Calculation Policy: Addition

Key language: sum, total, parts and wholes, plus add, altogether, more, 'is equal to, 'is the same as.'			
	Concrete	**Pictorial**	**Abstract**
EYFS / Year 1 Combing two parts to make a whole: part whole model.	Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears, cars)	Children to represent the cubes using dots or crosses. They could put each part on a part whole model too.	$4 + 3 = 7$ Four is a part, 3 is a part and the whole is seven.
EYFS / Year 1 Starting at the bigger number and on using using cubes.	**Counting on using number lines** using cubes or Numicon.	A bar model which encourages the children to count on, rather than count all	The abstract number line: What is 2 more than 4? What is the sum of 2 and 4? What is the total of 4 and 2? $4 + 2$
EYFS / Year 1 Regrouping to make 10 using ten frame	**Regrouping to make 10;** using ten frames and counters/cubes or using Numicon. $6 + 5$	Children to draw the ten frame and counters/cubes.	Children to develop an understanding of equality e.g. $6 + \square = 11$ $6 + 5 = 5 + \square$ $6 + 5 = \square + 4$
Year 2 Adding three single digits.	$4 + 7 + 6 = 17$ Put 4 and 6 together to make 10. Add on 7. Following on from making 10, make 10 with 2 of the digits (if possible) then add on the third digit. Use Numicon to find number bonds to 10.	Draw a 10 frame / bar model to recombine the groups to make 10	Combine the two numbers that make 10 and then add the remainder.

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	Concrete	**Pictorial**	**Abstract**
Year 2 Use of base 10 to combine two numbers. TO + O	Continue to develop understanding of partitioning and place value. 41 + 8	Children to represent the base 10 e.g. lines for tens and dot/crosses for ones.	$41 + 8$ $1 + 8 = 9$ $40 + 9 = 49$
Year 2 Column method - regrouping TO + TO	Continue to develop understanding of partitioning and place value. 36 + 25	Children to represent the base 10 in a place value chart.	Looking for ways to make 10. $36 + 25 =$ $1 \quad 5$ Formal method: $\begin{array}{r} 36 \\ +25 \\ \hline 61 \end{array}$ $30 + 20 = 50$ $5 + 5 = 10$ $50 + 10 + 1 = 61$
Year 3 Using place value counters (up to three digits).	**Use of place value counters to add HTO + TO, HTO + HTO etc.** When there are 10 ones in the 1s column- we exchange for 1 ten, when there are 10 tens in the 10s column- we exchange for 1 hundred.	Children to represent the counters in a place value chart, circling when they make an exchange.	$\begin{array}{r} 243 \\ +368 \\ \hline 6\,11 \\ 1\ \ 1 \end{array}$