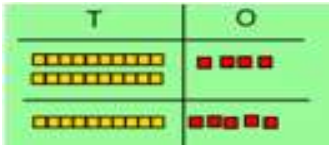
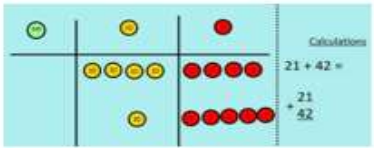
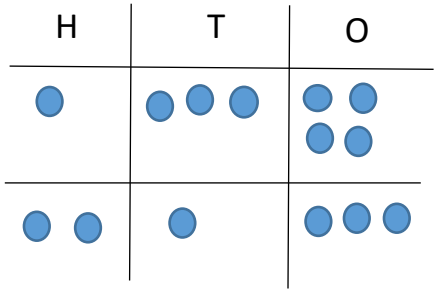
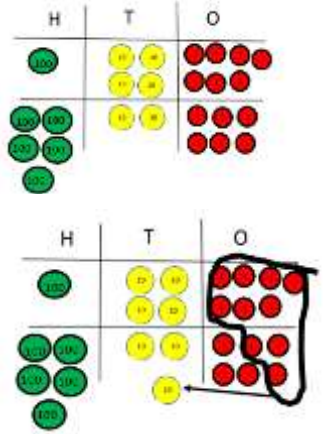
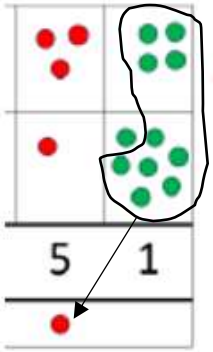
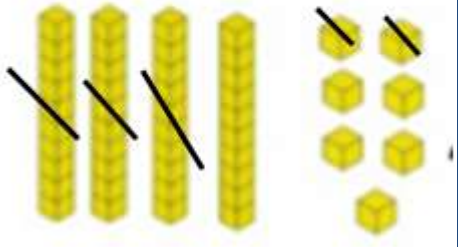
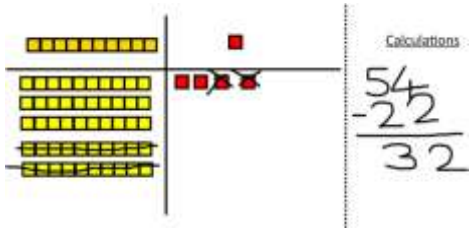
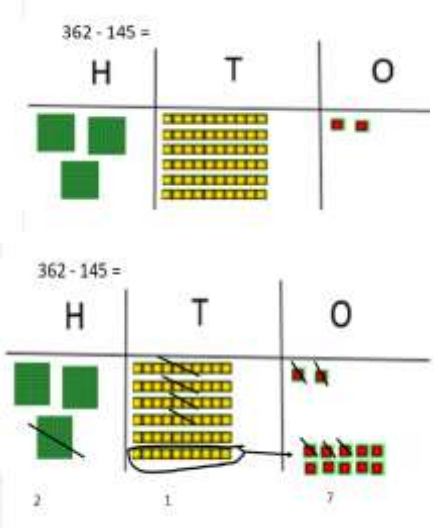
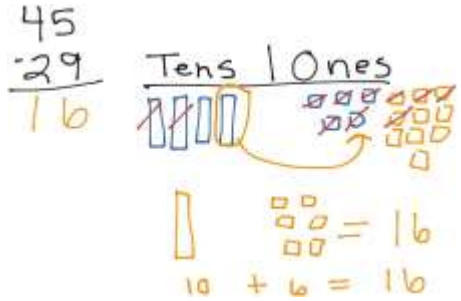
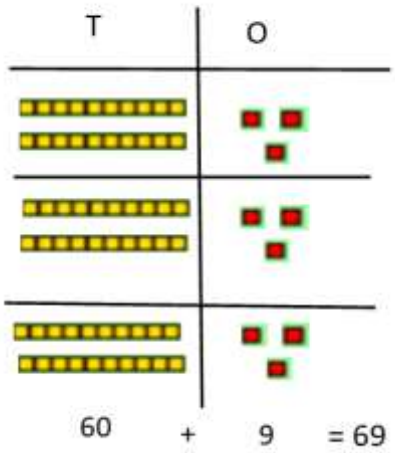
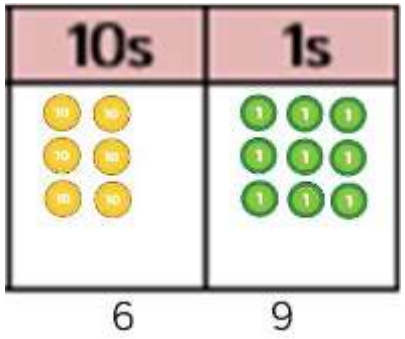
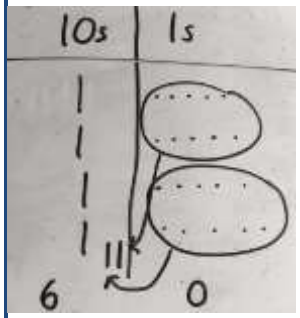
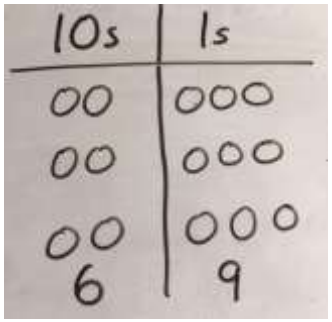
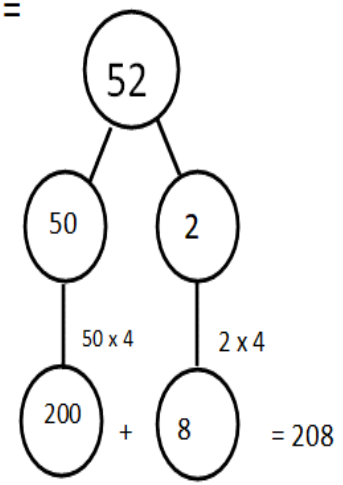
Addition + Year 3

