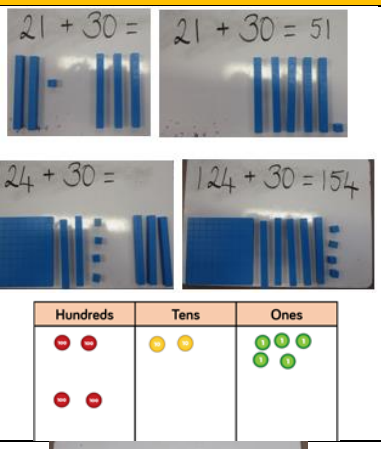
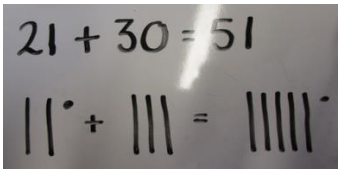
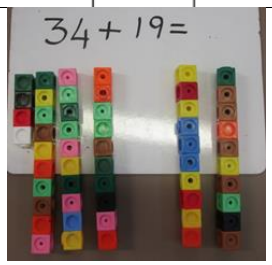
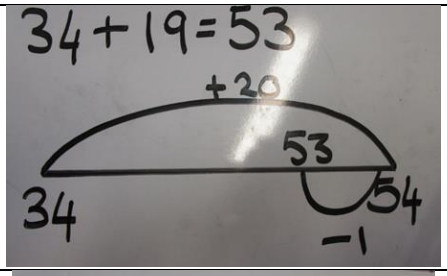
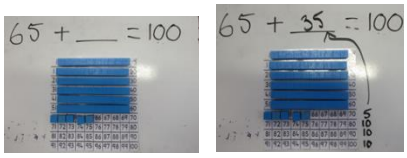
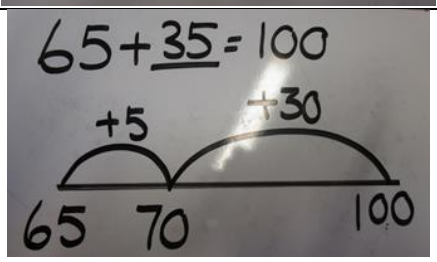
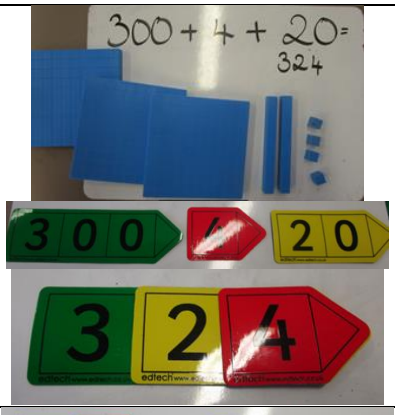
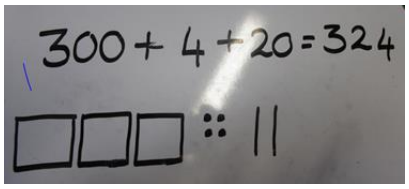
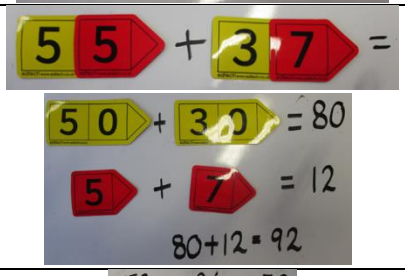
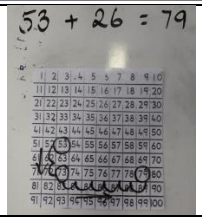
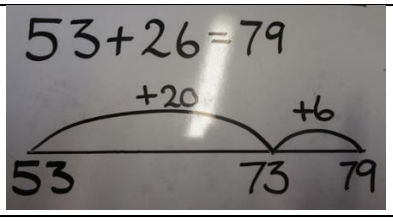
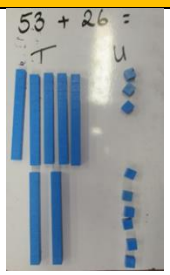
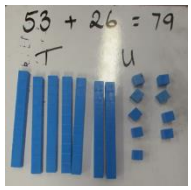
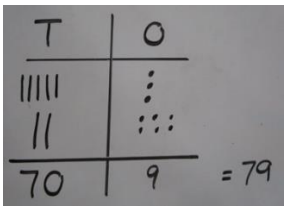
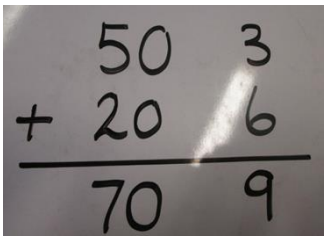
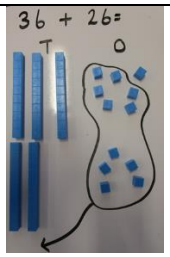
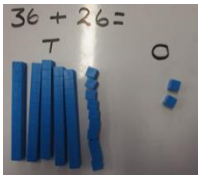
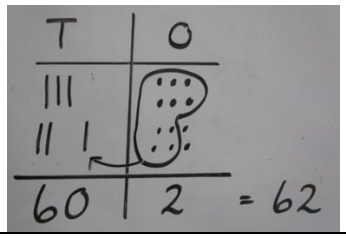
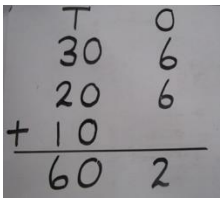
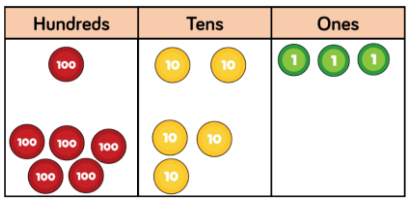
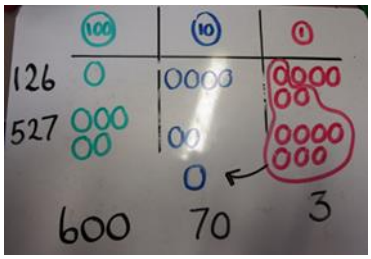
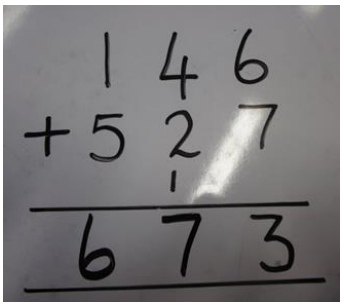
Year 3 Calculation Policy

