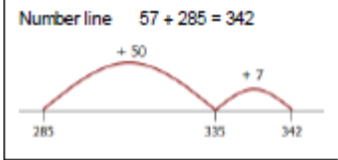
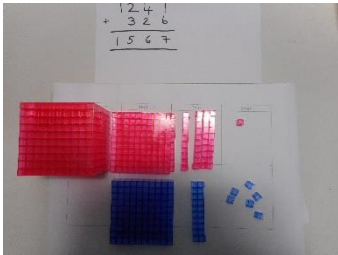
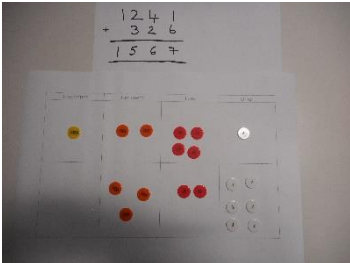
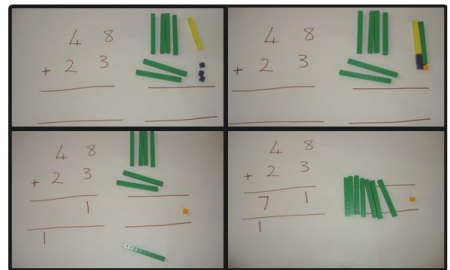
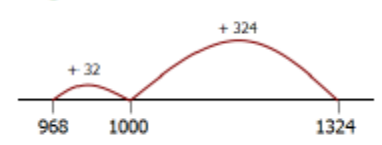
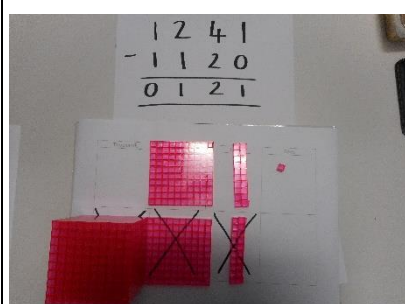
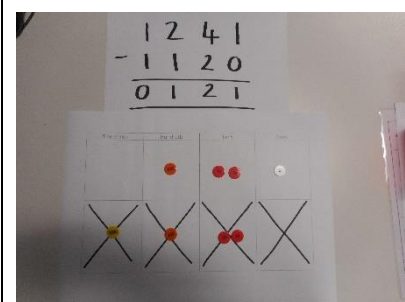


