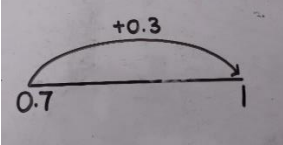
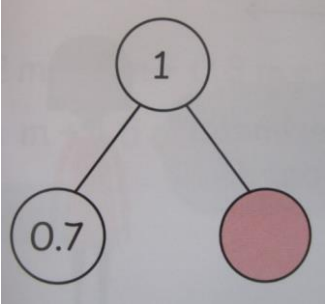
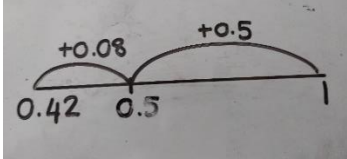
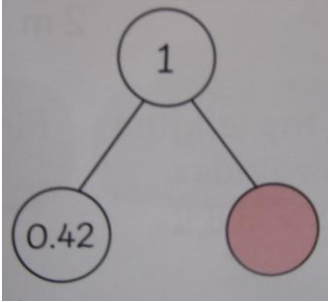
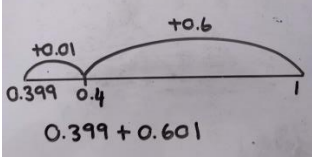
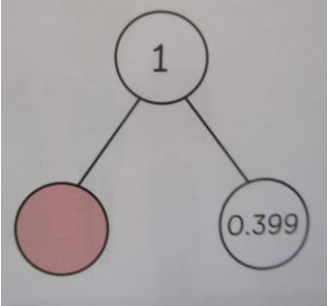
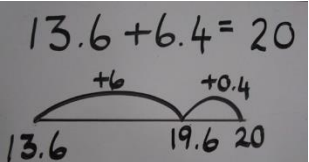


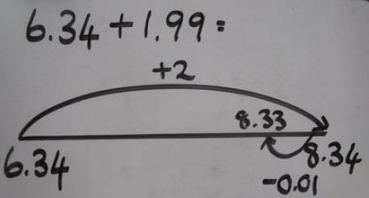
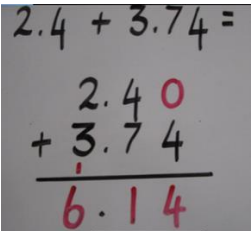



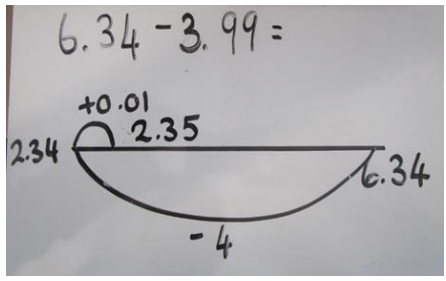

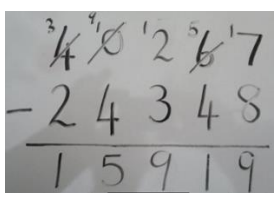
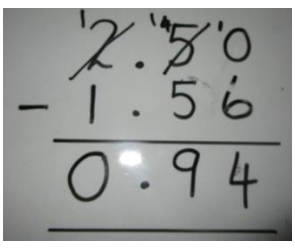
Year 5 Calculation Policy

Addition

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
5A.1 - I know number bonds to 1 and the next whole number	  <p>$0.7 + \underline{\quad} = 1$</p>	  <p>$0.42 + 0.58 = 1$</p>	  <p>$0.399 + 0.601 = 1$</p>
5A.2 - I can add to the next 10 from a decimal number (e.g. $13.6 + 6.4 = 20$)		$13.6 + \underline{\quad} = 20$ 	$13.6 + 6 + 0.4 = 20$
5A.3 - I can add decimals which are near multiples of 1 or 10 including money (e.g. $6.34 + 1.99$)	$£6.34 + £1.99$  <p>Then take away 1p</p>  <p>=£8.33</p>	$6.34 + 1.99 =$ 	$6.34 + 1.99 =$ $6.34 + 2 - 0.01$ $= 8.33$ $£6.34 + £2 - 1p$
5A.4 - I can add a mix of whole numbers and decimals with different numbers of decimal places using column addition			$2.4 + 3.74 =$ 

