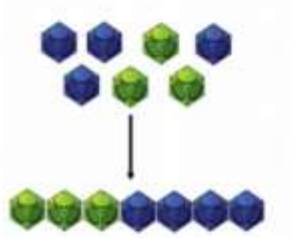
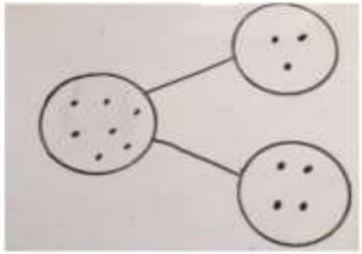
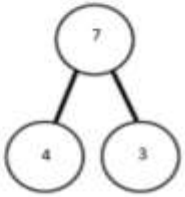
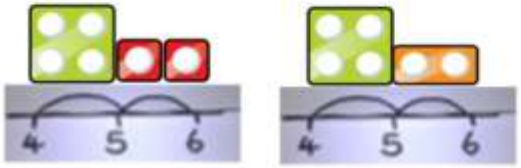
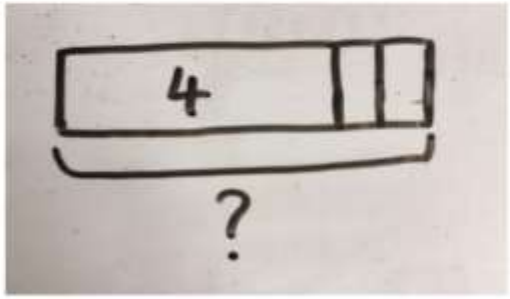
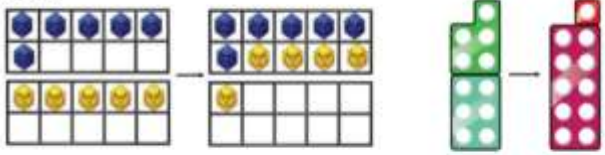
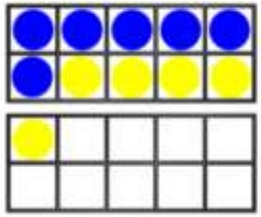
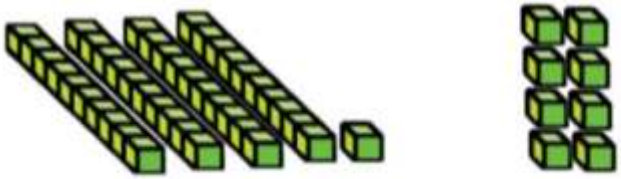
Calculation policy: Addition

Key language: sum, total, parts and wholes, plus, add, altogether, more, 'is equal to' 'is the same as'.

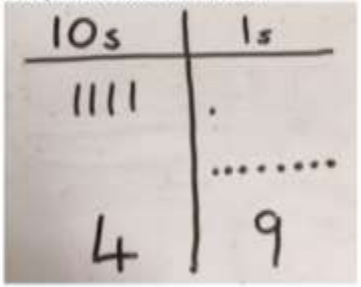
Concrete	Pictorial	Abstract
Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears, cars). 	Children to represent the cubes using dots or crosses. They could put each part on a part whole model too. 	4 + 3 = 7 Four is a part, 3 is a part and the whole is seven. 
Counting 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 
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 + □ = 11 6 + 5 = 5 + □ 6 + 5 = □ + 4

TO + O using base 10. Continue to develop understanding of partitioning and place value.

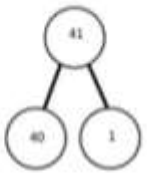
41 + 8



Children to represent the base 10 e.g. lines for tens and dot/crosses for ones.



41 + 8



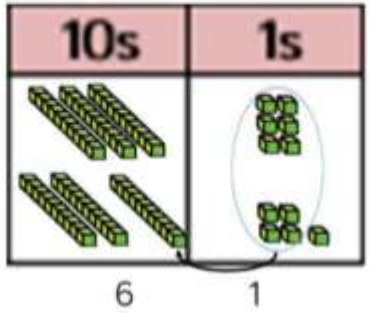
1 + 8 = 9

40 + 9 = 49

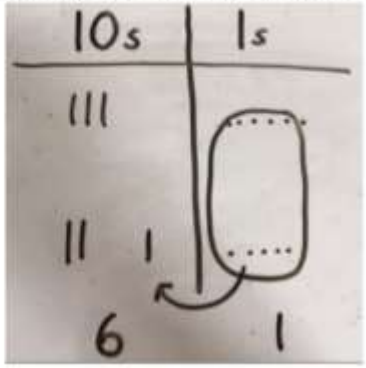
	4	1
+		8
	4	9

TO + TO using base 10. Continue to develop understanding of partitioning and place value.

36 + 25



Chidlren to represent the base 10 in a place value chart.



Looking for ways to make 10.

36 + 25=

1 5

30 + 20 = 50

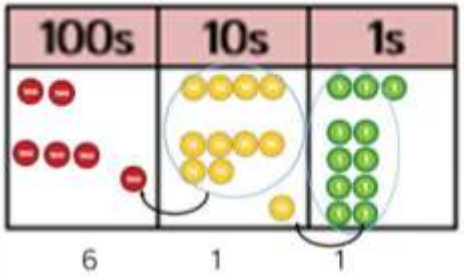
5 + 5 = 10

50 + 10 + 1 = 61

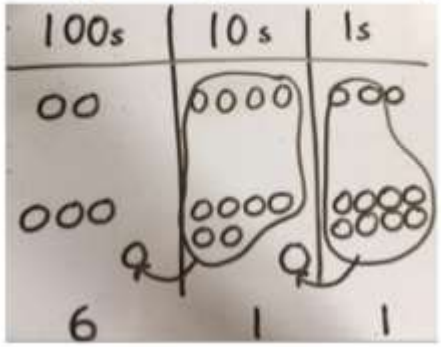
Formal method:

	3	6
	2	5
	6	1
	1	

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.



Chidren to represent the counters in a place value chart, circling when they make an exchange.



	2	4	3
	3	6	8
	6	1	1
	1	1	