LEARNING AND FLOURISHING TOGETHER | PROUD TO BE PART OF PDET

Sywell CE Primary School

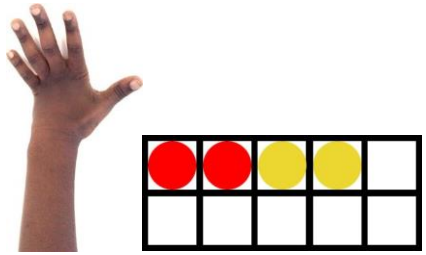
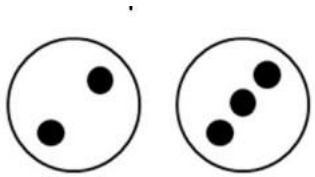
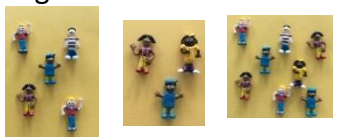
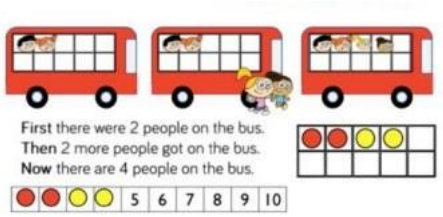
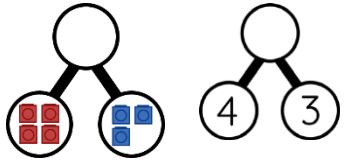
Calculation Policy

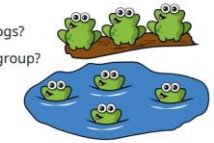
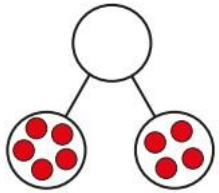
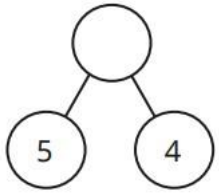
Addition

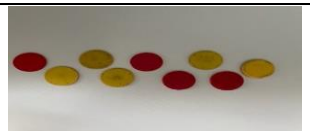
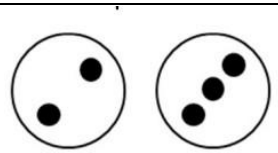
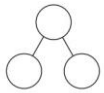
September 2023

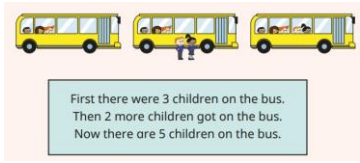
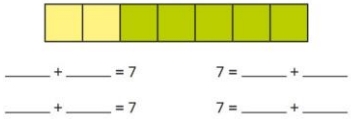
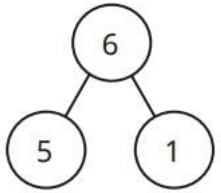
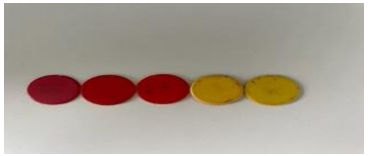
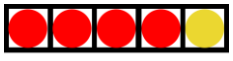
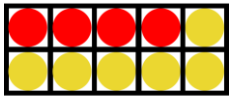
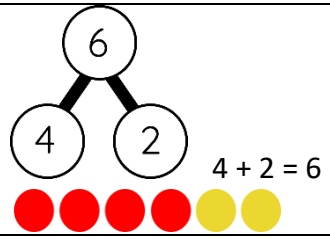
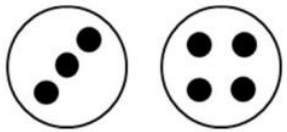
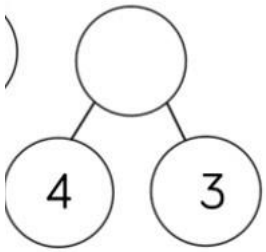
Addition:

