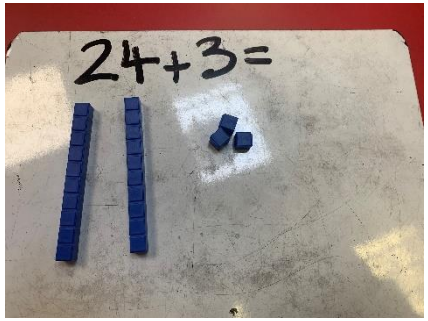
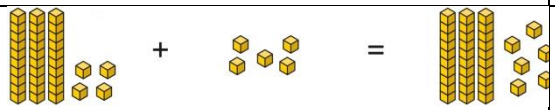
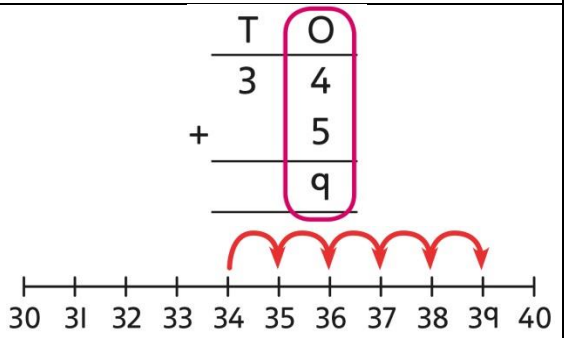
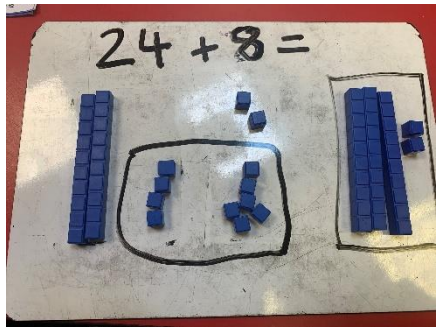
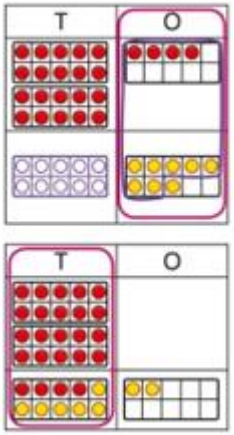
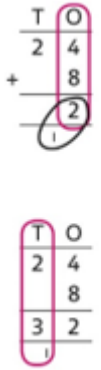
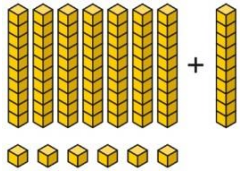
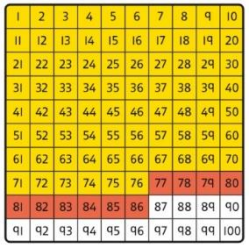
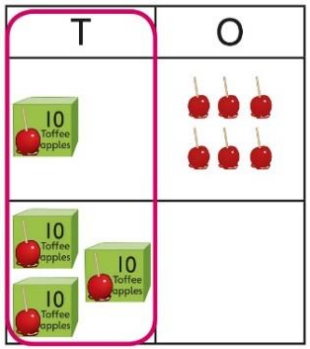
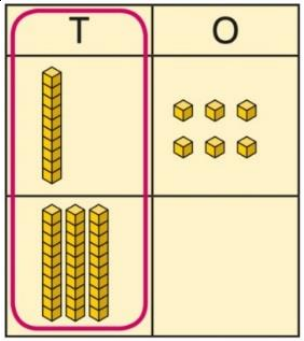
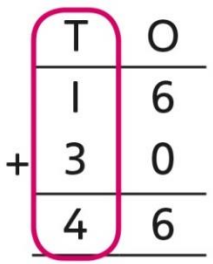
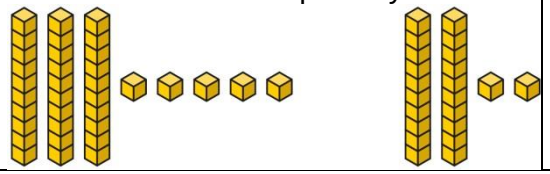
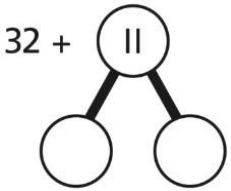
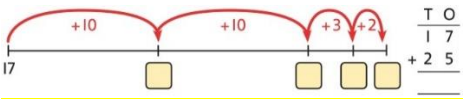
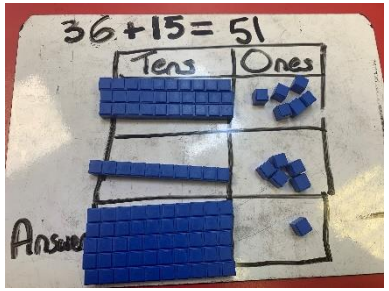