Addition

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3A.1 - I can add multiples 10 and 100		225 + 200 	21 + 30 = 51 51 = 21 + 30 225 + 100 = 225 + 200 = 225 + _____ = 325
3A.1 - I can add near multiples 10 and 100			34 + 19 = 34 + 20 - 1
I can add multiples of 5 and 10 to make a hundred			65 + 5 + 30 = 100
3A.2 - I can perform place value additions (e.g. 300+4+20=324)			300 + 4 + 20 = 324 330 + ___ = 334 ___ + 30 + 4 = 234 234 + _____= 334
3A.3 - I can add any 2-digit number by partitioning			55 + 37 = 50 + 30 = 80 5 + 7 = 12 80 + 12 = 92
3A.4 - I can add a pair of 2-digit numbers by counting on			53 + 26 = 53+ 20 + 6 = 79

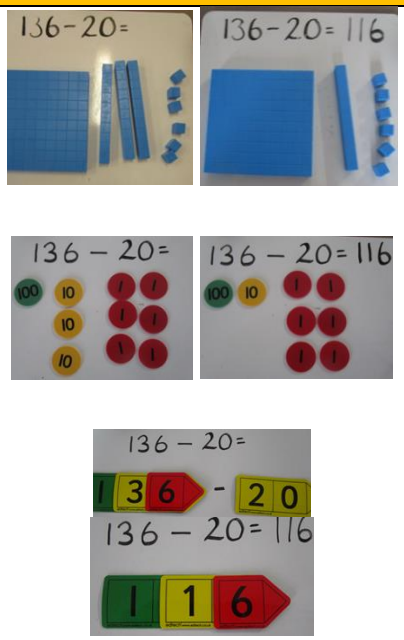
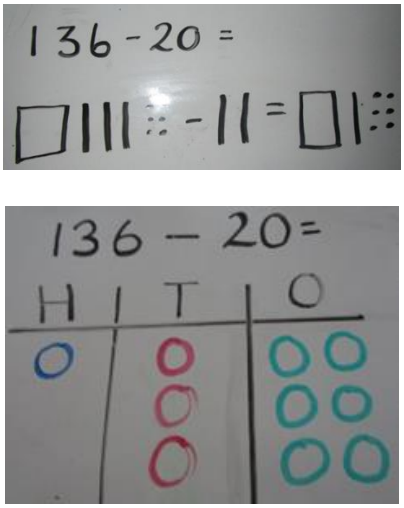
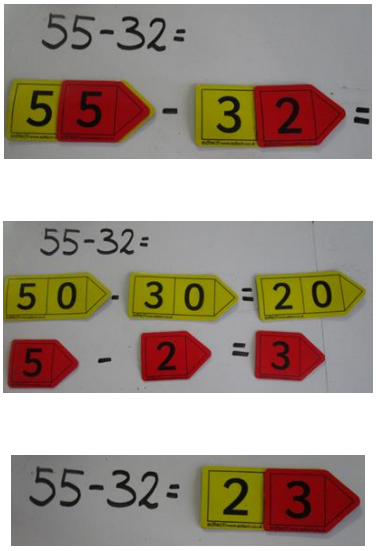
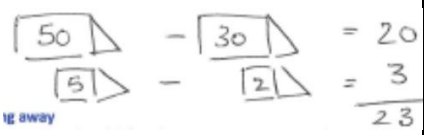
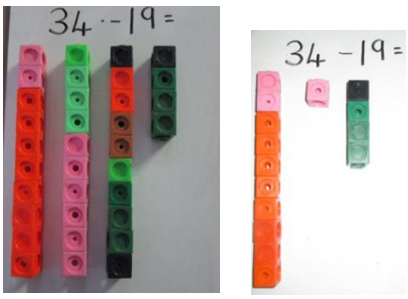
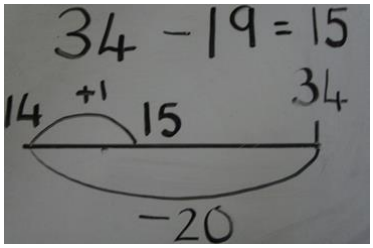
Year 3 Calculation Policy

Addition- Written Methods

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3A.6 - I can use expanded column addition	 		53 + 26= 
	 	36 + 26 = 	36 +26 
3A. 7 - I can use efficient column addition to add numbers with 3 digits	 Group the 1s into a ten and move it into the tens column 		466 358 11 824 

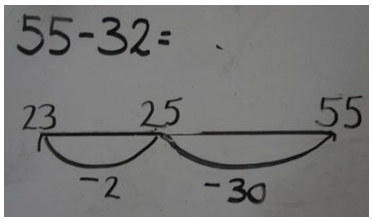
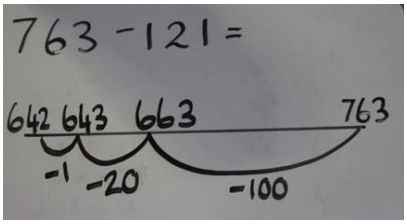
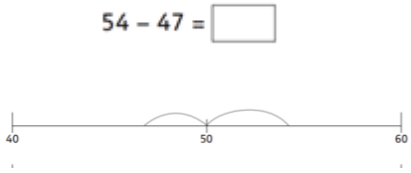
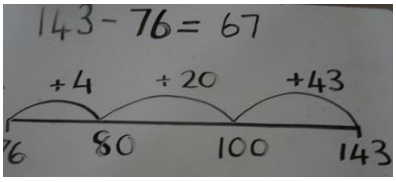
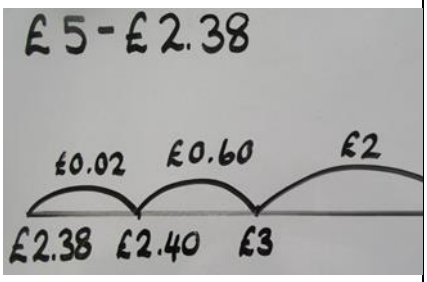
Year 3 Calculation Policy

