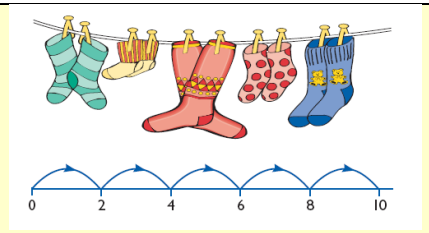
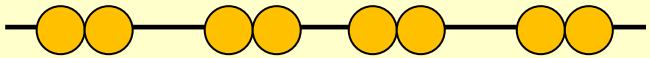
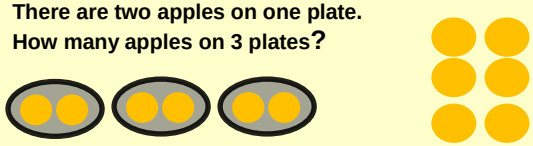
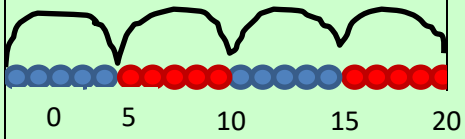
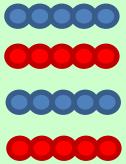
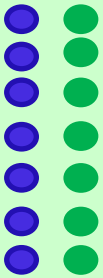
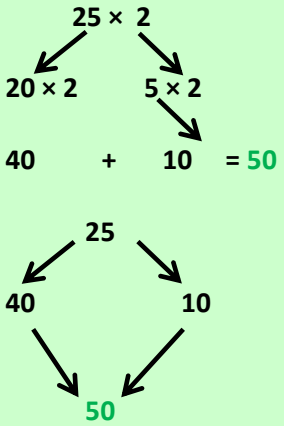
<table>
<tr>
<td>Year 1
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</td>
<td>Count in multiples of twos, fives and tens</td>
<td colspan="2"> 

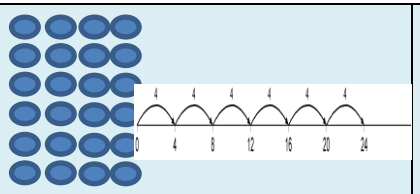
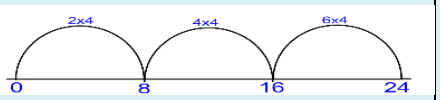
 </td>
<td>There are two apples on one plate.
How many apples on 3 plates?
 
  </td>
</tr>
<tr>
<td>Year 2

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs</td>
<td>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</td>
<td> 

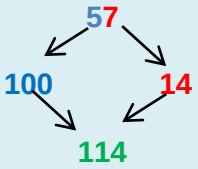

5 × 4 = 20</td>
<td> 
Recall and Derive doubles
7 + 7 = 14
7 × 2 = 14</td>
<td>Recall and derive doubles
 
</td>
</tr>
</table>

<table>
<tr>
<td>Year 3

Write and calculate mathematical statements for multiplication and 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</td>
<td>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

Multiply single digits by 20,30,40,50 and 80</td>
<td> 
 
4 × 6 = 24
Use arrays and number lines to count in multiples</td>
<td>Using partitioning to multiply

57 × 2 = 114
50 × 2 7 × 2
100 + 14 =114

  </td>
<td>Scaling
Making a 5cm line 4 times longer

5cm × 4 = 20cm

  </td>
<td>48 × 3 = 144
(Partitioning)
<table><tr><td>×</td><td>40</td><td>8</td></tr><tr><td>3</td><td>120</td><td>24</td></tr></table>4 × 10 × 3 or
4 × 3 × 10

120 + 24
= 144</td>
</tr>
<tr>
<td>Year 4
Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

Multiply and divide two-digit and three-digit numbers by a one-digit number using formal written layout</td>
<td>Recall multiplication and division facts for multiplication tables up to 12 × 12 (facts for 6,7,9,11,12 are new)

Multiply single digits by 60,70, and 90</td>
<td>Mental

Multiplying by 10 and 100
Eg. 24 × 100
<table><tr><td>Th</td><td>H</td><td>T</td><td>U</td></tr><tr><td></td><td></td><td>2</td><td>4</td></tr><tr><td>2</td><td>4</td><td>0</td><td>0</td></tr></table>Partitioning
267 × 2
200 × 2 = 400 400 + 120 + 14 =
60 × 2 = 120 534
7 × 2 = 14</td>
<td>67 × 9
<table><tr><td>×</td><td>60</td><td>7</td></tr><tr><td>9</td><td>540</td><td>63</td></tr></table>540 + 63 = 603

437 × 6
<table><tr><td>×</td><td>400</td><td>30</td><td>7</td></tr><tr><td>6</td><td>2400</td><td>180</td><td>42</td></tr></table>2400 + 180 + 42 = 2622</td>
<td>Partitioning grid multiplication leading to formal compact methods

67 × 9 =

6 7
X 9
6 0 3
6</td>
</tr>
</table>

<table>
<tr>
<td>Year 5

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</td>
<td>Multiply and divide numbers mentally drawing upon known facts

multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</td>
<td>Mental calculation

Partitioning
407 × 4
400 × 4 = 1600
0 × 4 = 0
7 × 4 = 28

1600 + 28 = 1628

Rounding and adjusting

£3.99 × 6
£4 × 6 = £24
£24.00 – £0.06 = £23.94

28 × 19
28 × 10 × 2 = 560
560 – 28 = 532</td>
<td>TU × TU by partitioning

47 × 58
<table><tr><td></td><td>40</td><td>7</td></tr><tr><td>50</td><td>2000
(4 x 10 x 5 x 10)
Or 4 x 5 x 100</td><td>350
(5 x 10 x 7)</td></tr><tr><td>8</td><td>320
(8 x 4 x 10)</td><td>56</td></tr></table></td>
<td>Leading to multiplication using a compact method

3 7 8
X 7
2 6 4 6
5 5

4 5 6 9
X 8
3 6 5 5 2
4 5 7</td>
<td>Compact for TU × TU

28 × 39

2 8
x 3 9
2 5 2
7
8 4 0
2
1 0 9 2

567 × 86

5 6 7
X 8 6
3 4 0 2
4 4
4 5 3 6 0
5 5
4 8 7 6 2</td>
</tr>
<tr>
<td>Year 6

Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication</td>
<td>Perform mental calculations, including with mixed operations and large numbers</td>
<td>Mental calculation

Partitioning
5.7 × 6
5 × 6 = 30
0.7 × 7 = 4.2
30 + 4.2 = 34.2

5.3 × 19
5.3 × 10 × 2 = 106
106 – 5.3 = 100.7</td>
<td>3749 × 38

3 7 4 9
X 3 8
2 9 9 9 2
5 3 7
1 1 2 4 7 0
2 1 2
1 4 2 4 6 2
1 1 1</td>
<td></td>
<td></td>
</tr>
</table>