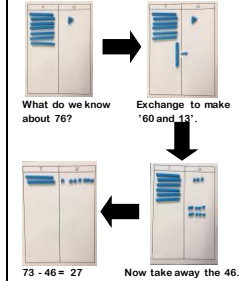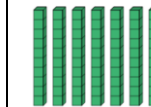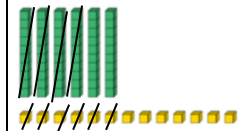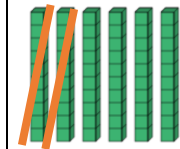| Developing Conceptual/ Procedural Understanding | **Number bonds** Numicon   Ten Frame Difference between 7 and 10. $2 + \square = 10$ $10 - \square = 3$ $5 + \square = 10$ $10 - \square = 9$ $\square + 4 = 10$ $10 - 0 = \square$ **Use the pattern to complete the number sentences.** 6 less than 10 is 4. **Count out, then count how many are left.** $7 - 4 = 3$ | **Count back on a number track.** $15 - 6 = 9$ **Difference between.** $13 - 8 = \_\_$ $8 + \_\_ = 13$ **Subtraction-take away** Jenny's cakes Cakes left   Cakes eaten $8-3=?$ **Subtraction-finding the difference** Peter Jenny How many more cakes does Peter have than Jenny? $8-3=?$ | **Develop knowledge of fact families.** $7 = 5 + 2$ $2 + 5 = 7$ $7 - 2 = 5$ $7 - 5 = 2$ **Whole-part model** **Fill in the missing numbers** 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? $55 - 27 =$ $55 - 30 + 3 = 25 + 3$ $= 28$ $91 - 48 =$ $91 - 50 + 2 = 41 + 2$ $= 43$ **Subtraction-finding the difference** $72 - 68$ Appropriate number steps 68 to 70 is 2 and then 70 to 72 is 2 4 | **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. $73 - 46 = 27$ 73 becomes 60 and 13 | **Subtract mentally pairs of multiples of 10 using known facts** $60 - 20 = 40$ because $6 - 2 = 4$ Subtracting multiples of tens $60 - 20 = 40$ **Partitioning of the second number strategy** $74 - 47$ $74 - 40 = 34$ $34 - 4 - 3 = 27$ **Balance in the equation** $35 - \square = 31$ $\square - 12 = 34$ $20 - \square = 14 - 3$ (Open-ended) $18 - \square = 15 - \square$ **Decision making** $27 - \square = 12$ Sam works out $27 - 15 = 12$. How could he have done this? |
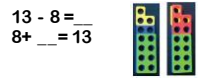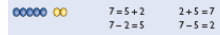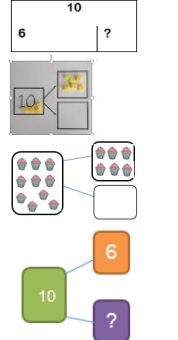
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Known facts	Represent & use number bonds and related subtraction facts within 20. Add and subtract 1 digit and 2 digit numbers to 20, including zero.		Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up 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.	