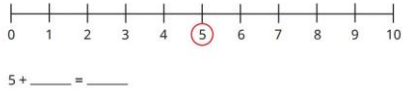
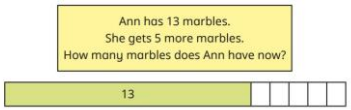
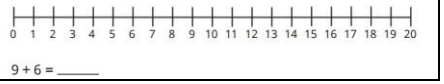
EYFS:			

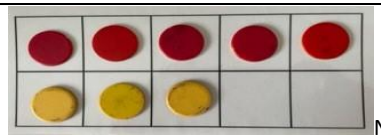
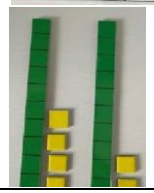
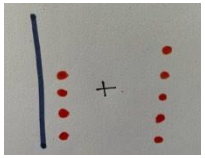
Vocabulary:	first, then, now, add, plus, altogether, total, part, whole	**Manipulatives & scaffolds:**	Fingers Five frames Ten frames Double sided counters Numicon Cubes Bead strings Part-whole model
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Combining two groups	Children begin to combine 2 groups of objects to find how many there are altogether 		How many ___ can you see? How many ___ can you see? How many can you see altogether?
Adding more	Combine two groups of objects using practical resources, role play, stories and songs: 		 4 + 3 =

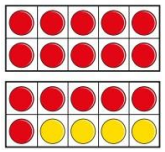
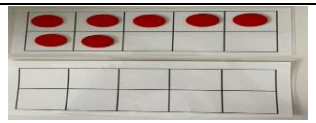
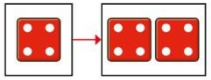
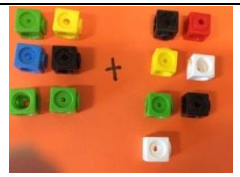
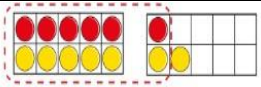
	5 + 3 = 8		
How many did I add?	To follow March 24		
Y1			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double	**Manipulatives & scaffolds:**	Ten frames Double sided counters Numicon Cubes Bead strings Part-whole model Bar model
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Understand part and whole relationships	Here are some frogs. ▸ Can you see two groups of frogs? ▸ How many frogs are in each group? ▸ Complete the sentences. _____ is a part. _____ is a part. The whole is _____ 	 __ is a part __ is a part The whole is __	 __ is a part __ is a part The whole is __

Write number sentences	 Here are some counters. Group the counters by colour. __ red counters plus __ yellow counters is equal to __ counters.	 2 + 3 = 5	 ___ + ___ = ___

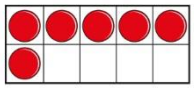
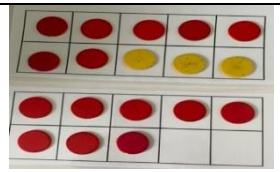
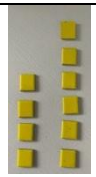
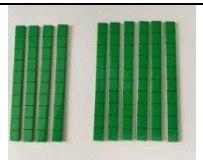
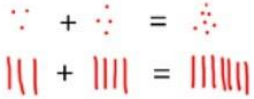
Fact families – addition facts			 5 + 1 = 6 1 + 5 = 6 6 = 5 + 1 6 = 1 + 5
Number bonds within 10	 3 + 2 = 5	 4 + 1 = 5  4 + 6 = 10	 4 + 2 = 6
Add together	 4 + 3 = 7	 3 + 4 = 7	 4 + 3 = 7

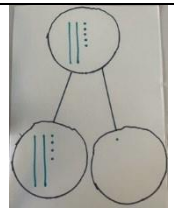
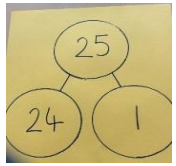
Add more	 Put 2 counters in a tens frame. Now add 8 more counters. How many counters are there altogether?	4 + 3 = 	
Add by counting on within 20	 First  Then		

