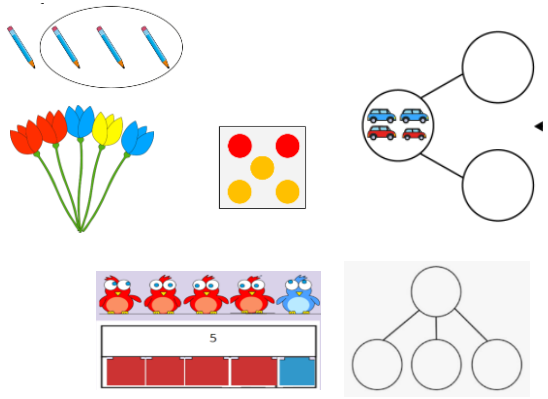
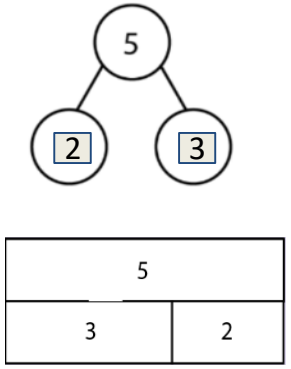
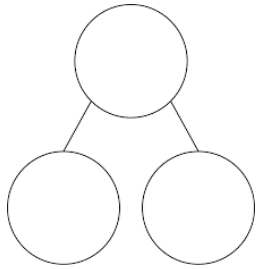
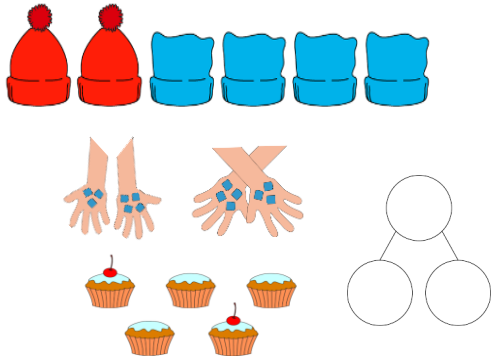
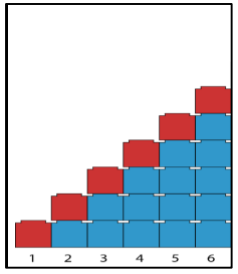
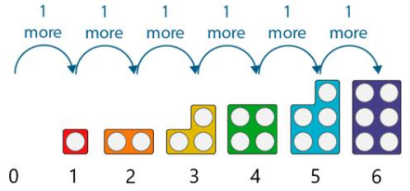
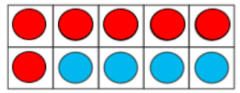
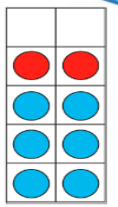
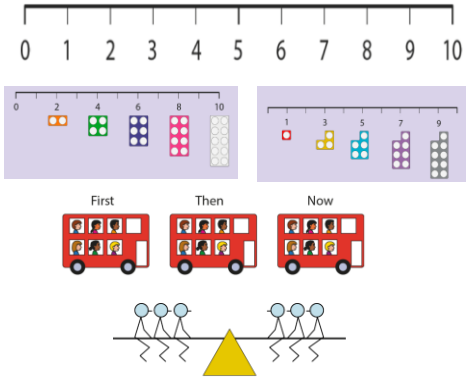
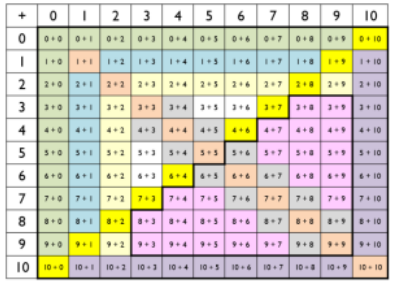
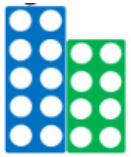
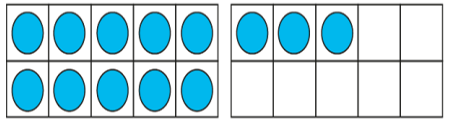
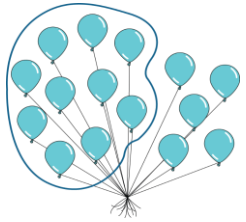
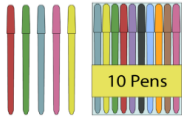
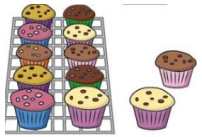
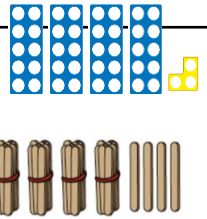
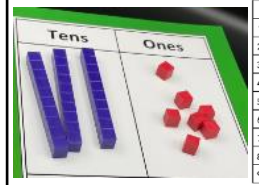
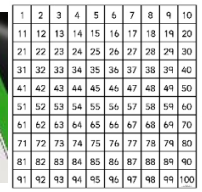
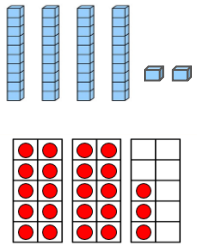
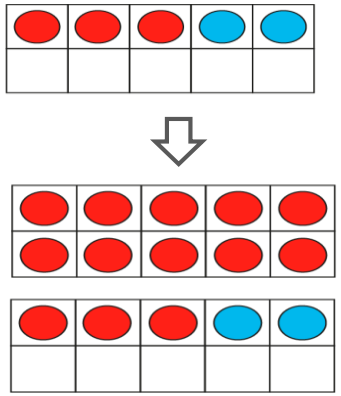
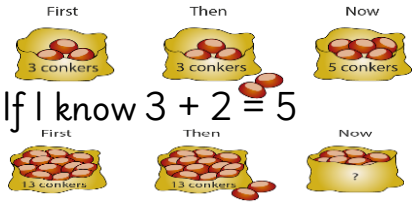
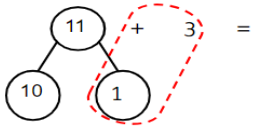
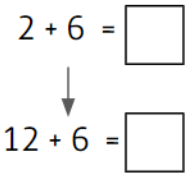
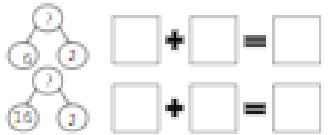
Y1 Addition