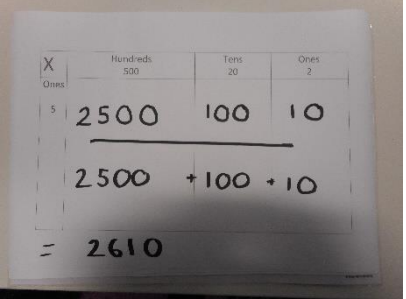
Year 4 Progression in maths

<p>Addition</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate ▪ estimate and use inverse operations to check answers to a calculation ▪ solve addition two-step problems in contexts, deciding which operations and methods to use and why. 	<p>Strategies:</p> <ul style="list-style-type: none"> • Diennes • Place value counters • Diennes alongside column method • Expanded column method <p>Summer term:</p> <ul style="list-style-type: none"> • Compact column method 	<p>Number line $57 + 285 = 342$</p>  <p style="text-align: right;">(low ability)</p>   	<p>Expanded vertical</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: right;"> $789 + 642 = 1431$ $\begin{array}{r} 789 \\ + 642 \\ \hline 1120 \\ 1300 \\ \hline 1431 \end{array}$ </div> <div style="text-align: right;"> $789 + 642 = 1431$ $\begin{array}{r} 789 \\ + 642 \\ \hline 1431 \\ \hline 11 \end{array}$ </div> </div>
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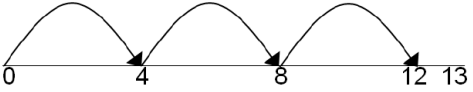
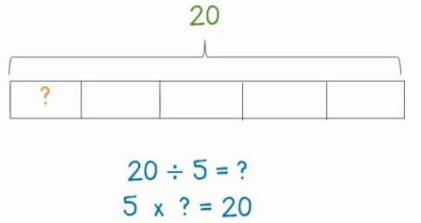
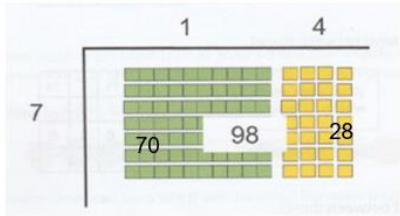
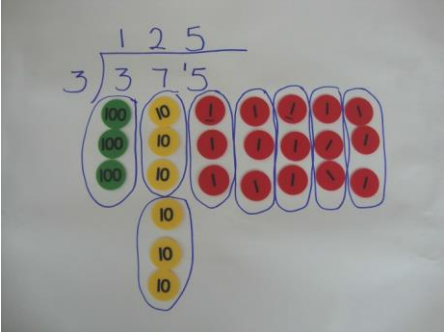
Year 4 Progression in maths

Subtraction	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ subtract numbers with up to 4 digits using the formal written methods of column subtraction where appropriate ▪ estimate and use inverse operations to check answers to a calculation ▪ solve subtraction two-step problems in contexts, deciding which operations and methods to use and why. 	<p>Strategies:</p> <ul style="list-style-type: none"> • Diennes • Place value counters • Diennes alongside column method • Number line • Expanded column method <p>Summer:</p> <ul style="list-style-type: none"> • Compact column method 	<p style="color: green; font-weight: bold;">Counting on $1324 - 968 = 356$</p>   	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> $\begin{array}{r} 1000 \text{ and } 300 \text{ and } 70 \text{ and } 4 \\ - \quad \quad 900 \text{ and } 60 \text{ and } 8 \\ \hline 1300 \text{ and } 60 \text{ and } 14 \\ - \quad 900 \text{ and } 60 \text{ and } 8 \\ \hline 400 \text{ and } 0 \text{ and } 6 \end{array}$ <p style="color: blue; font-weight: bold;">Decomposition: $1374 - 968 = 406$</p> </td> <td style="width: 50%; padding: 5px;"> <p style="color: blue; font-weight: bold;">Decomposition $1374 - 968 = 406$</p> $\begin{array}{r} 6 \\ 1374 \\ - 968 \\ \hline 406 \end{array}$ </td> </tr> </table>	$\begin{array}{r} 1000 \text{ and } 300 \text{ and } 70 \text{ and } 4 \\ - \quad \quad 900 \text{ and } 60 \text{ and } 8 \\ \hline 1300 \text{ and } 60 \text{ and } 14 \\ - \quad 900 \text{ and } 60 \text{ and } 8 \\ \hline 400 \text{ and } 0 \text{ and } 6 \end{array}$ <p style="color: blue; font-weight: bold;">Decomposition: $1374 - 968 = 406$</p>	<p style="color: blue; font-weight: bold;">Decomposition $1374 - 968 = 406$</p> $\begin{array}{r} 6 \\ 1374 \\ - 968 \\ \hline 406 \end{array}$
$\begin{array}{r} 1000 \text{ and } 300 \text{ and } 70 \text{ and } 4 \\ - \quad \quad 900 \text{ and } 60 \text{ and } 8 \\ \hline 1300 \text{ and } 60 \text{ and } 14 \\ - \quad 900 \text{ and } 60 \text{ and } 8 \\ \hline 400 \text{ and } 0 \text{ and } 6 \end{array}$ <p style="color: blue; font-weight: bold;">Decomposition: $1374 - 968 = 406$</p>	<p style="color: blue; font-weight: bold;">Decomposition $1374 - 968 = 406$</p> $\begin{array}{r} 6 \\ 1374 \\ - 968 \\ \hline 406 \end{array}$					