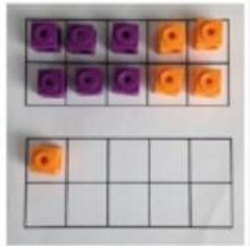
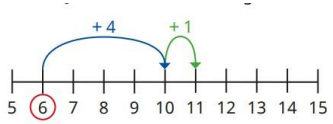
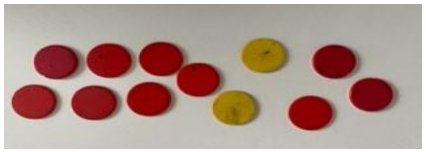
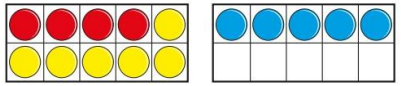
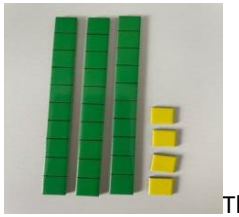
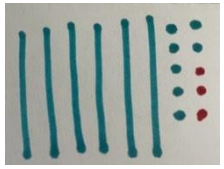
	 Now First there were 5 counters Then I added 3 Now there are 8 counters		
Adding ones using number bonds	  14 + 2 =	 14 + 2 =	12 + 4 =

Find and make number bonds to 20	 16 + 4 = 20	 4 + 16 = 20	20 = __ + __ 20 = __ + __
Doubles	 Double 7 is__	 Double 4 is __	Double __ is __
Near doubles	 6 + 7 = 6 + 6 + 1 = Double 6 + 1 =	 6 + 7 = double _____ plus _____	Use doubles to work out the near doubles: 4 + 5 = 6 + 7 = 8 + 7 =

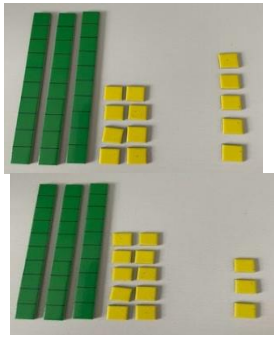
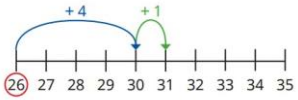
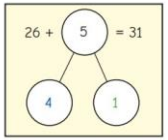
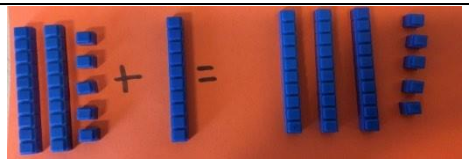
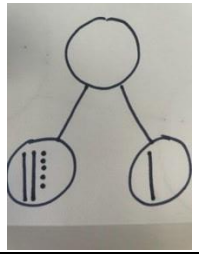
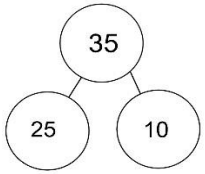
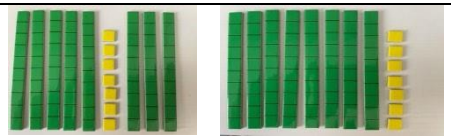
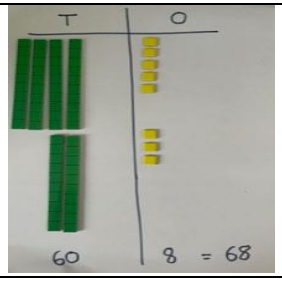
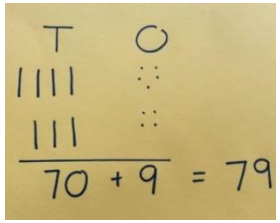
Y2			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, commutative	**Manipulatives & scaffolds:**	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts

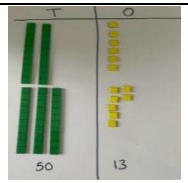
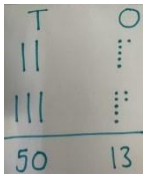
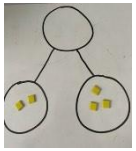
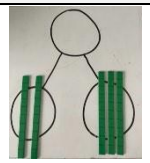
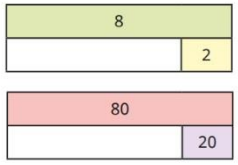
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Bonds to 10	 __ + __ = 10	 5 + __ = 10	__ + __ = 10 10 = __ + __
Fact families – addition bonds within 20	 __ + __ = __ __ + __ = __ __ = __ + __ __ = __ + __		__ + __ = __ __ + __ = __ __ = __ + __ __ = __ + __
Bonds to 100 (tens)	  4 = 6 = 10 40 + 60 = 100	 3 + 4 = 7 30 + 40 = 70	__ + __ = 100 100 = __ + __

