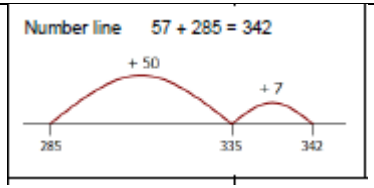
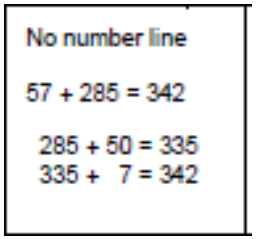
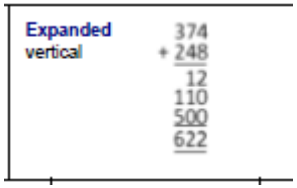
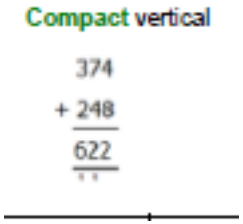
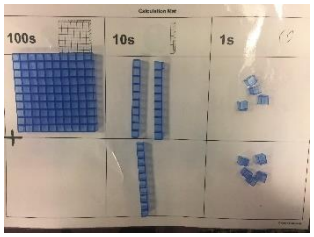
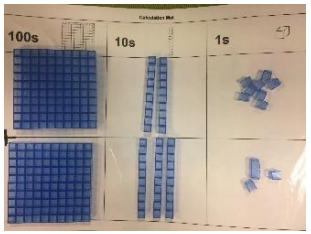
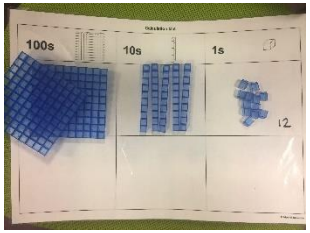
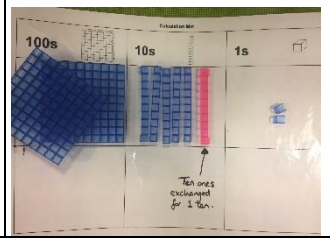
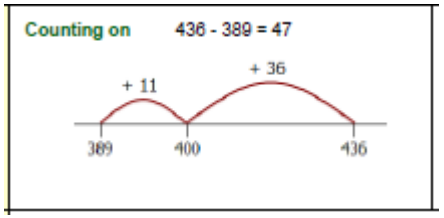
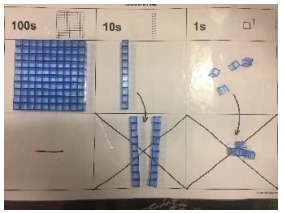
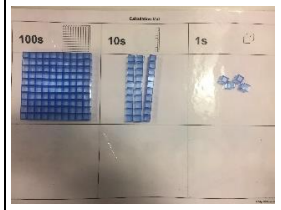
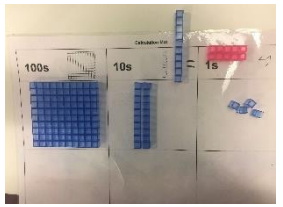
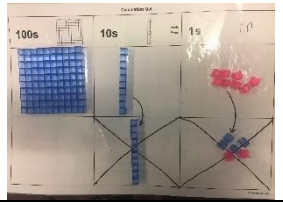
Addition	Pupils should be taught to: add numbers mentally, including: a three-digit number and 1s a three-digit number and 10s a three-digit number and 100s add and subtract numbers with up to 3 digits, using formal written methods of columnar addition estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition	**Strategies:** • **Number line** • **Unstructured number line** • **Partitioning** • **Expanded** All of the methods should be alongside concrete resources and pictorial representations. DO NOT USE PLACE VALUE COUNTERS UNTIL CHN ARE SECURE WITH DIENNES. **<u>Summer term:</u>** introduce compact method.	   SUMMER TERM: 	No regrouping: 124 + 15= Add together the ones first then add the tens. Use the Base 10 blocks first before moving onto place value counters.  With regrouping: 128 + 134 =   