Subtraction

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3S.1 - I can subtract multiples of 10 and 100 (e.g. 136-20=)			136 – 20 = 116
I can subtract by partitioning (e.g. 55-32 as 50-30 and 5-2)			55 - 32 = 23 50 - 30 = 20 5 – 2 = 3 23
3S.3 - I can takeaway multiples and near multiples of 10 and 100			34 – 19 = 30 – 20 + 1 =

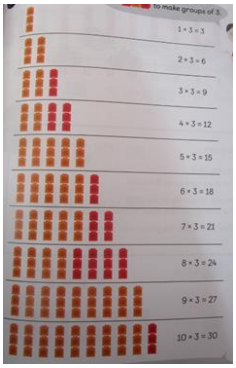
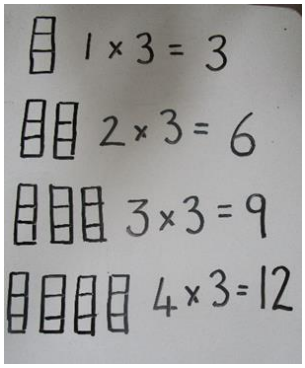
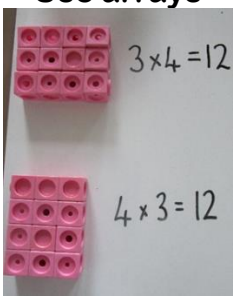
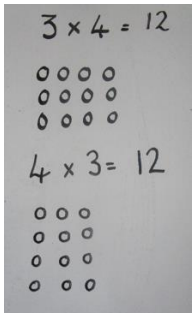
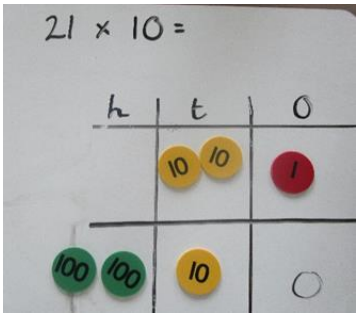
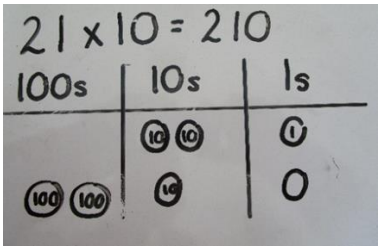
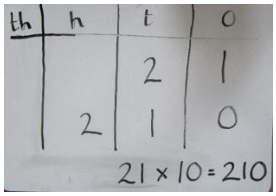
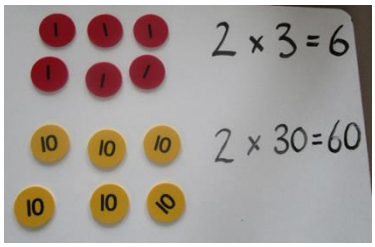
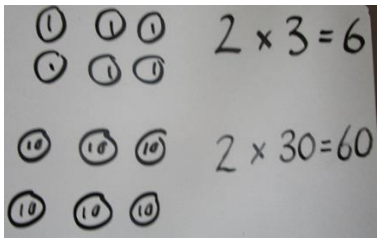
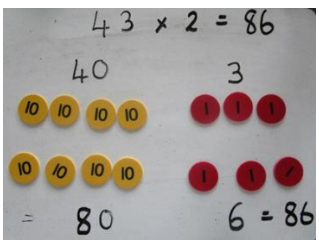
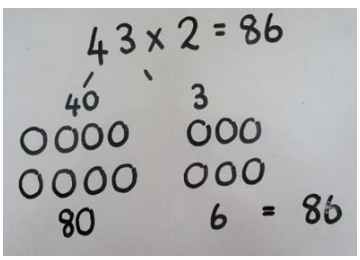
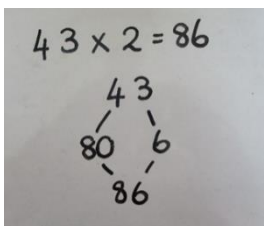
Year 3 Calculation Policy

Subtraction

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3S.4 - I can count back in hundreds, tens and then ones using an unstructured number line (e.g. 763 - 121)		 	55 – 32 = 22 55 – 30 – 2 = 23 763 – 121 = 763 – 100 – 20 -1 = 642
3S.5 - I can count on (FROG) from a 2-digit number to a number bigger than 100 (e.g. 143-76)			143 – 76 = 67 76 + 4 + 20 + 43 = 143 4 + 20 + 43 = 67
3S.6 – I can find change from £1, £5 and £10 by counting up	  		£5 - £2.38 = £2.62 £2.38 + £0.02 + £0.60 + £2 = £5 £0.02 + £0.60 + £2 £2.62

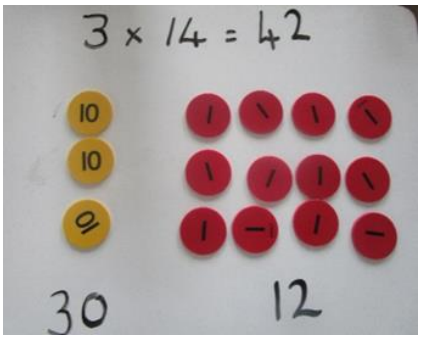
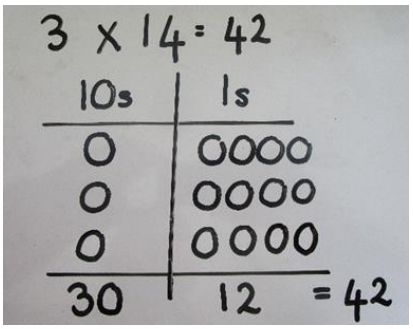
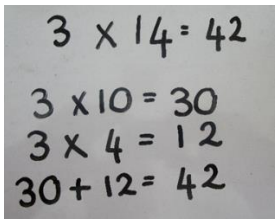
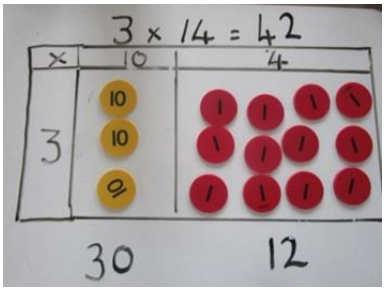
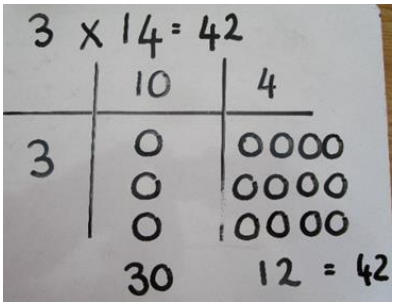
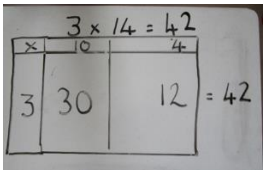
Year 3 Calculation Policy