Objective &Strategy	Concrete	Pictorial	Abstract
Column Addition—no regrouping Add two or three 2 or 3-digit numbers.	24 + 15 = 39  Add using grid and base 10. Always add ones first then tens then hundreds.  Move to 3 digits and using counters	The children move to drawing the calculation using a hundreds, tens and ones frame.  134 + 213 =	2 2 3 + 1 1 4 3 3 7 Add the ones first, then the tens, then the hundreds.
Column Addition with regrouping.	147+526 =  	 Children can draw a representation of the grid to further support their understanding, carrying the ten **underneath** the line	536 + 85 621 1 1

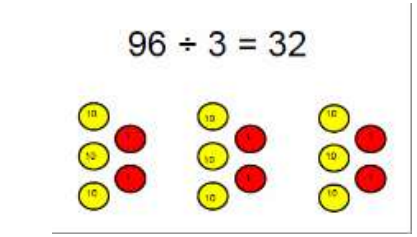
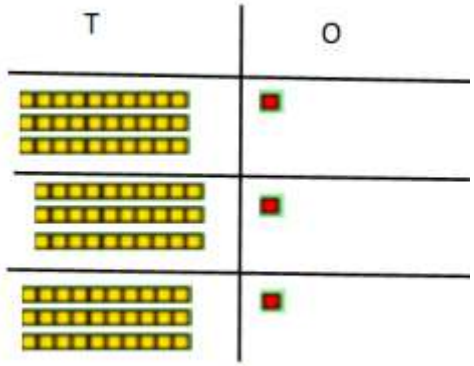
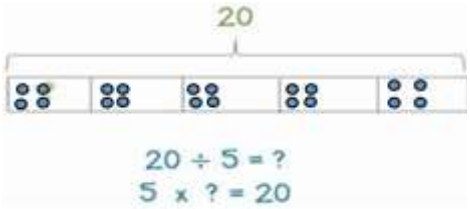
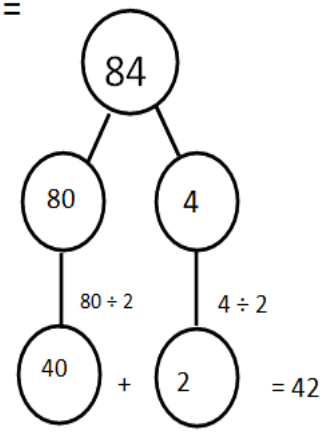
Subtraction - Year 3