Subtraction	Pupils should be taught to: Subtract numbers mentally, including: a three-digit number and 1s a three-digit number and 10s a three-digit number and 100s Subtract numbers with up to 3 digits, using formal written methods of columnar subtraction estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex subtraction	**Strategies:** • **Number line** • **Unstructured number line** • **Partitioning** • **Expanded** All of the methods should be alongside concrete resources and pictorial representations. DO NOT USE PLACE VALUE COUNTERS UNTIL CHN ARE SECURE WITH DIENNES. **<u>Summer term:</u>** introduce compact method.	 Taking away (no number line) 326 - 178 = 148 326 - 100 = 226 226 - 70 = 156 156 - 6 = 150 150 - 2 = 148 874 - 523 = 351 (no decomposition 8 7 4 - 5 2 3 3 5 1 Decomposition 723 - 458 = 265 700 20 3 400 50 8 600 110 13 400 50 8 200 60 5 Summer Term: Decomposition 932 - 457 = 475 8 12 1 9 3 2 - 4 5 7 4 7 5	No decomposition: 138 – 24=   Decomposition: 134-16=   

<table>
<tr>
<td>Multiplication</td>
<td>Pupils should be taught to:

recall and use multiplication and facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

solve problems, including missing number problems, involving multiplication including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</td>
<td>STRATEGIES:

• Number line
• Grid method
• Expanded method

All of the methods should be alongside concrete resources and pictorial representations.

DO NOT USE PLACE VALUE COUNTERS UNTIL CHN ARE SECURE WITH DIENNES.

Summer Term:

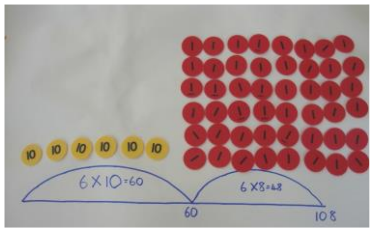
Introduce compact method for higher attainers only.

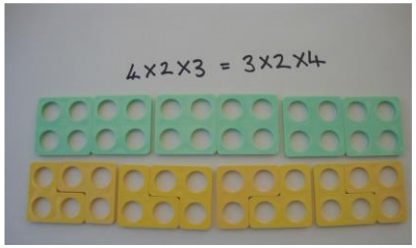
36 x 4 = 144

36
x 4
144</td>
<td>36 x 4 = 144

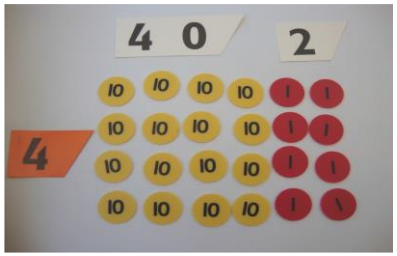
<table><tr><td>X</td><td>30</td><td>6</td></tr><tr><td>4</td><td>120</td><td>24</td></tr></table>
Support grid method with diennes to show visually what each number looks like.

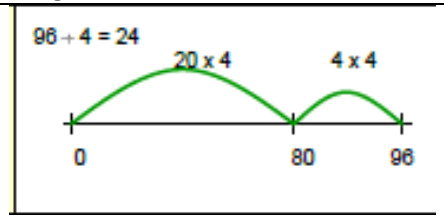
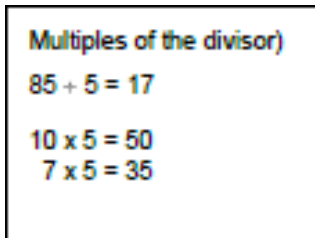
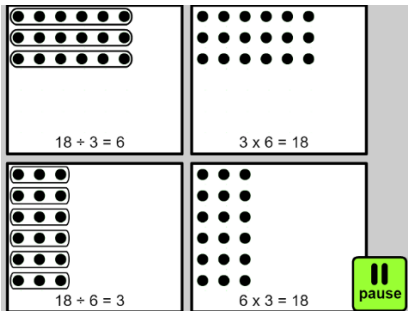
36 x 4 = 144
30 x 4 = 120
6 x 4 = 24

36 x 4 = 144
36
x 4
(6 x 4) 24
(30 x 4) 120
144</td>
<td> 

When confident with diennes:

 
</td>
</tr>
</table>

Division	Pupils should be taught to: write and calculate mathematical statements for division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods solve problems, including missing number problems, involving division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	STRATEGIES: • Number line • Using timetable knowledge & inverse • Linking arrays to divisions All of the methods should be alongside concrete resources and pictorial representations. DO NOT USE PLACE VALUE COUNTERS UNTIL CHN ARE SECURE WITH DIENNES.	  	Summer term only for higher attainers: use two digits by 1 digit only.