Objective and Strategy	Concrete	Pictorial	Abstract
Combining two parts to make a whole : part- whole model, bar model, tens frames.number stories. Working systematically/ Subitising of tens frames. Progressing into 3 parts.	Using part, whole models and 10s frames and bar models.  		
Addition is commutative. **Writing equations.**	 		Introduced **plus (+)** 4 + 2 2 + 4 Then introduced to **equal** (=) 4 + 2 = 6 6 = 2 + 4 2 + 4 = 6 6 = 4 + 2 Missing parts 2 + = 6
One more than a number	Using cubes to add one more block each time. 		**One more** than 3 is ☐ **One more** than 5 is ☐ ____ is 1 less than ____ ____ is 1 more than ____

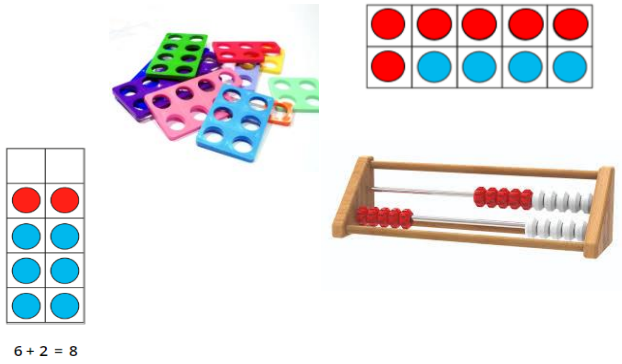
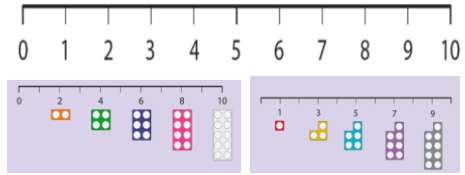
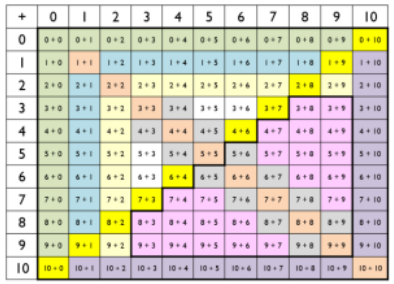
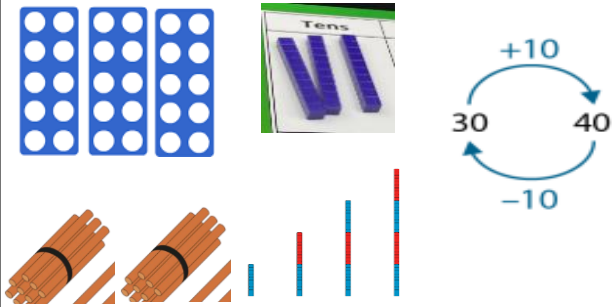
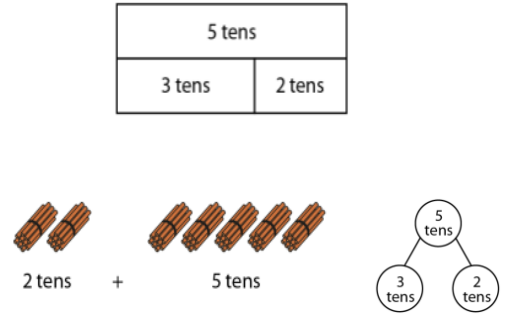
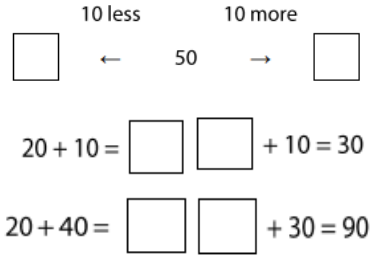
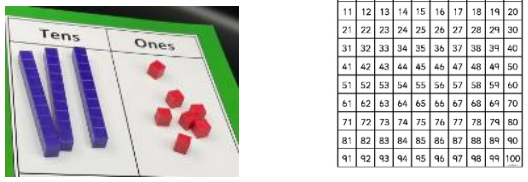
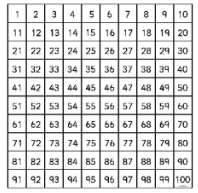
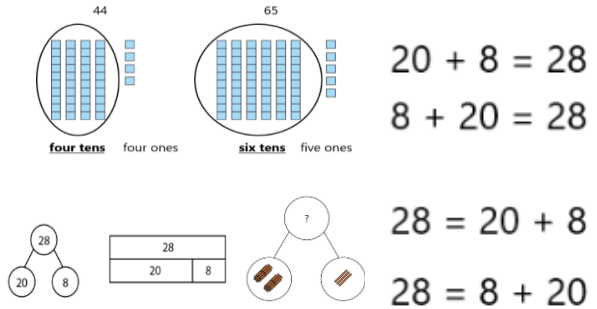
Y1 Addition

Objective and Strategy	Concrete	Pictorial	Abstract
Number bonds to 5 Number bonds to 10 Adding 2/ 3 Doubles + ner doubles	    6 + 2 = 8	 	Aiming for fluent recall. 
Ten and more. Partitioning teen numbers into one ten and more.	  	   10s | 1s 1 | 5 	10 + 4 = ☐ ☐ = 10 + 4 4 + 10 = ☐ ☐ = 4 + 10 1. 10 + 3 = ☐ 2. 10 + ☐ = 17 3. ☐ + 5 = 15
Place value within 100.	  		Tens | Ones 4 | 9