Year 4 Progression in maths

<p>Multiplication</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> recall multiplication facts for multiplication tables up to 12×12 use place value, known and derived facts to multiply mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations multiply two-digit and three-digit numbers by a one-digit number using formal written layout solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. 	<p>Strategies:</p> <ul style="list-style-type: none"> Arrays, numberline and bar model for lower attainers Grid method Expanded column method <p>Summer Term:</p> <ul style="list-style-type: none"> Compact column method 	<p>Use this method for up to TU x U</p> <table border="1"> <tr> <td>x</td> <td>T</td> <td>U</td> </tr> <tr> <td></td> <td>████████</td> <td>□□□</td> </tr> <tr> <td></td> <td>████████</td> <td>□□□</td> </tr> <tr> <td></td> <td>████████</td> <td>□□□</td> </tr> <tr> <td></td> <td>████████</td> <td>□□□</td> </tr> </table> <table border="1"> <tr> <td>x</td> <td>10</td> <td>3</td> </tr> <tr> <td>4</td> <td>●●●●●●●●●●</td> <td>●●●</td> </tr> <tr> <td></td> <td>●●●●●●●●●●</td> <td>●●●</td> </tr> <tr> <td></td> <td>●●●●●●●●●●</td> <td>●●●</td> </tr> <tr> <td></td> <td>●●●●●●●●●●</td> <td>●●●</td> </tr> </table> <p>Use written grid method for HTU xU.</p>  <p>The image shows a handwritten grid method for 2500×4. The grid has columns for Hundreds (500), Tens (20), and Ones (2). The number 2500 is written as 2 in the Hundreds column, 5 in the Tens column, and 0 in the Ones column. It is multiplied by 4. The result is 2610, with 2 in the Hundreds column, 6 in the Tens column, and 10 in the Ones column. Below the grid, the calculation is shown as $2500 + 100 + 10 = 2610$.</p>	x	T	U		████████	□□□		████████	□□□		████████	□□□		████████	□□□	x	10	3	4	●●●●●●●●●●	●●●		●●●●●●●●●●	●●●		●●●●●●●●●●	●●●		●●●●●●●●●●	●●●	<table border="1"> <tr> <td> 237×4 (estimate: $250 \times 4 = 1000$) $\begin{array}{r} 237 \\ \times 4 \\ \hline 948 \end{array}$ </td> <td> $342 \times 7 = 2394$ $\begin{array}{r} 342 \\ \times 7 \\ \hline 2394 \end{array}$ </td> </tr> </table>	237×4 (estimate: $250 \times 4 = 1000$) $\begin{array}{r} 237 \\ \times 4 \\ \hline 948 \end{array}$	$342 \times 7 = 2394$ $\begin{array}{r} 342 \\ \times 7 \\ \hline 2394 \end{array}$
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Year 4 Progression in maths

Division	Pupils should be taught to:	Strategies:	Number line for LA:	HTU xU:
	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> ▪ recall division facts for multiplication tables up to 12×12 ▪ use place value, known and derived facts to divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers ▪ recognise and use factor pairs and commutativity in mental calculations ▪ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. 	<p>Strategies:</p> <ul style="list-style-type: none"> • Arrays, numberline and bar model for lower attainers • Expanded short division <p>Summer Term:</p> <ul style="list-style-type: none"> • Compact short division 	<p>Number line for LA:</p>  <p>Think of the bar as a whole. Split it into the number of groups you are dividing by and work out how many would be within each group</p>  <p>For TU xU:</p> 	<p>HTU xU:</p>  <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> $252 \div 7 = 36$ $\begin{array}{r} 252 \\ 7 \overline{) 210} \quad (7 \times 30) \\ \underline{42} \\ 42 \quad (7 \times 6) \\ \underline{0} \end{array}$ </div> <div style="text-align: center;"> $252 \div 7 = 36$ $7 \overline{) 252} \quad 36$ </div> </div>