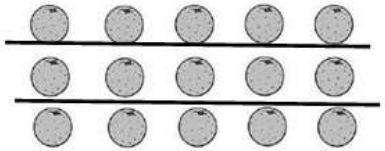
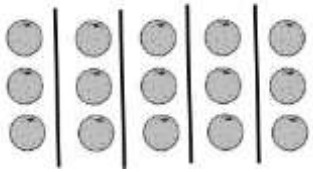
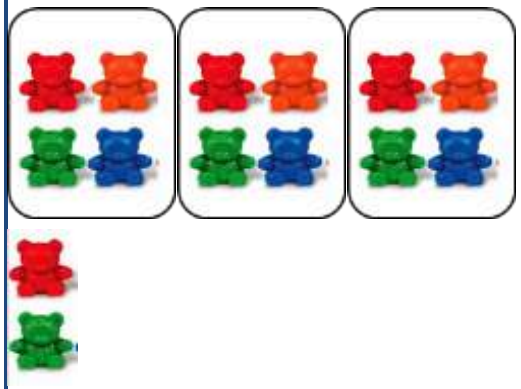
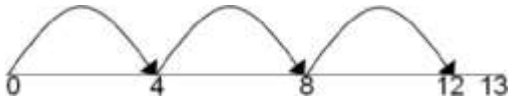
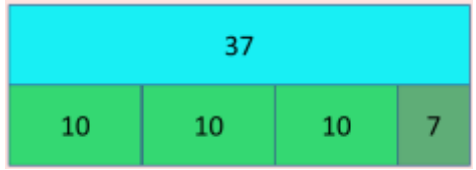
Objective &Strategy	Concrete	Pictorial	Abstract
Column subtraction without regrouping (friendly numbers)	47 - 32 = 15 	 Draw representations to support under-standing	458 - 214 244
Column subtraction with regrouping		 Children may draw base ten or PV counters and cross off.	

Multiplication X Year 3

Objective & Strategy	Concrete	Pictorial	Abstract
Partitioning to multiply moving to more formal written methods	23 x 3 =   	Children to represent the concrete manipulatives pictorially.  Children to represent the counters pictorially.  	52 x 4 = 

Division ÷ Year 3

Objective &Strategy	Concrete	Pictorial	Abstract
Division as grouping	24 divided into groups of 6 = 4  93 ÷ 3 =  First make the number using base ten. Then share equally on a hand drawn grid.	Continue to use bar modelling to aid solving division problems. 	84 ÷ 2 = 

Division with arrays	 Link division to multiplication by creating an array and thinking about the number sentences that can be created. Eg 15 ÷ 3 = 5 5 x 3 = 15 15 ÷ 5 = 3 3 x 5 = 15	Draw an array and use lines to split the array into groups to make multiplication and division sentences 15 ÷ 3 = 5  15 ÷ 5 = 3 	Find the inverse of multiplication and division sentences by creating eight linking number sentences. 7 x 4 = 28 4 x 7 = 28 28 ÷ 7 = 4 28 ÷ 4 = 7 28 = 7 x 4 28 = 4 x 7 4 = 28 ÷ 7 7 = 28 ÷ 4
Division with remainders.	14 ÷ 3 = Divide objects between groups and see how much is left over 	Jump forward in equal jumps on a number line then see how many more you need to jump to find a remainder.  Draw dots and group them to divide an amount and clearly show a remainder.  Use bar models to show division with remainders.  	Complete written divisions and show the remainder using r.