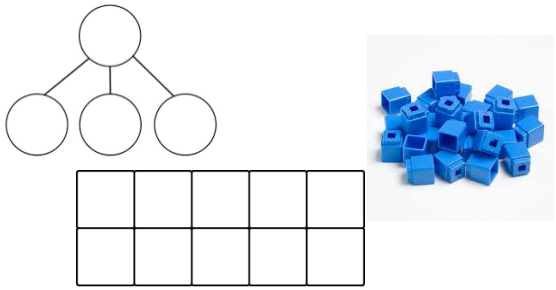
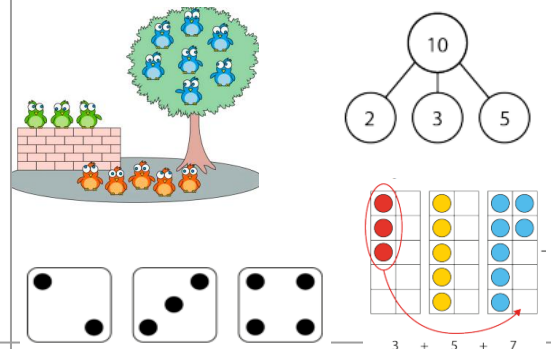
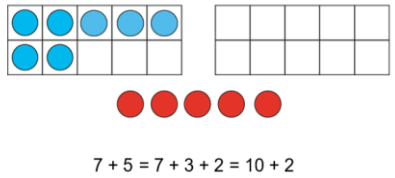
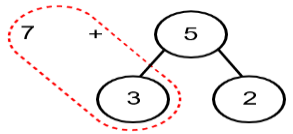
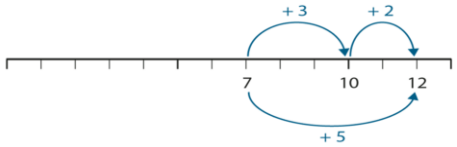
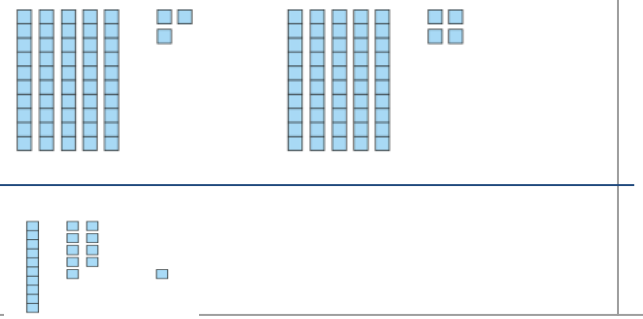
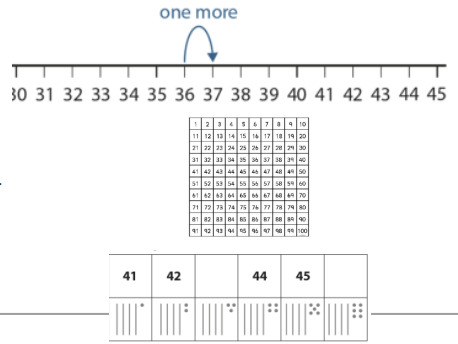
Y1 Addition

Objective and Strategy	Concrete	Pictorial	Abstract
Using additive facts to support addition within 20.		 If I know 3 + 2 = 5 Then I know 13 + 2 = 15 	 

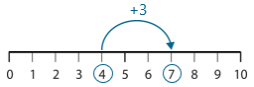