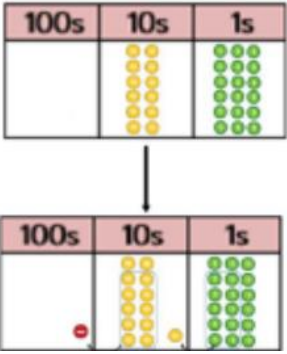
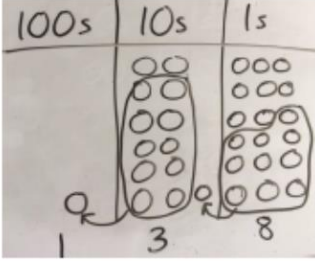
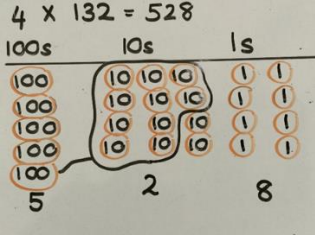
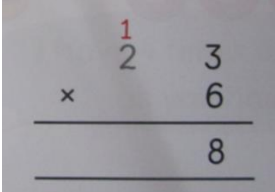
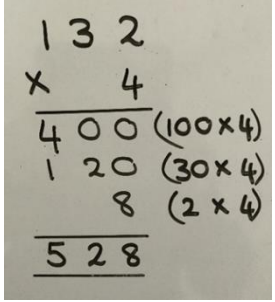
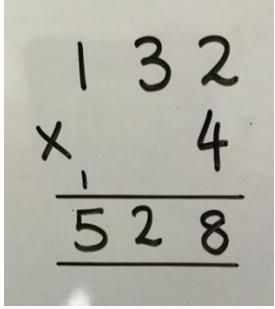
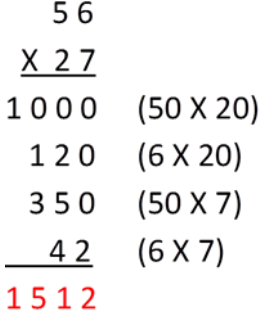
Year 5 Calculation Policy

Subtraction

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract																											
5S.1 - I can takeaway numbers which are near multiples of 1 or 10, including money (e.g. $6.34 - 1.99$)			$6.34 - 3.99 =$ $6.34 - 4 + 0.01 = 2.35$																											
5S.3 - I can efficient written subtraction with upto 5 digits using efficient column subtraction																														
5S.4 - I can use efficient written subtraction with a mix of whole numbers and decimals with different numbers of decimal places using column subtraction	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #e6f2ff;"> <th colspan="3">Thousands</th> <th colspan="3">Units</th> <th>•</th> <th>1/10</th> <th>1/100</th> </tr> <tr style="background-color: #e6f2ff;"> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> <th>•</th> <th>Tenths</th> <th>Hundredths</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td>•</td> <td> </td> <td> </td> </tr> </tbody> </table>	Thousands			Units			•	1/10	1/100	Hundreds	Tens	Ones	Hundreds	Tens	Ones	•	Tenths	Hundredths							•				
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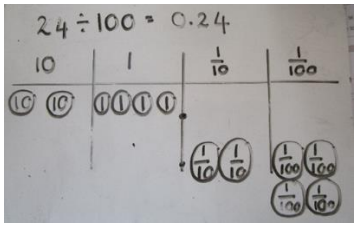
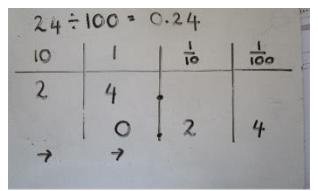