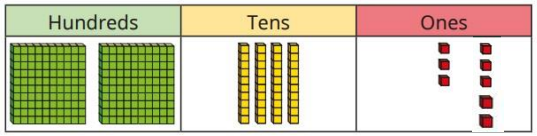
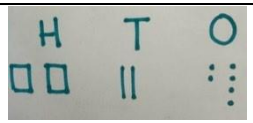
Add ones	 24 + 1 = 25	 	46 + 1 = 46 + 2 = 46 + 3 =

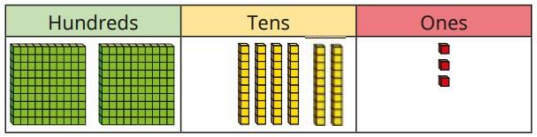
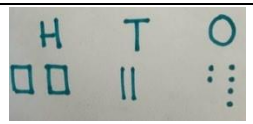
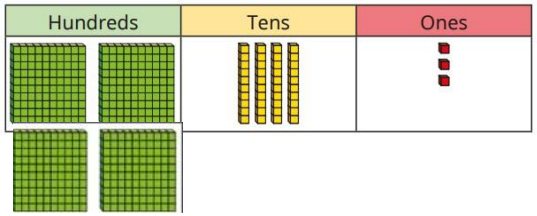
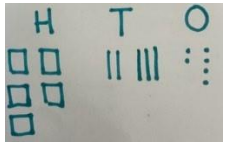
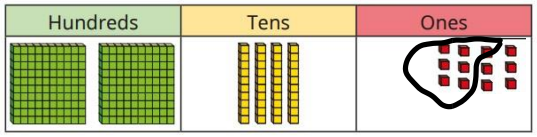
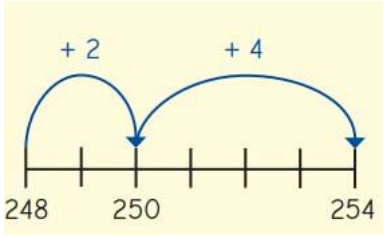
Add by making 10	 6 + 5 = 10 + 1 = 11	 6 + 5 = 10 + 1 = 11	7 + 4 = 11 *If I have seven, how many more do I need to make ten?* *How many more do I need to add?*
Add three 1digit numbers	 7 + 2 + 3 =	 4 + 6 + 6 =	7 + 5 + 3 = 7 + 5 + 3 = 15 10
Add to the next 10	 The Base 10 shows 34 How many tens are there in 34? What is the multiple of 10 after 34? How many ones are there in 34? How many more ones do I need to add to get to	 67 + __ = 70	45 + __ = 50 81 + __ = 90 32 + __ = 40

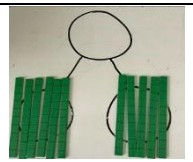
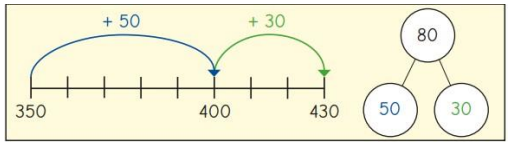
	the next multiple of 10? 34 + __ = __		