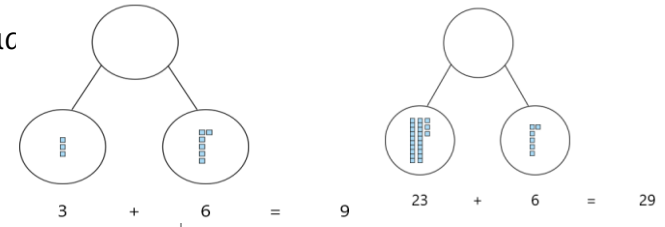
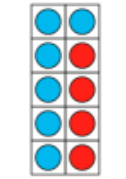
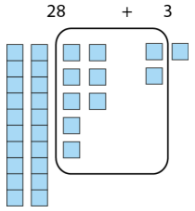
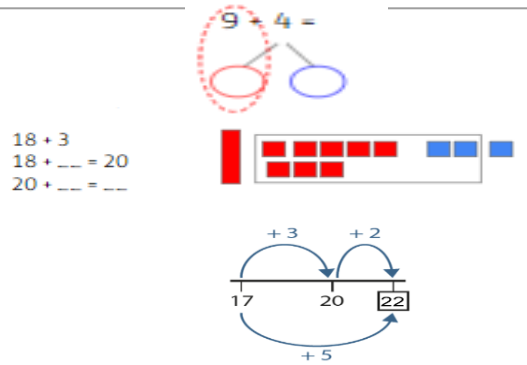
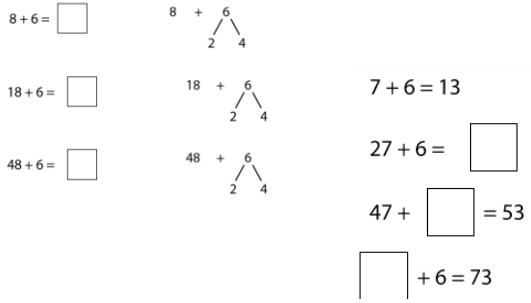
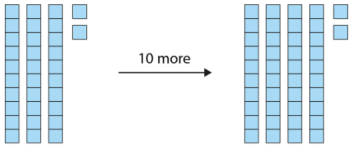
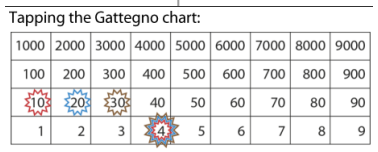
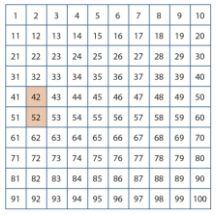
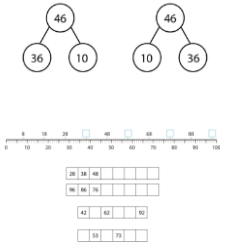
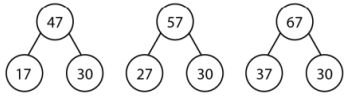
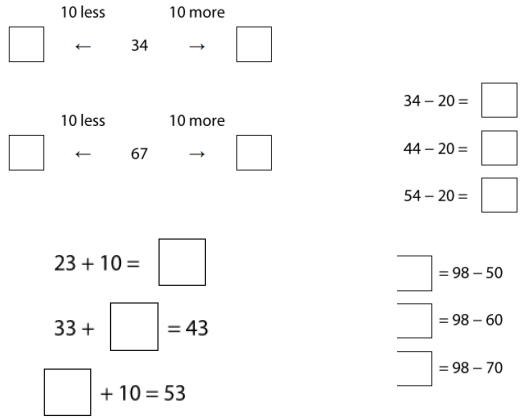
Y2 Addition