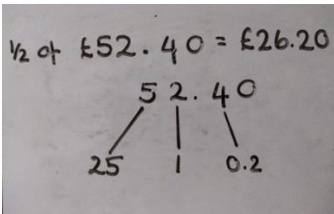
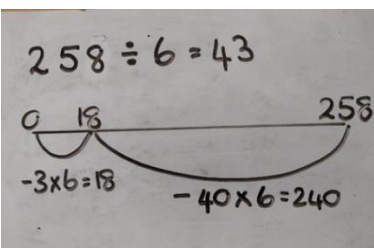
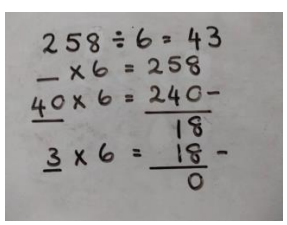
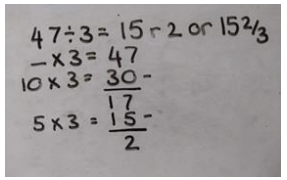
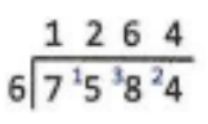
Year 5 Calculation Policy

Multiplication

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
<p>5M.6 - I can use short multiplication to multiply a 1-digit number by a number with upto 4 digits and money</p>	<p>Formal column method with place value counters</p> <p style="text-align: center;">6×23</p> 	<p>Children represent the counters/base 10:</p>  	  
<p>5M.7 - I can use the 'ladder' method to multiply 3 and 4 digit numbers by a teen number (long multiplication)</p>			

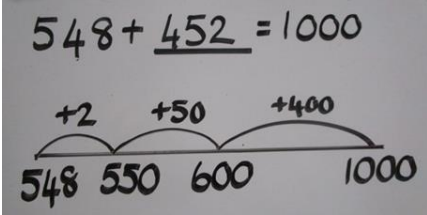
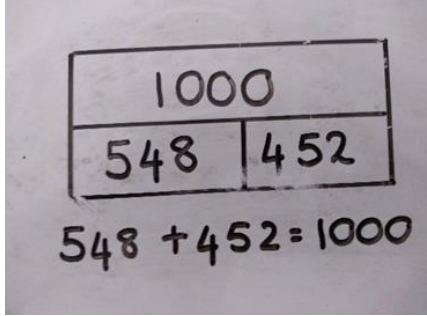
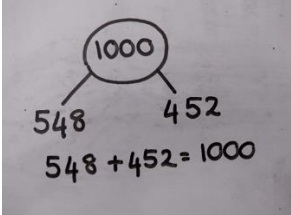
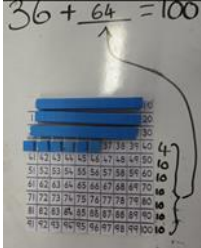
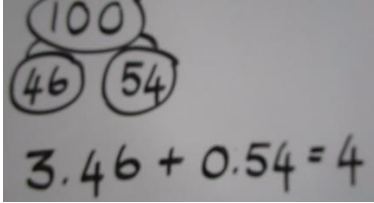
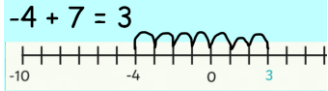
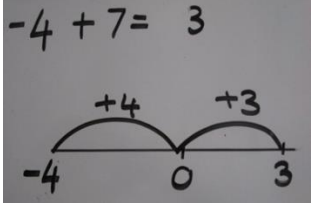
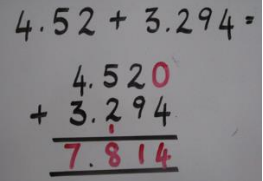
Year 5 Calculation Policy

Division

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
5D.1 - I can divide whole numbers by 10, 100, 1000, 10000 to give whole number answers or answers with 1, 2 or 3 decimal places			
5D.2 - I can halve amounts of money e.g. half of £52.40 is £26.20			$\begin{aligned} \frac{1}{2} \text{ of } \pounds 52.40 &= (\frac{1}{2} \text{ of } \pounds 52) + (\frac{1}{2} \text{ of } 0.20) \\ &= \pounds 26 + \pounds 0.20 \\ &= \pounds 26.20 \end{aligned}$
5D.3 - I can divide by larger numbers mentally by subtracting the 10th or 100th multiple as appropriate			
D.4 - I can begin to represent a remainder as a fraction or decimal			
5D.5 - I can use short division to divide a number with up to 4 digits by 12 or less.			