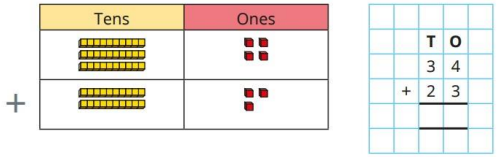
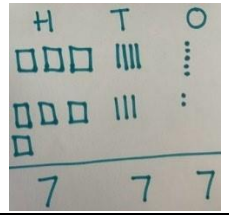
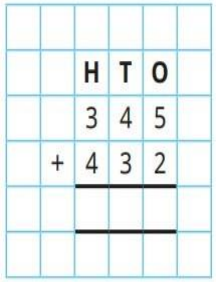
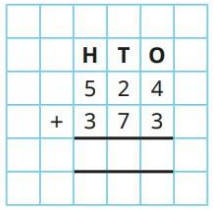
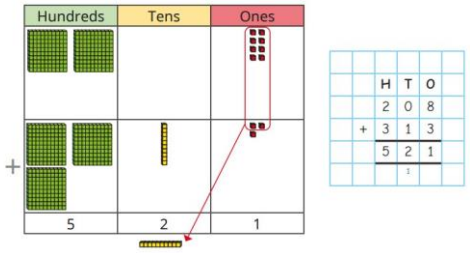
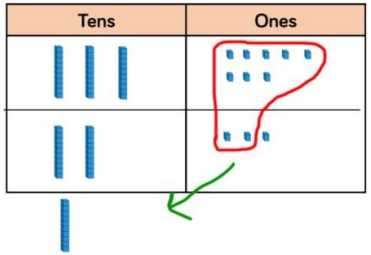
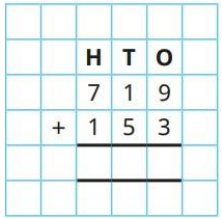
Add across a ten	 38 + 5 = 40 + 3	 	67 + 5 =
10 more	 25 + 10 = 35	 	25 + 10 = 35 10 + 25 = 35 35 = 25 + 10 35 = 10 + 25
Add 10s	 57 + 30 = 87	 24 + 40 = 64	23 + 10 54 + 40
Add two 2-digit numbers (not across a ten)		45 + 34 = 	52 + 14 23 + 31

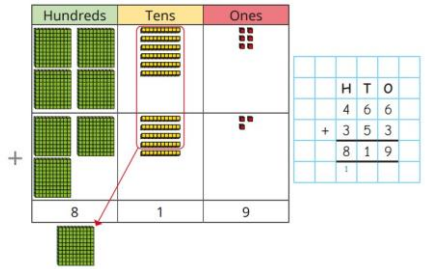
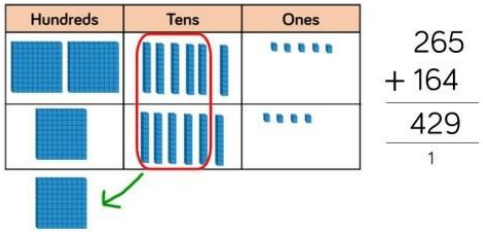
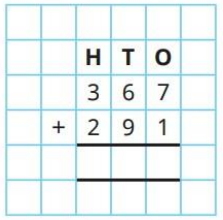
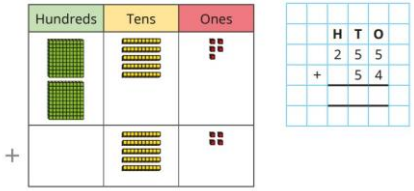
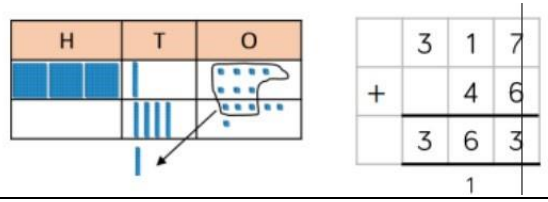
	 26 + 37 = 20 + 30 = 50 6 + 7 = 13 50 + 13 = 63	26 + 37 =  20 + 30 = 50 6 + 7 = 13 50 + 13 = 63	26 + 37 46 + 27 = 17 + 33 =
Y3			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds	**Manipulatives & scaffolds:**	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Apply number bonds	  2 + 3 = 5 20 + 30 = 50	 __ + 2 = 8 __ + 20 = 80	2 + __ = 5 20 + __ = 50

