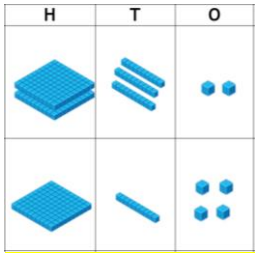
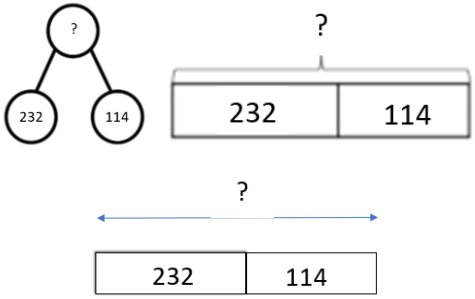
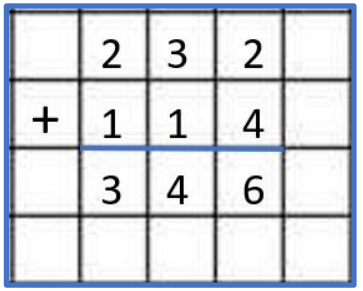
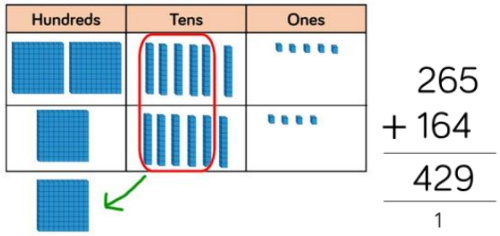
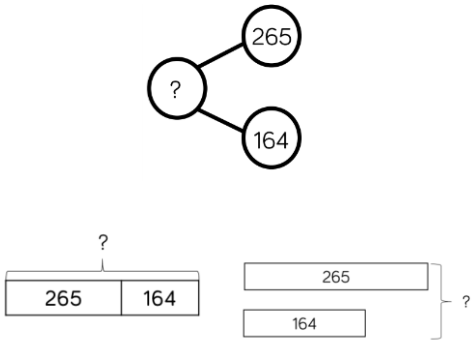
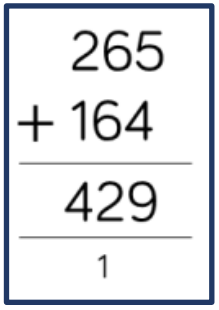
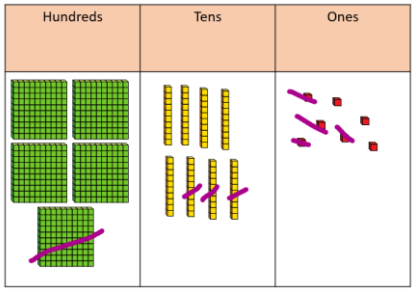
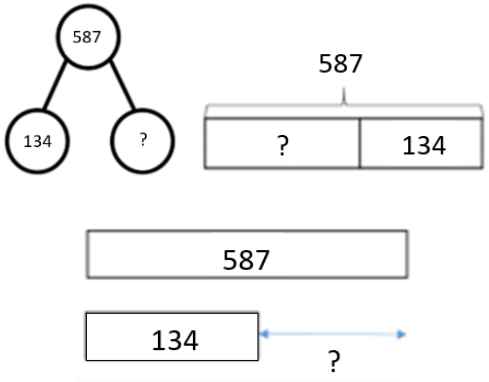
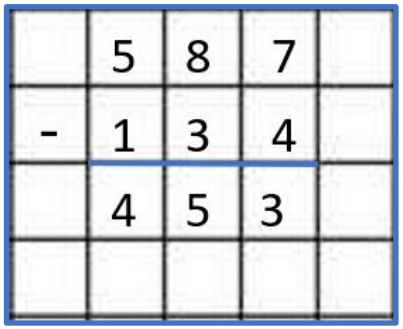
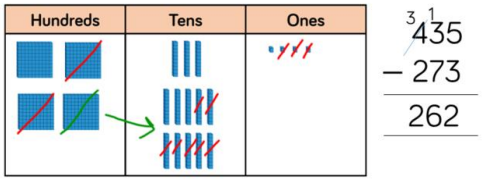
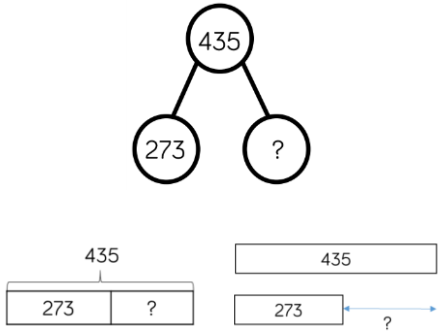
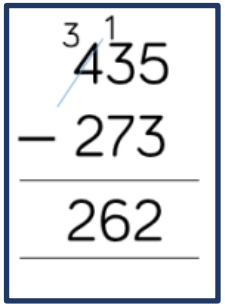
Year 3 Calculations Policy