Multiplication

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3M.1 - I know by heart all the multiplication facts in x2,x3,x4,x5,x8,x10 tables			1 x 3 = 3 2 x 3 = 6 3 x 3 = 9 4 x 3 = 12 5 x 3 = 15 6 x 3 = 18 7 x 3 = 21 8 x 3 = 24 9 x 3 = 27 10 x 3 = 30
3M.2 - I know that multiplication can be done in any order (commutative)	Use arrays 		3 x 4 = 12 so 4 x 3 = 12
3M. 3 - I can multiply whole numbers by 10 and 100			
3M.4 - I can use related facts to multiply multiples of 10 e.g. 2x3=6 2x30=60			. 2 x 3 =6 2 x 30 =60
3M.5 - I can double numbers upto 50 by partitioning			

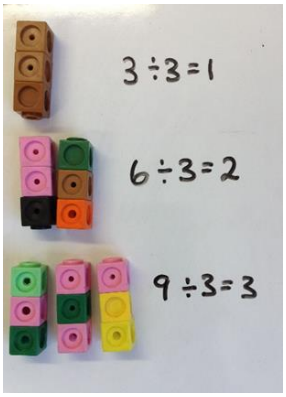
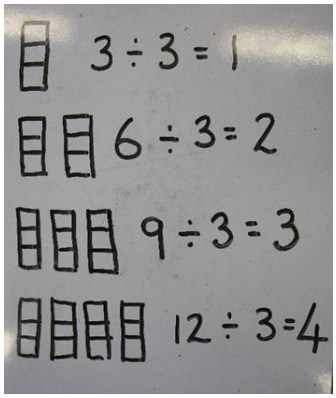
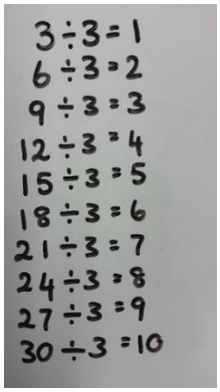
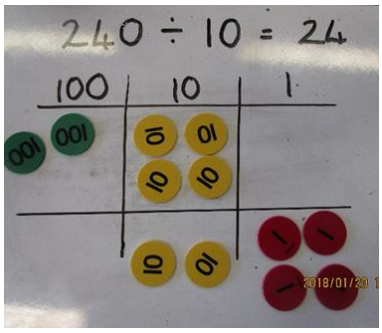
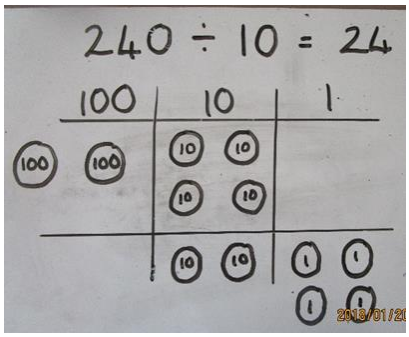
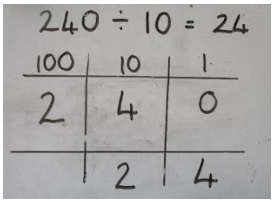
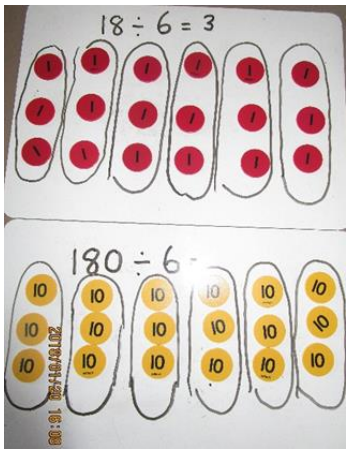
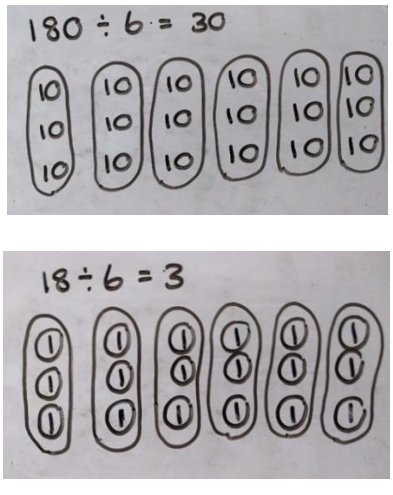
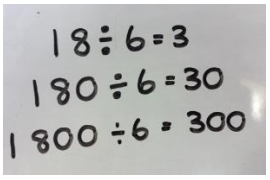
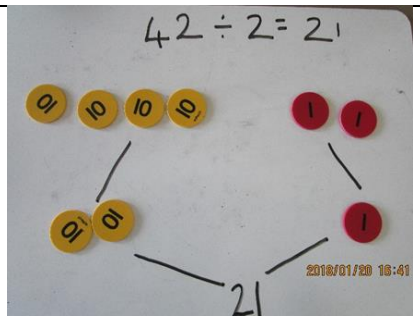
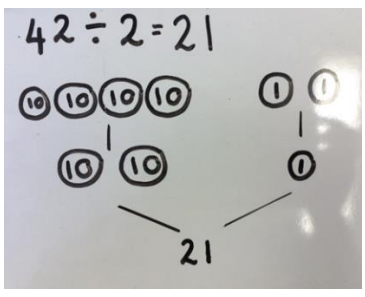
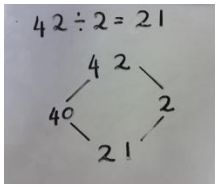
Year 3 Calculation Policy

Multiplication

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3M.6 - I can partition teen numbers into 10's and ones to multiply (e.g. 3 x14 as 3x10 and 3 x4)			
3M.7 - I can use a grid method to multiply 2-digit and 3-digit numbers by 'friendly' 1- digit numbers			