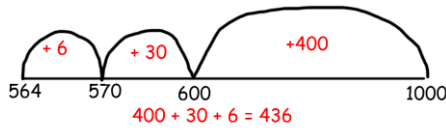
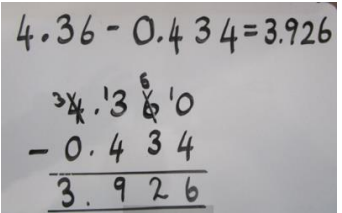
Year 6 Calculation Policy

Addition

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
6.1 - I can work out quickly number bonds to 1000		 	
6A.2 - I can use number bonds to 100 to work out related facts (e.g. 3.46 + 0.54)	 <p>Use the same method to work out $46 + \underline{\quad} = 100$</p>		$46 + 54 = 100$ $0.46 + 0.54 = 1$ $3.46 + 0.54 = 4$ $3.46 + \underline{\quad} = 4$
6A.3 - I can add positive number to negative numbers			$-4 + 7 =$ $-4 + 4 + 3 = 3$
6A.5 - I can use column addition to add decimal numbers with up to 3 decimal places			

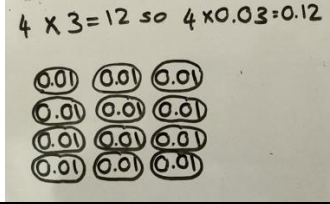
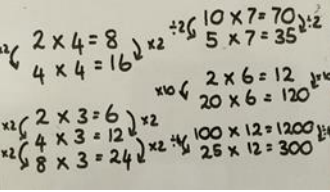
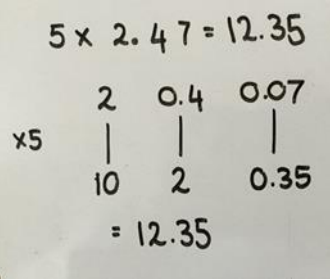
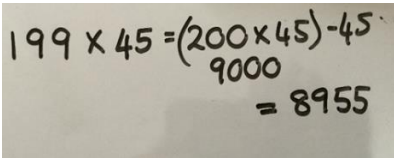
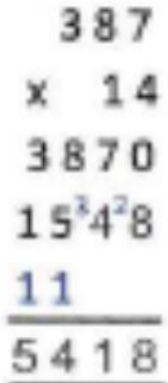
Year 6 Calculation Policy

Subtraction

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract																														
6S.1 - I can work out number bonds to 1000 quickly		<p>1000 - 564 =</p>  <p style="color: red; font-weight: bold;">400 + 30 + 6 = 436</p>	<p>1000 = 564 + ?</p>																														
6S.2 - I can use mental strategies to subtract decimal numbers	<p>Count on, count back – subtract and adjust.</p> <p>Look at previous mental strategies taught in KS2</p>																																
6S.3 - I can use efficient written subtraction with numbers with upto 3 decimal places	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr style="background-color: #00B0F0; color: white;"> <th colspan="3">Thousands</th> <th colspan="3">Units</th> <th>•</th> <th>1/10</th> <th>1/100</th> <th>1/1000</th> </tr> <tr style="background-color: #FFD700;"> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> <th>•</th> <th>Tenths</th> <th>Hundredths</th> <th>Thousandths</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Thousands			Units			•	1/10	1/100	1/1000	Hundreds	Tens	Ones	Hundreds	Tens	Ones	•	Tenths	Hundredths	Thousandths											
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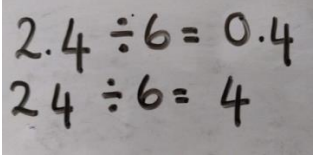
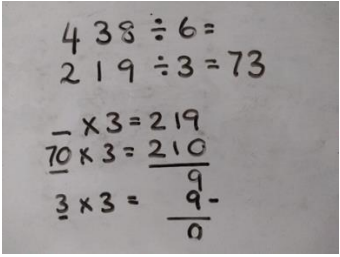
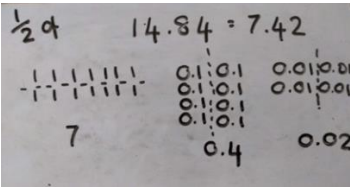
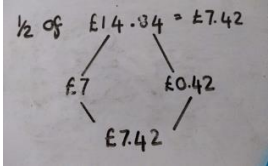
Year 6 Calculation Policy