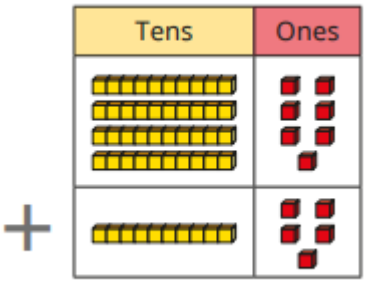
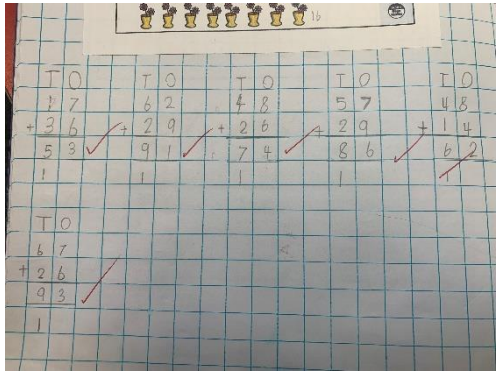
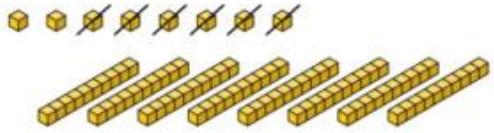
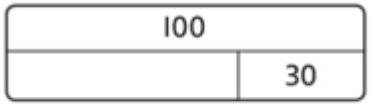
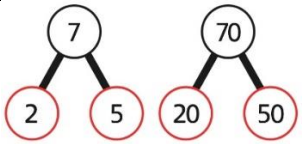
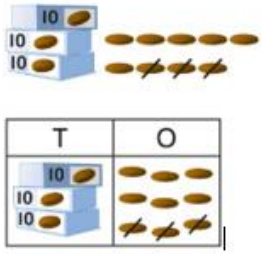
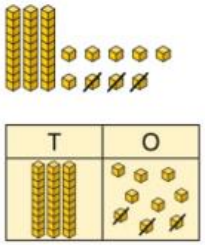
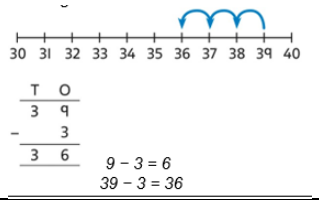
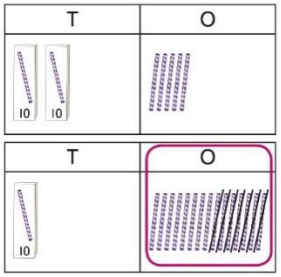
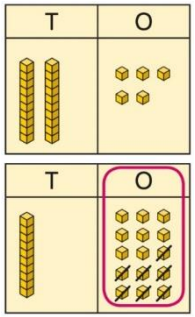
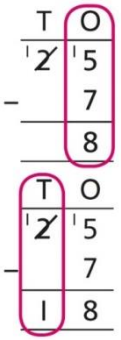
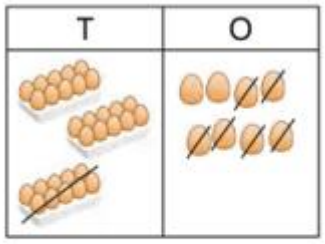
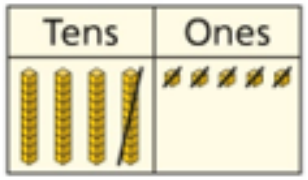
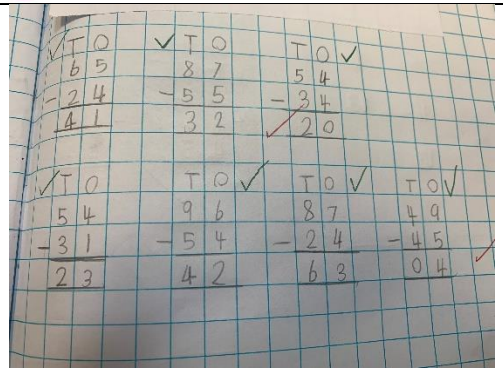
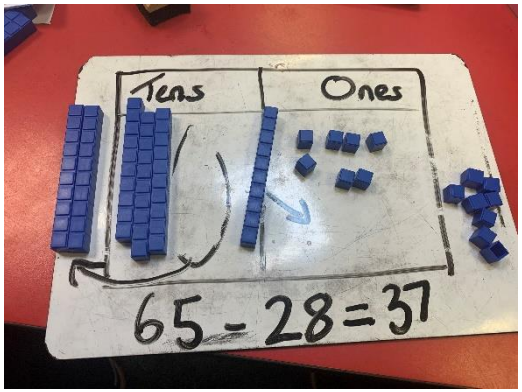