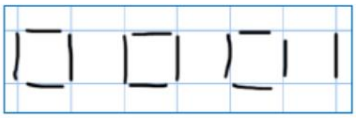
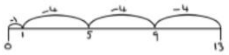
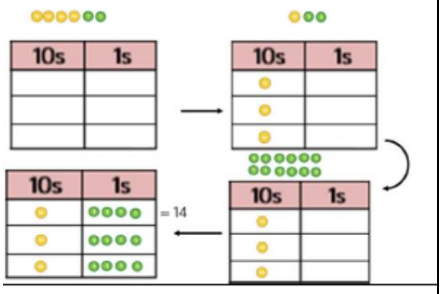
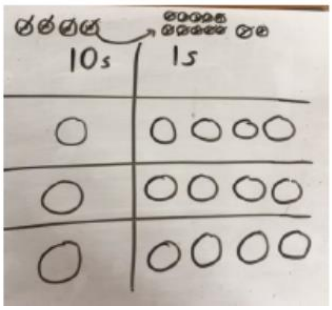
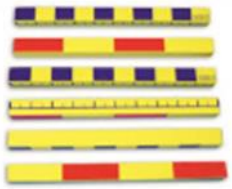
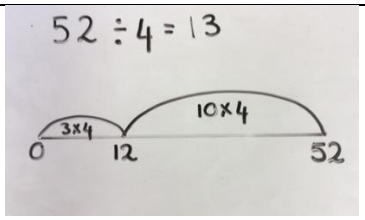
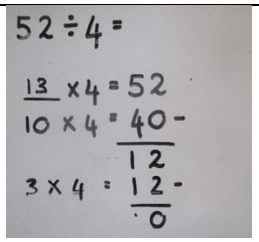
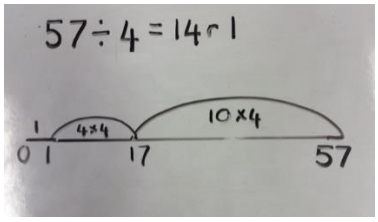
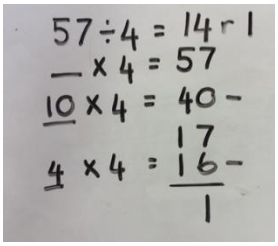
Year 3 Calculation Policy

Division

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
3D.1 - I know by heart all the division facts that can be derived from the x2, x3, x4, x5, x8 and x 10 tables			
3D.2 - I can divide whole numbers by 10 or 100 to give whole number answers			
3D.3 - I can use related facts to divide multiples of 10 by 1-digit numbers e.g. 32 ÷ 8 = 4 so 320 ÷ 8 = 40			
3D.4 - I can halve even numbers to 100, halve odd numbers to 20			

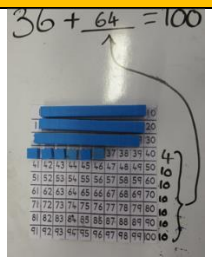
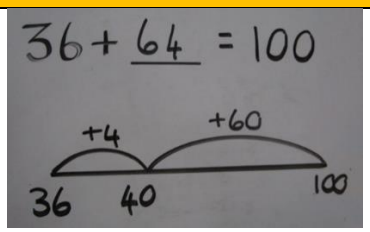
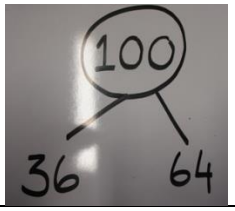
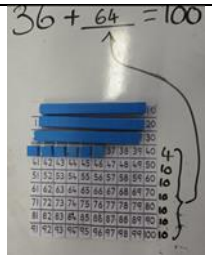
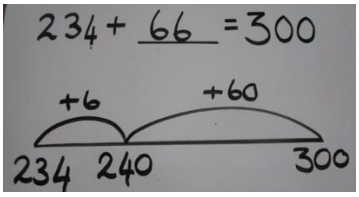
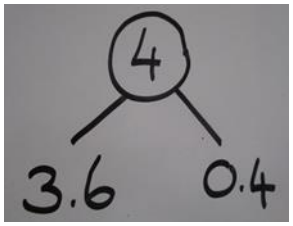
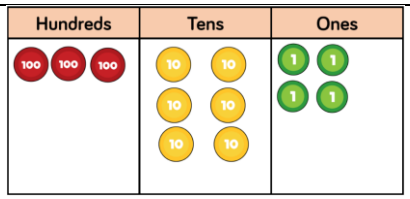
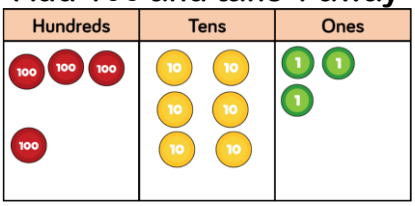
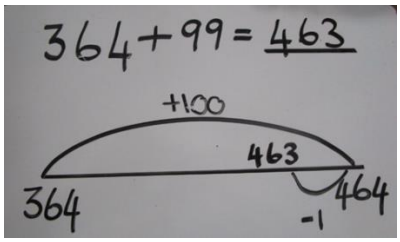
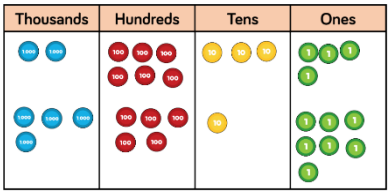
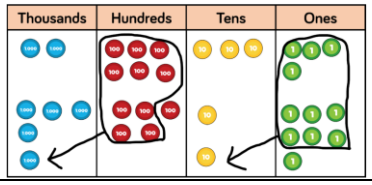
Year 3 Calculation Policy

Division

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
Dividing with remainders	2d ÷ 1d with remainders using lollipop sticks. Cuisenaire rods, above a ruler can also be used. 13 ÷ 4 Use of lollipop sticks to form wholes- squares are made because we are dividing by 4.  There are 3 whole squares, with 1 left over.	Children to represent the lollipop sticks pictorially..  There are 3 whole squares, with 1 left over.	13 ÷ 4 = 3 remainder 1 Children should be encouraged to use their times table facts; they could also represent repeated addition on a number line. '3 groups of 4, with 1 left over' 
Sharing	Sharing using place value counters. 42 ÷ 3 = 14 	Children to represent the place value counters pictorially. 	42 ÷ 3 42 = 30 + 12 30 ÷ 3 = 10 12 ÷ 3 = 4 10 + 4 = 14
3D.5 - I can perform divisions just above the 10th multiple using a number line e.g. 52 ÷ 4 = 13			
3D.6 - I can divide larger numbers mentally by subtracting the 10th multiple, including those with remainders e.g. 57 ÷ 3	**Times tables square**		