Multiplication

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
6M.2 - I can use doubling and halving to multiply by 2, 4, 8, 5, 20 and 25		 <p>$4 \times 3 = 12$ so $4 \times 0.03 = 0.12$</p> <p>0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01</p>	$4 \times 3 = 12$ $4 \times 0.3 = 1.2$ $4 \times 0.03 = 0.12$
6M.3 - I can multiply 2 place decimals by 1 digit numbers using partitioning		 <p>$2 \times 4 = 8$ $\times 2$ $10 \times 7 = 70$ $\times 2$ $4 \times 4 = 16$ $\times 2$ $5 \times 7 = 35$ $\times 2$ $2 \times 3 = 6$ $\times 2$ $2 \times 6 = 12$ $\times 10$ $4 \times 3 = 12$ $\times 2$ $20 \times 6 = 120$ $\times 10$ $8 \times 3 = 24$ $\times 2$ $100 \times 12 = 1200$ $\times 10$ $25 \times 12 = 300$ $\times 10$</p>	
6M.4 - I can multiply mentally by near multiples of 100 (e.g. 67×199 as $(67 \times 200) - 67$)		 <p>$5 \times 2.47 = 12.35$</p> <p>$\times 5$ 2 0.4 0.07 10 2 0.35 = 12.35</p>	$5 \times 2.47 = (5 \times 2) + (5 \times 0.4) + (5 \times 0.07) = 12.35$
6M.5 - I can use long multiplication to multiply a 2-digit number by a number with up to 4-digits		 <p>$199 \times 45 = (200 \times 45) - 45$ $\quad \quad \quad 9000$ $\quad \quad \quad = 8955$</p>	$199 \times 45 = (200 \times 45) - 45 = 8955$
6M.5 - I can use long multiplication to multiply a 2-digit number by a number with up to 4-digits			 <p style="text-align: right;"> 387 $\times 14$ 3870 1548 11 <hr style="width: 10%; margin: 0 auto;"/> 5418 </p>

Year 6 Calculation Policy

Division

Learning Ladders Assessment Statement	Concrete	Pictorial	Abstract
6D.1 - I can divide 1 and 2 place decimals by 10 and less using know facts			
6D.2 - I can identify common factors to help with mental division e.g. $438 \div 6$ is $219 \div 3$ which is 73			
6D.3 - I can halve decimal numbers with up to 2 decimal places using partitioning e.g. half of 36.86			 <p> $\frac{1}{2}$ of £14.84 = (£7 + £0.42) = £7.42 </p>
6D.4 - I can use short division to divide a number with upto 4 digits by a 1-digit or 2-digit number			$ \begin{array}{r} 12.325 \\ 4 \overline{) 49.300} \\ \underline{4} \\ 9 \\ \underline{8} \\ 13 \\ \underline{12} \\ 10 \\ \underline{8} \\ 20 \\ \underline{20} \\ 0 \end{array} $ <p>12.325 to 2 d.p is <u>12.33</u></p>
6D.5 - I can use long division to divide 3-digit and 4-digit numbers by 'friendly' 2-digit numbers			