Year 3 Addition

Objective / Strategy	Concrete	Pictorial	Abstract
Adding 3-digit numbers (no regrouping)	232 + 114 = ? Base 10 or counters are the most suitable concrete resources to add 3-digit numbers: 	232 + 114 = ? Represent pictorially: 	232 + 114 = ? Use the formal column method: 
Adding 3-digit numbers (regrouping)	265 + 164 = 429 Base 10 or counters are the most suitable concrete resources to add 3-digit numbers:  265 + 164 429 1 (Children should write out the calculation next to the concrete resources so they can see the links to the written column method)	265 + 164 = 429 Represent pictorially: 	265 + 164 = 429 Use the formal column method:  Moving on to applying knowledge to multi step Word Problems /Reasoning Style questions

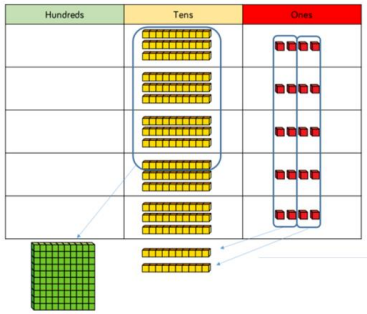
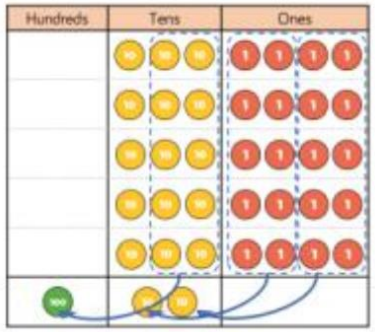
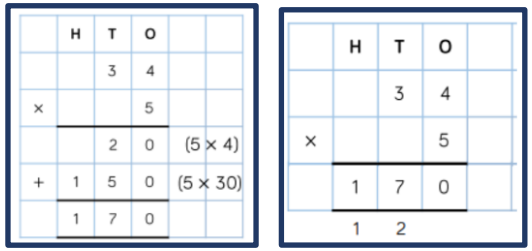
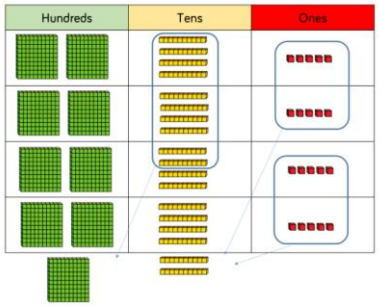
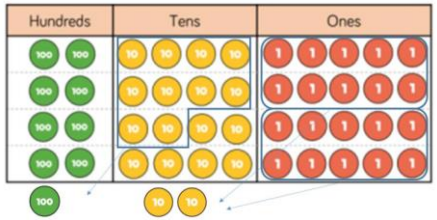
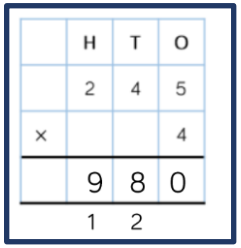
Key Vocabulary: sum, total, parts and wholes, plus, add, altogether, more, 'is equal to' 'is the same as'.