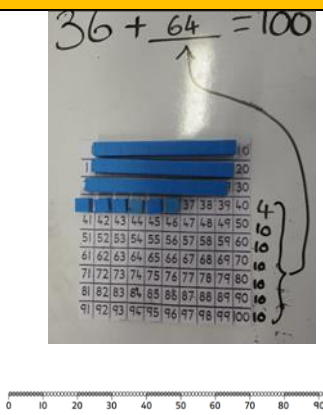
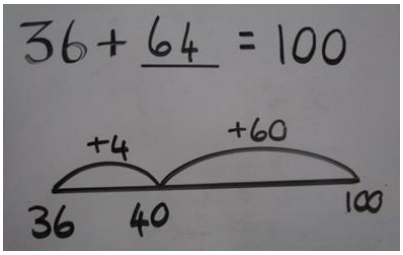
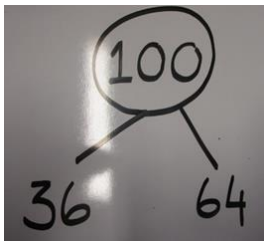
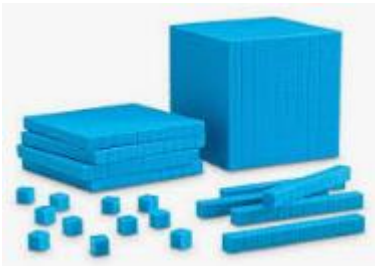
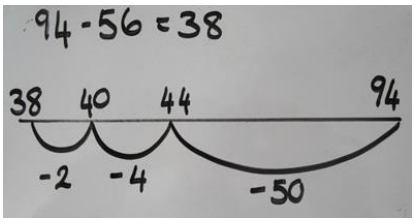
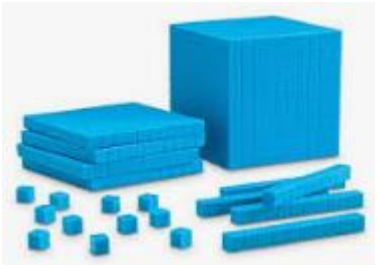
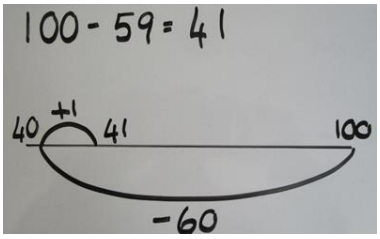
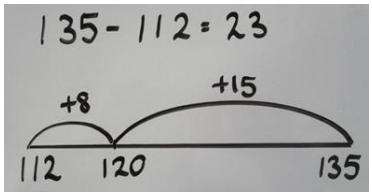
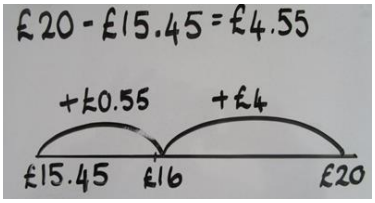
Year 4 Calculation Policy

Addition

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
4A. 1 – I know by heart or work out quickly number bonds to 100 or £1			What do you add to 36 to make 100? 
4A. 2 – I can add to the next 100, £1 and whole number (e.g. 234 + 66 = 300, 3.4 + 0.6 = 4)		 	234 + 6 + 60 = 3.6 + _____ = 4
4A.3 – I can add near multiples of 10, 100, 1000, £1 and 10p	 Add 100 and take 1 away 		364 + 100 – 1 = 463
4A.5 – I can add 3 and 4 digit numbers using efficient column method	2634 + 4517 =  	2634+ 4517= 	

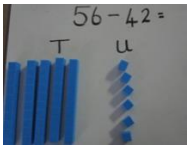
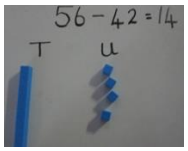
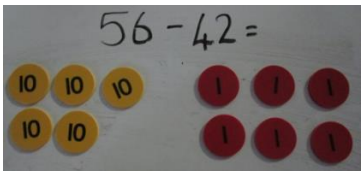
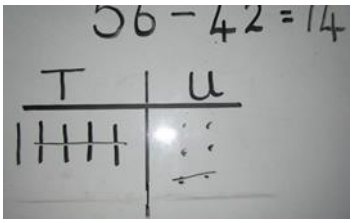
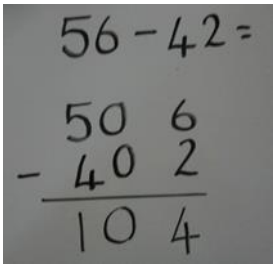
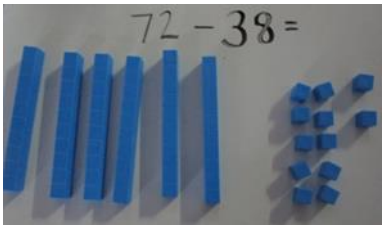
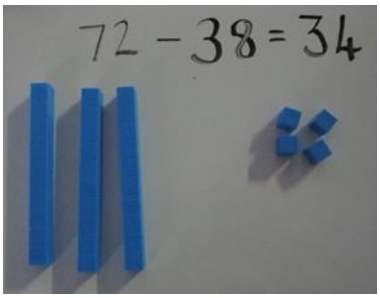
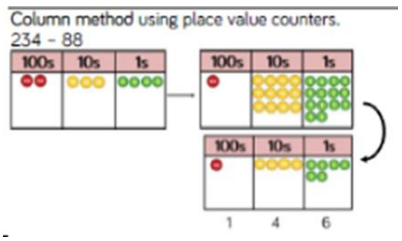
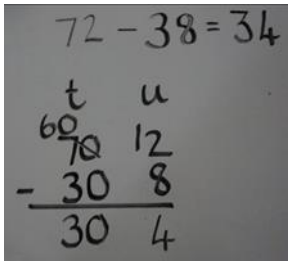
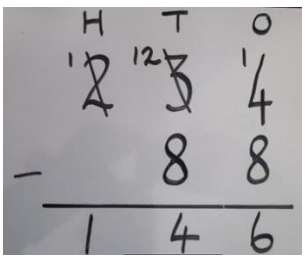
Year 4 Calculation Policy