Objective and Strategy	Concrete	Pictorial	Abstract
Fluency with basic additive facts within 10. (including 10 + __) Doubles Adding 1 Adding 2 Adding 3			
Adding 10 to a multiple of ten. Using known facts to add multiples of 10.			
Partition a two digit number into tens and ones.	 		

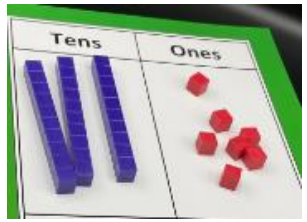
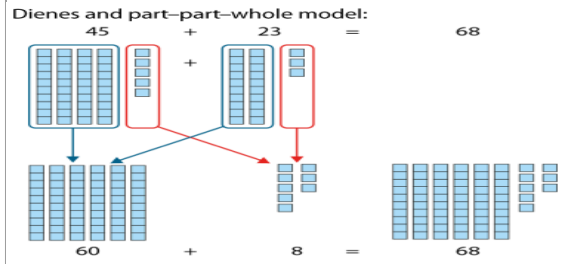
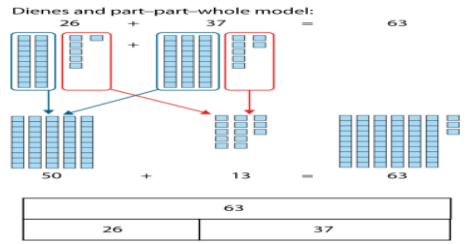
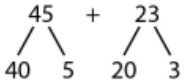
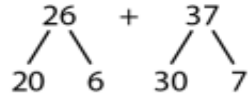
Y2 Addition

Objective and strategy	Concrete	Pictorial	Abstract
Adding 3 addends **Including three addends that make 10**	Practically making first then now stories. 	 	$3 + 5 + 2 = 10$ $5 + 2 + 3 = 10$
Add two numbers that bridge through 10.	Tens frames to subitise making 10  7 + 5 = 7 + 3 + 2 = 10 + 2	 7 + 3 = 10 10 + 2 = 12  	$2 + 4 + 3 = \square + 3 = \square$ $7 + 5 = 7 + 3 + \square$ $8 + 5 = 8 + 2 + \square$ $6 + 5 = 6 + \square + \square$ $9 + 5 = 9 + \square + \square$
Adding 1 to a two-digit number within 100 **This includes crossing the tens boundary.**		 	$53 + 1 = 54$ $35 = \square + 1$ $35 = 1 + \square$ one less ← 99 → one more