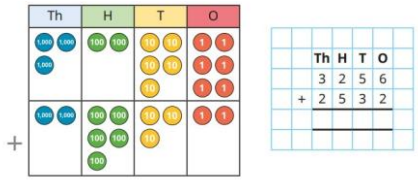
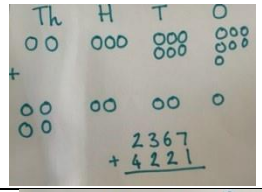
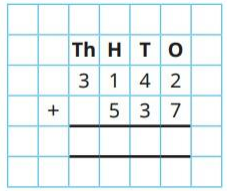
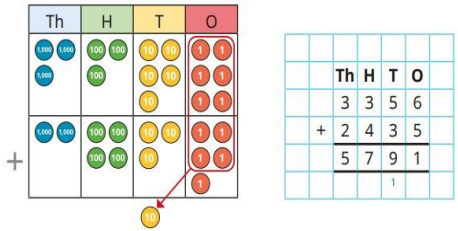
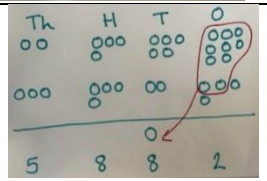
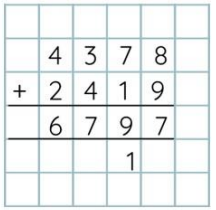
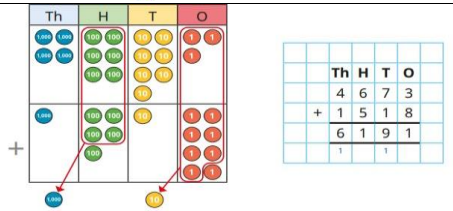
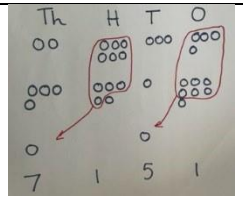
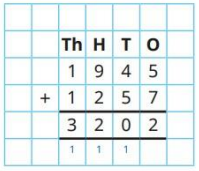
Add ones			354 + 4 215 + 3 461 + 8

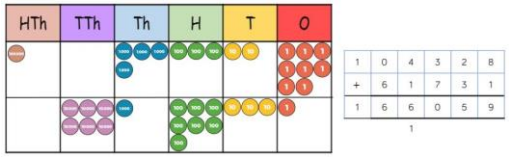
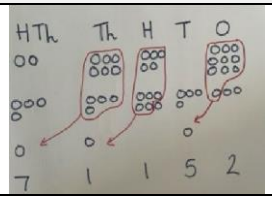
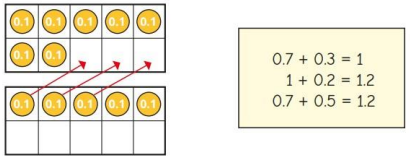
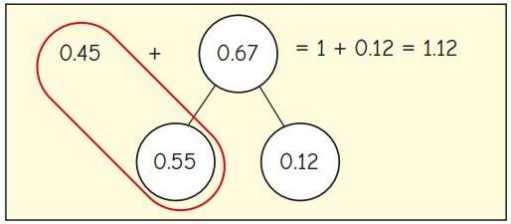
	243 + 5 =	222 + 4 =	
Add tens	 243 + 20 =	 226 + 30 =	546 + 30 743 + 50 229 + 60
Add hundreds	 243 + 200 =	 256 + 300 =	378 + 400 579 + 300 285 + 600
Add 1s across a ten	 243 + 9 = 243 + 7 = 250 + 2 = 252	 248 + 6 = 248 + 2 = 250 + 4 = 254	248 + 9