Subtraction

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
4S.1 - I know by heart or can work out quickly number bonds to 100 or £1			
4S.2 - I can takeaway 2 digit numbers from 2 and 3-digit numbers without a number line			94 – 56 = 94 – 50 – 4 – 3 = 37
4S.3 - I can takeaway multiples and near multiples of 10, 100, 1000, £1 and 10p			100 – 59 = 100 – 60 + 1
4S.4 - I can subtract by counting on (FROG) without a number line e.g. 503 -368			135 – 112 = 112 + 8 + 15 = 135
4S. 5 - I can find change from £10, £20 and £50 by counting on (FROG)			£20 – £15.45 =

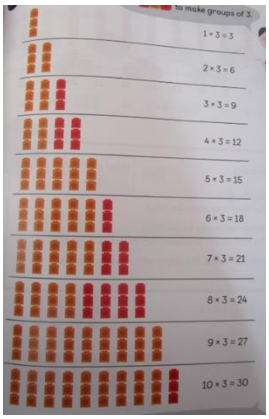
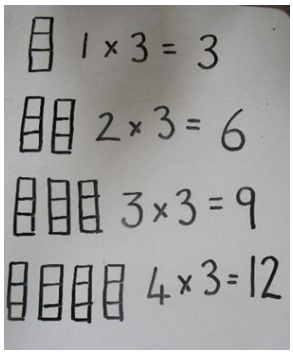
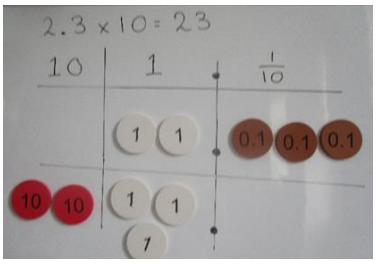
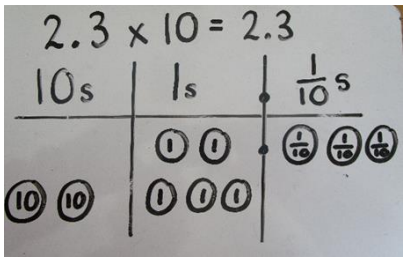
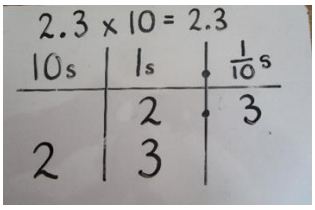
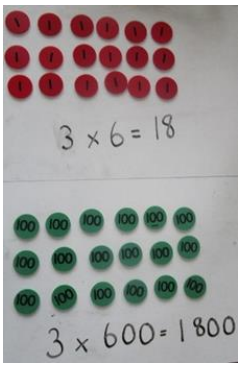
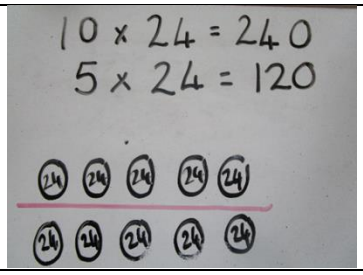
Year 4 Calculation Policy

Subtraction – Written Calculations

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
4S.6 - I can use expanded written subtraction without decomposing (2 and 3 digit numbers)	  		
4S.7 - I can use expanded written subtraction using decomposition with 3 digit numbers	  		
4S.8 - I can efficient written subtraction with upto 3 digits using efficient column subtraction			

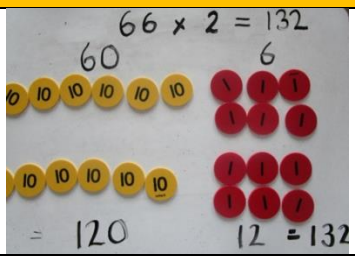
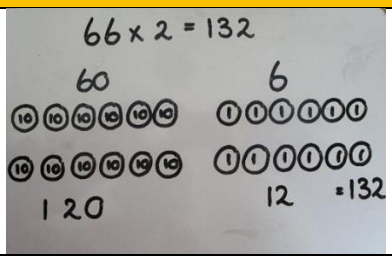
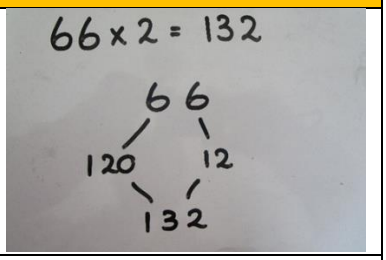
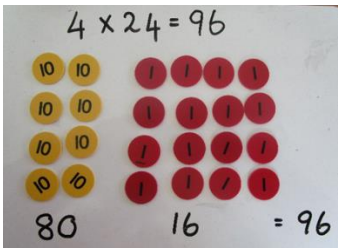
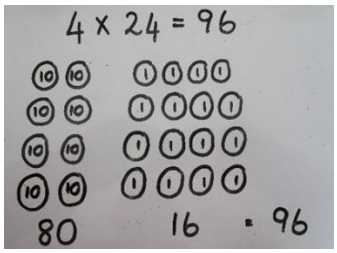
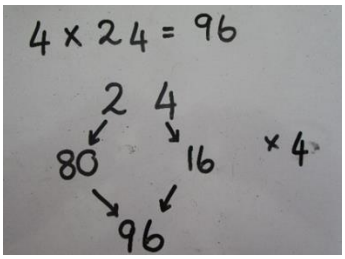
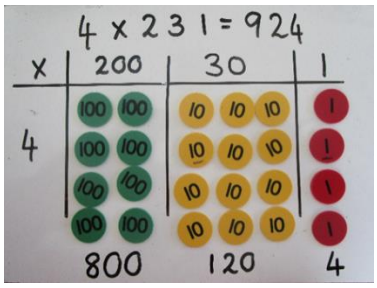
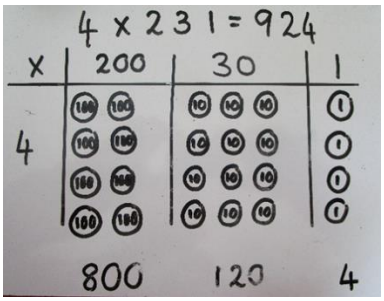
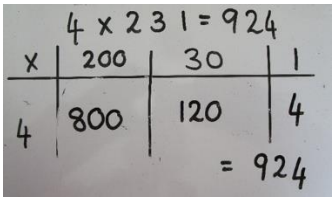
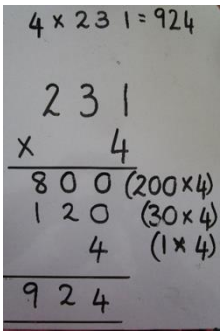
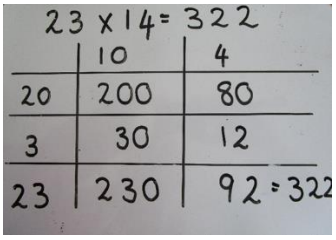
Year 4 Calculation Policy