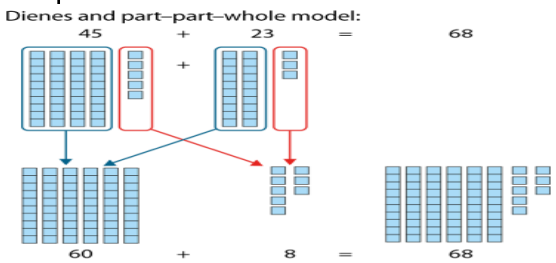
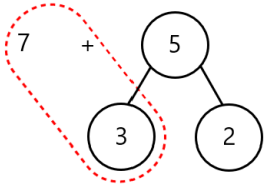
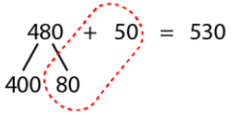
Y2 Addition

Objective and strategy	Concrete	Pictorial	Abstract
Use number facts to add a single-digit number to a two-digit number	If I know, Then I know... Part, whole models + Dienes Making to spot the pattern of ac ones stays the same, the tens change.	  	***'I know that ___ plus ___ is equal to ___...'*** (single-digit fact) ***'...so ___ plus ___ is equal to ___.'*** (related two-digit plus single-digit calculation) 3 + 6 = 9 13 + 6 = 19 ☐ 23 + 6 = 29
knowledge of 'make ten' to add a one-digit number to a two-digit number **making 10/a multiple of 10**	Dienes/ tens frames available  6 + 4 = 10 Making thirty:  	 	
Adding 10 **then** a multiple of 10 to any two-digit number	 *'We had three tens and two ones. Ten more gives us four tens and two ones.'* Tapping the Gattegno chart:  Real-life context: 	   	

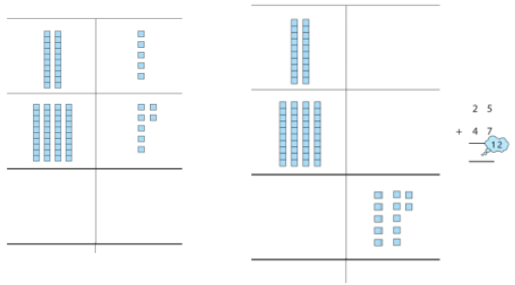
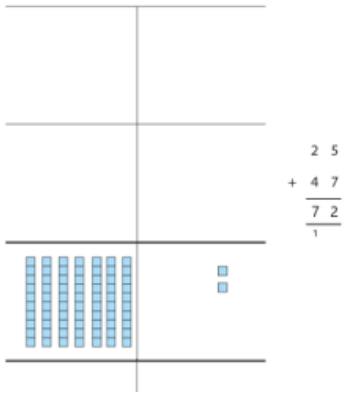
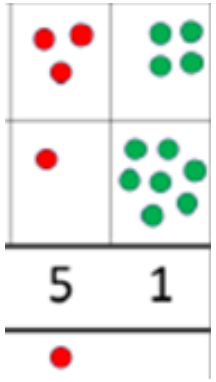
Y2 Addition

Objective and strategy	Concrete	Pictorial	Abstract
Pupils add a two-digit number to a two-digit number **not crossing 10** then **crossing 10**	using dienes practically to make numbers  	  	partitioning method  40 + 20 = 60 5 + 3 = 8 60 + 8 = 68  20 + 30 = 50 6 + 7 = 13 50 + 13 = 63

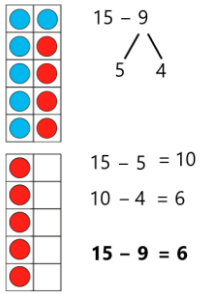
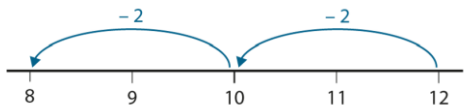
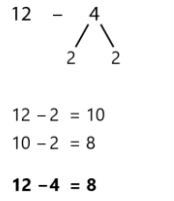
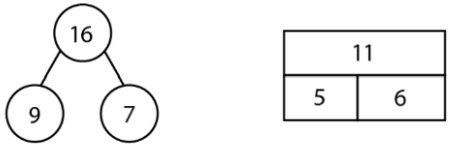
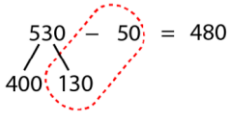
Y3 Addition

Objective and Strategy	Concrete	Pictorial	Abstract
Pupils add two numbers bridging across 10	Recap Year 2 	  7 + 3 = 10 10 + 2 = 12 	Children write the calculation and use known strategies to solve it mentally. 7 + 5 = 12