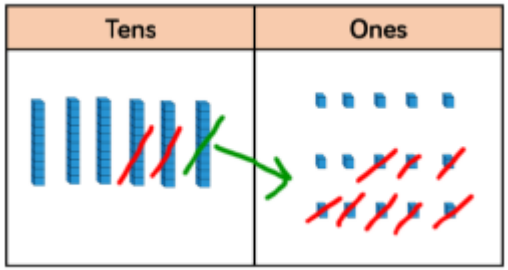
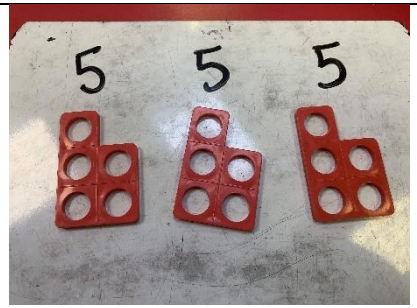
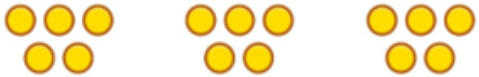
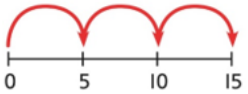
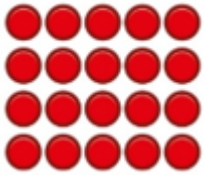
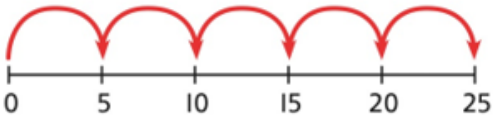
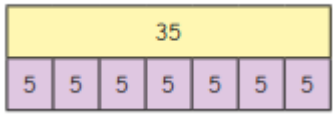
Year 2			
Addition			
Concept	Concrete	Pictorial	Abstract
Adding a 1-digit number to a 2-digit number not bridging a 10		 *34 is 3 tens and 4 ones.* *4 ones and 5 ones are 9 ones.* *The total is 3 tens and 9 ones.*	
Adding a 1-digit number to a 2-digit number with an exchange		Exchange 10 ones for 1 ten. 	Exchange 10 ones for 1 ten. 