Multiplication

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
Year 4 Number Facts 4M.1 - I know by heart all the multiplication facts up to 12 x 12			1 x 3 = 3 2 x 3 = 6 3 x 3 = 9 4 x 3 = 12 5 x 3 = 15 6 x 3 = 18 7 x 3 = 21 8 x 3 = 24 9 x 3 = 27 10 x 3 = 30
4M.2 - I can multiply whole numbers and 1 place decimals by 10, 100, 1000			
4M.3 - I can use related facts to multiply by multiples of 10, 100, 1000 (e.g. 300x6 and 50x60)			3 x 6 =18 3 x 60 = 180 3 x 600 = 1800
4M.4 - I can use number facts to make mental multiplication easier e.g. 36x5 is half of 36x10			10 x 24 = 240 so 5 x 24 = 120
4M.5 - I can multiply a 2-digit by 9 or 11 by multiplying by 10 and adjusting (e.g. 9x25 as (10x25)-25)		9x25 as (10x25)-25) 25 25 25 25 25 25 25 25 25 25	9x25 = (10x25)-25)

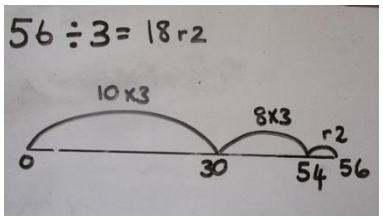
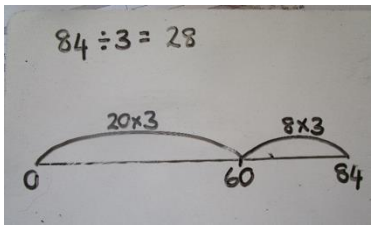
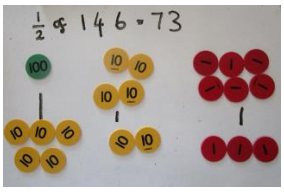
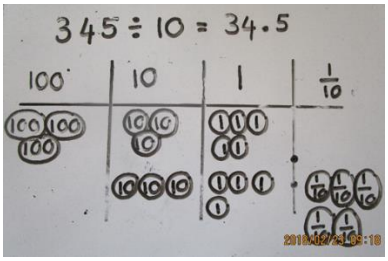
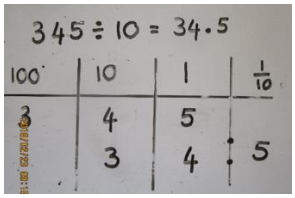
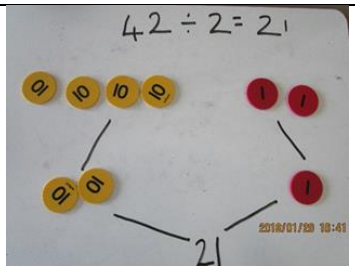
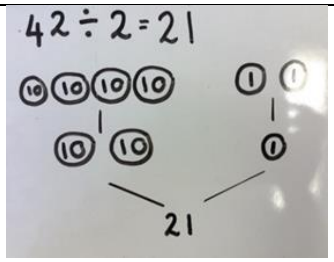
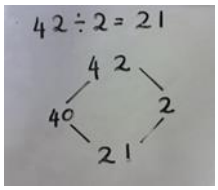
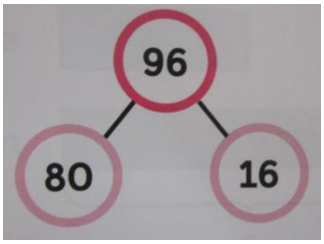
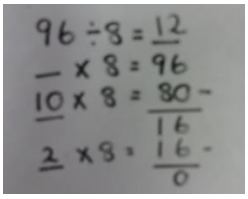
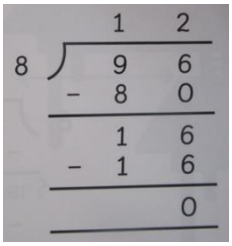
Year 4 Calculation Policy

Multiplication

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
4M.6 - I can use partitioning to find doubles to 100 and beyond			
4M.7 - I can partition 2 digit numbers to multiply by a 1-digit number (e.g. 4x24 as 4x20 and 4x4)			
4M.8 - I can use a grid method to multiply a 3-digit number by a 1-digit number			
4M.9 - I can use the 'ladder' method to multiply 3-digit numbers by 1-digit numbers			
4.10 - I can use a grid method to multiply a teen number by a 2-digit number			

Year 4 Calculation Policy

Division

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
4D.1 - I know by heart all the division facts up to 144 ÷ 12			
4D.2 - I can divide whole numbers by 10, 100, to give whole number answers with 1 decimal place			
4D.3 - I can use related facts to divide multiples of 100 by 1-digit numbers e.g. 32 ÷ 8 = 4 so 3200 ÷ 8 = 400	Find the answer to this first 32 ÷ 8 = 4 Use methods taught previously		32 ÷ 8 = 4 So 320 ÷ 8 = 40 So 3200 ÷ 8 = 400
4D.4 - I can find halves of even numbers to 200 and beyond using partitioning			 Use the same method but with larger numbers.
4D.5 - I can divide larger numbers mentally by subtracting the 10th or 20th multiple as appropriate.			 

Year 4 Calculation Policy

Division			
Learning Ladders Assessment Statement	**Concrete**	**Pictorial**	**Abstract**
D.6 - I can use a written method to divide a 2 digit or a 3- digit number by a 1-digit number.