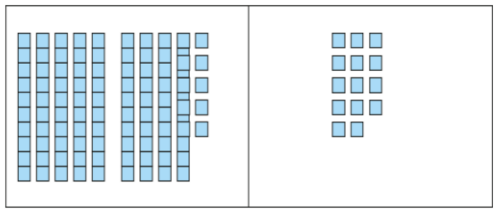
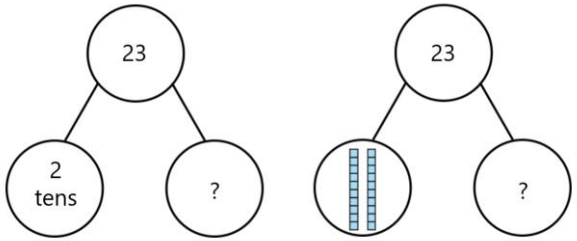
Y3 Addition

Objective and strategy	Concrete	Pictorial	Abstract
Pupils use column addition to add two 2 digit numbers	Children use dienes to physically add two 2 digit numbers. 25 + 47 = 72 First we add the ones. 5 + 7 = 12  Then we add the tens.  *2 tens plus 4 tens is 6 tens. We also need to add 1 ten from the regrouping. There are 7 tens altogether.*	Children draw a representation.  Children can draw a representation of the grid to further support their understanding, carrying the ten **underneath** the line	Start by portioning to show the exchange. 20 + 5 40 + 8 60 + 13 = 73 Move onto the formal method. 536 + 85 621 1 1
Repeat the method for adding two 2 digit numbers to add 2 3 digit numbers.			

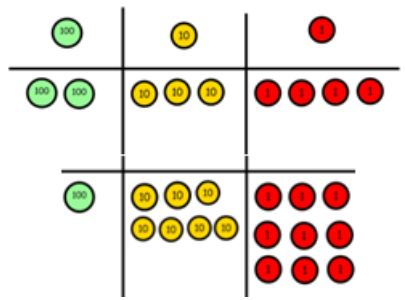
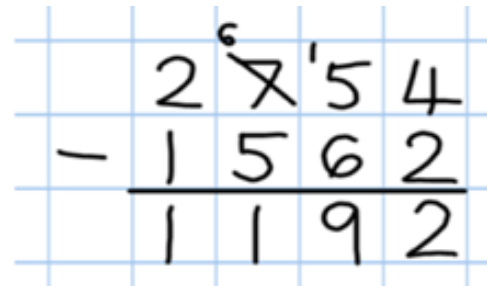
Y3 Subtraction

Objective and Strategy	Concrete	Pictorial	Abstract
Pupils subtract numbers that bridge 10	Children place the numbers on a tens frame and use this to physically subtract by removing the counters.  Children use a number line to subtract.  	Children partition the number and subtract until they reach 10 and then subtract the remaining amount.  Children represent the numbers using bar models and part whole models.  	Children write the calculation and subtract mentally using known strategies. 12 – 4
Pupils subtract multiples of 10 bridging 100		 	

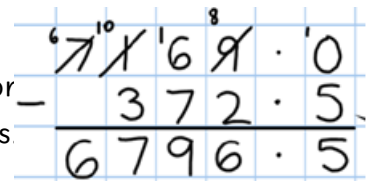
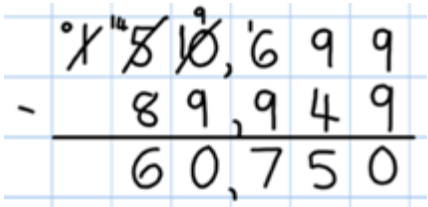
Y3 Subtraction

Objective and Strategy	Concrete	Pictorial	Abstract
Pupils use column subtraction with exchanging from tens to ones.			10s 1s ~~3~~ 2 ~~8~~ 1 4 − 6 8 8
Repeat the method subtracting with up to 3 digits.	See NCTEM		

Y4 Subtraction

Objective and Strategy	Concrete	Pictorial	Abstract
Subtract with up to 4 digits. using column subtraction	234 - 179  Model process of exchange using base ten and place value counters.	Children to draw place value counters and show their exchange	

Y5 Subtraction

Objective and strategy	Concrete	Pictorial	Abstract
Subtract with at least 4 digits, including money and measures	As Y4	As Y4	Use zeros for placeholders  

Y6 Subtraction

Objective and strategy	Concrete	Pictorial	Abstract
Subtract with increasingly large and more complex numbers and decimal values using formal methods.