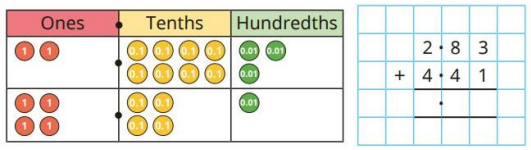
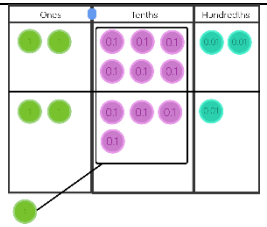
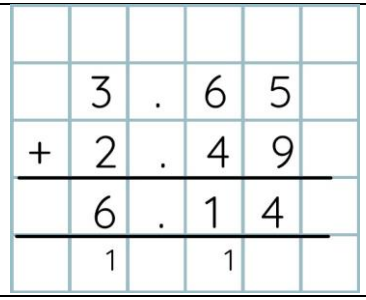
Add 10s across a hundred		60 + 50 = 60 + 40 = 100 100 + 10 = 110	 350 + 80 = 350 + 50 = 400 + 30 = 430	695 + 80 476 + 60

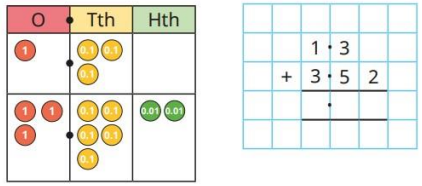
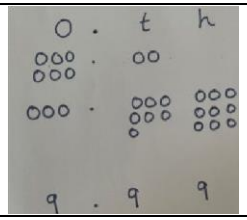
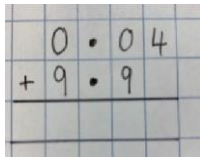
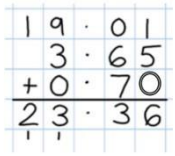
Add two numbers (no exchange)				
Add two numbers (across a ten)			38 + 23 61 1	

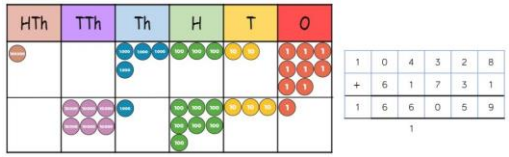
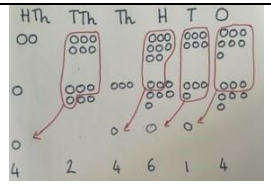
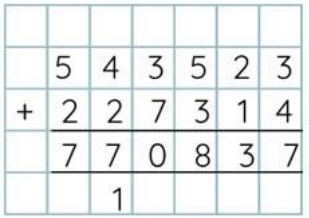
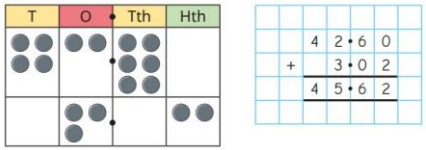
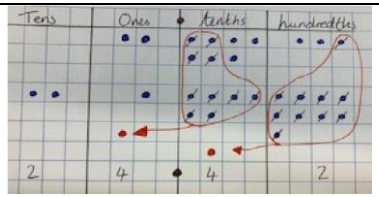
Add two numbers (across a hundred)			
Add 2-digit and 3-digit numbers			537 + 82 =
Y4			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes,	**Manipulatives & scaffolds:**	Ten frames Double sided counters
	double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands		Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**

Add up to two 4-digit numbers – no exchange			
Add two 4-digit numbers – one exchange			2458 + 3424	
Add two 4-digit numbers – more than one exchange			2634 + 4517	
Y5				
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes,	**Manipulatives & scaffolds:**	Ten frames Double sided counters	

	double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands, decimals, tenths, hundredths, thousandths, decimal point		Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Add whole numbers with more than four digits		 26509 + 44643	1 0 4 3 2 8 + 6 1 7 3 1 1 6 6 0 5 9 1
Add decimals across one	0.7 + 0.5 	0.45 + 0.67 	0.74 + 0.42

Add decimals with the same number of decimal places		 2.62 + 2.41	

Add decimals with a different number of decimal places		 6.2 + 3.79	 
Y6			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands, decimals, tenths, hundredths, thousandths, decimal point, integer	**Manipulatives & scaffolds:**	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**

Add integers		 260867 + 163747	
Add decimals		 1.73 + 21.69 =	Insert zeros for place holders.