Year 3 Subtraction

Objective / Strategy	Concrete	Pictorial	Abstract
Subtracting 3-digit numbers (no regrouping)	587 – 134 = Base 10 or counters are the most suitable concrete resources to add 3-digit numbers: 	587 – 134 = Represent pictorially: 	587 – 134 = Use the formal column method: 
Subtracting 3-digit numbers (regrouping)	435 – 273 = 262 Base 10 or counters are the most suitable concrete resources to add 3-digit numbers:  (Children should write out the calculation next to the concrete resources so they can see the links to the written column method)	435 – 273 = 262 Represent pictorially: 	435 – 273 = 262 Use the formal column method: 

Key Vocabulary: take away, less than, the difference, subtract, minus, fewer, decrease.

Year 3 Multiplication

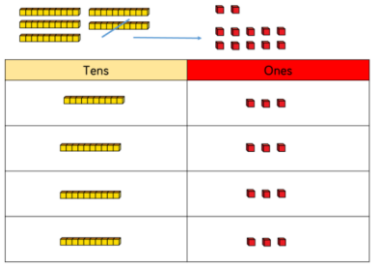
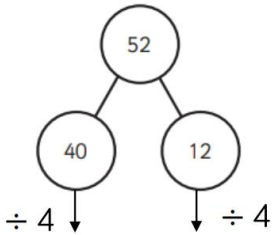
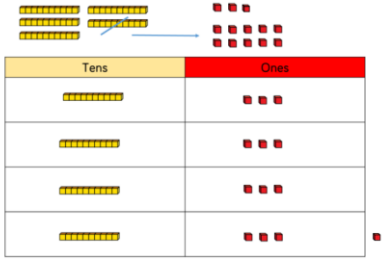
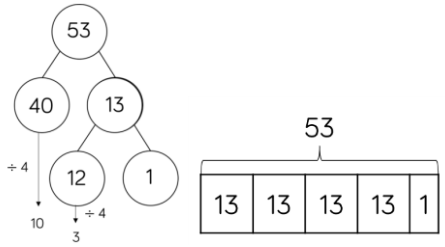
Objective / Strategy	Concrete	Pictorial	Abstract
Multiply 2 digits by 1 digit	$34 \times 5 = 170$ A range of concrete resources could be used such as Base 10: 	$34 \times 5 = 170$ Represent pictorially: 	$34 \times 5 = 170$ Teachers may want to use the expanded column method before moving to the short method:  Moving on to applying knowledge to multi step Word Problems /Reasoning Style questions
Multiply 3 digits by 1 digit	$245 \times 4 = 980$ A range of concrete resources could be used such as Base 10: 	$245 \times 4 = 980$ Represent pictorially: 	$245 \times 4 = 980$ Encourage the use of the formal column short method:  Moving on to applying knowledge to multi step Word Problems /Reasoning Style questions

Multiplcation Tables: Childrne in Year 3 are expected to learn their 3, 4 and 8 times tables.

Encourge children to count in multiples both forwards and backwards and to notice patterns, a range of concrete maniplulatives can also be used.

Key Vocabulary: double, times, multiplied by, the product of, groups of, lots of, equal groups.

Year 3 Division

Objective / Strategy	Concrete	Pictorial	Abstract
Divide 2 digits by 1 digit (sharing with exchange)	$52 \div 4 = 13$ Base 10 or counters should be used to exchange one ten for ten ones.  (Start with the equipment outside the place value grid before sharing the tens and ones equally between the rows)	$52 \div 4 = 13$  $10 + 3 = 13$ (Flexible partitioning using the part whole model will support the method used with concrete resources)	$52 \div 4 = 13$
Divide 2 digits by 1 digit (sharing with remainders)	$52 \div 4 = 13$ r1 A range of concrete resources could be used such as Base 10:  (Starting with the equipment outside the place value grid will highlight remainders as they will be left outside the grid once equal groups have been made)	$52 \div 4 = 13$ r1 Represent pictorially:  (Flexible partitioning using the part whole model will support the method used with concrete resources)	$52 \div 4 = 13$ r1

Key Vocabulary: share, group, divide, divided by, half.