Adding a multiple of 10 to a 2 digit number	Add the 10s and then recombine. *27 is 2 tens and 7 ones.* *50 is 5 tens.*	Add the 10s and then recombine. 	Add the 10s and then recombine. *37 + 20 =* *30 + 20 = 50*

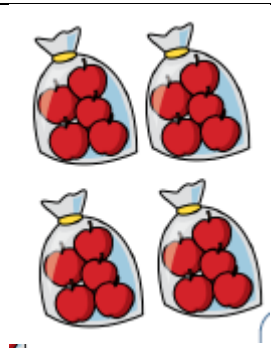
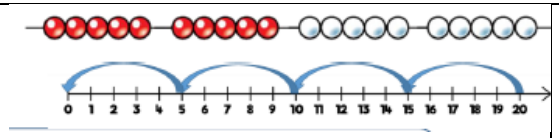
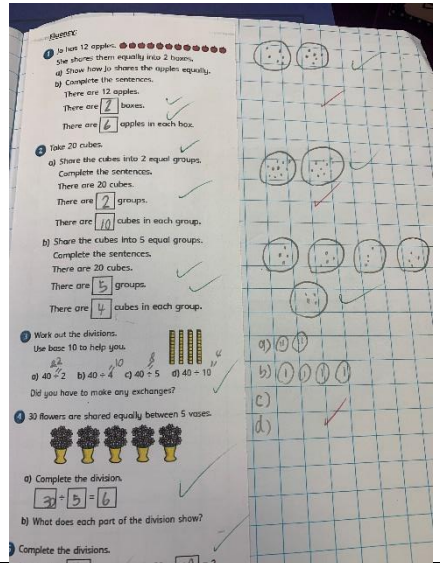
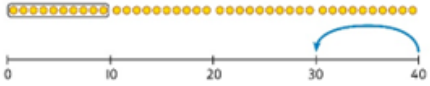
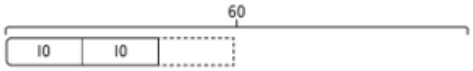
	There are 7 tens in total and 7 ones. *So, 27 + 50 is 7 tens and 7 ones.*	*66 is 6 tens and 6 ones.* *66 + 10 = 76* A 100 square can support this understanding. 	*50 + 7 = 57* *37 + 20 = 57*
Adding a multiple of 10 to a 2-digit number using columns	 *16 is 1 ten and 6 ones.* *30 is 3 tens.* *There are 4 tens and 6 ones in total.*	 *16 is 1 ten and 6 ones.* *30 is 3 tens.* *There are 4 tens and 6 ones in total.*	 *1 + 3 = 4* *1 ten + 3 tens = 4 tens* *16 + 30 = 46*
Adding two 2 digit numbers (no exchange)	Add the 10s and 1s separately. 	 	17 + 25 = 

	5 + 3 = 8 *There are 8 ones in total.* *3 + 2 = 5* *There are 5 tens in total.* *35 + 23 = 58*	*11 = 10 + 1* *32 + 10 = 42* *42 + 1 = 43* *32 + 11 = 43*	
Adding two 2 digit numbers with an exchange			
Year 2 Subtraction			
Subtracting multiples of 10	 *8 subtract 6 is 2.* *So, 8 tens subtract 6 tens is 2 tens.*	 *10 − 3 = 7* *So, 10 tens subtract 3 tens is 7 tens.*	 7 tens subtract 5 tens is 2 tens. 70 – 50 = 20

Subtracting a single-digit number			
Subtracting a single digit number using exchange			
Subtracting a 2 digit number (no exchange)		 Subtract the ones then the tens	

Subtracting a 2 digit number with an exchange			5 1 6 5 − 2 8 3 7
Year 2 Multiplication			
Equal groups and repeated addition		 *3 groups of 5* *15 in total*	 *5 + 5 + 5 = 15* *3 × 5 = 15*
Using arrays to represent multiplication and support understanding	 *4 groups of 5*	Four groups of 5 	 *5 × 5 = 25*

Learning 2x, 5x and 10 x tables facts	 		7 x 5 = 35
Year 2 Division			
Sharing equally	30 flowers are shared equally between 5 vases. 	 20 ÷ 5 = 4	20 ÷ 5 = 4

Grouping equally	 There are 20 apples altogether. They are put in bags of 5. How many bags are there?		
Using known times tables to solve divisions	 *4 groups of 5 cars is 20 cars in total.* *20 divided by 4 is 5.*	 *40 divided by 4 is 10.* Use a bar model to support understanding of the link between times-table knowledge and division. 	1 × 10 = 10 2 × 10 = 20 3 × 10 = 30 4 × 10 = 40 5 × 10 = 50 6 × 10 = 60 7 × 10 = 70 8 × 10 = 80 I used the 10 times-table to help me. 3 × 10 = 30. *I know that 3 groups of 10 makes 30, so I know that 30 divided by 10 is 3.* *3 × 10 = 30 so 30 ÷ 10 = 3*