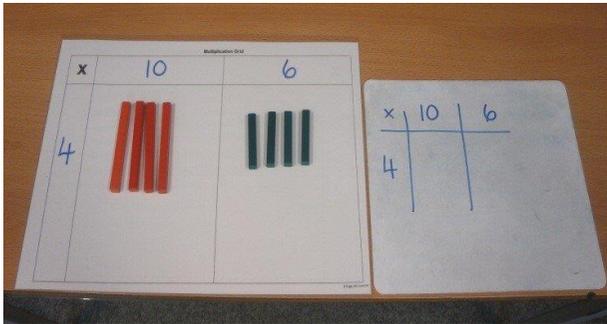


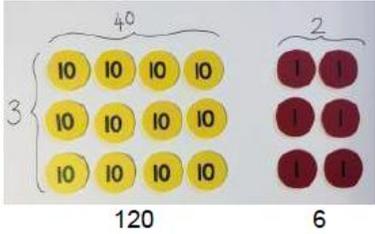
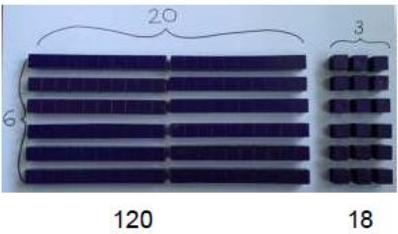
Calculation- Multiplication and Division

Pupils should be taught to:

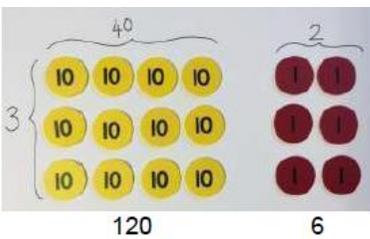
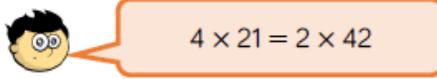
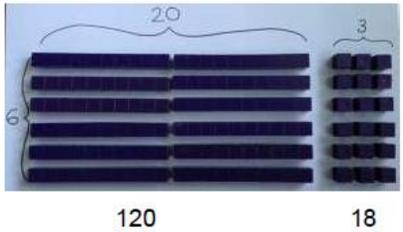
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

	Mental Starter	Main Activity	Plenary										
Tues	<p>Related calculations</p> <p><math>2 \times 6 = 12</math> So <math>2 \times 60 = 120</math></p> <p>Use WR questions.</p>	<p><b>L.O. To multiply 1 digit by 2 digit.</b></p> <p>Children use their understanding of repeated addition to represent a two-digit number multiplied by a one-digit number with concrete manipulatives.</p> <ul style="list-style-type: none"> <li>• How does multiplication link to addition?</li> <li>• How does partitioning help you to multiply 2-digits by a 1-digit number?</li> </ul> <p>There are 21 coloured balls on a snooker table. How many coloured balls are there on 3 snooker tables?</p> <p>Use Base 10 to calculate: <math>21 \times 4</math> and <math>33 \times 3</math></p> <p>Complete the calculations to match the place value counters.</p> <table border="1" style="display: inline-table; margin-right: 10px;"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td>● ●</td> <td>● ●</td> </tr> </tbody> </table> <p> <input type="text"/> + <input type="text"/> + <input type="text"/> + <input type="text"/> = <input type="text"/>  <input type="text"/> × <input type="text"/> = <input type="text"/> </p>  <p>Link multiplication to repeated addition. Give children examples to work through to make links. Children use base 10 and place value counters alongside written examples.</p>	Tens	Ones	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	<p>Using Power Point, show the children incorrect calculations. What mistakes can you see? Where have they gone wrong?</p>
Tens	Ones												
● ●	● ●												
● ●	● ●												
● ●	● ●												
● ●	● ●												

Calculation- Multiplication and Division

		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <math>42 \times 3 = 126</math>  <p>120      6</p> </div> <div style="text-align: center;"> <math>23 \times 6 = 138</math>  <p>120      18</p> </div> </div>	
<p>Wed</p>		<h2>Mental Maths</h2>	
<p>Thurs</p>	<p>Multiplying by 10</p>	<p><b>L.O. To multiply 1 digit by 2 digit.</b>          Children use their understanding of repeated addition to represent a two-digit number multiplied by a one-digit number with concrete manipulatives and picture images. Use pictures to develop fluency alongside place value counters and base 10.          Work through some examples of problems involving 2 digits X 1 digit (no exchange) . Model how to do grid method using place value counters and base 10. Children to use this in their books. Children who struggle to go back to doing grid with repeated addition.</p> <p><b>All children:</b> Children to work through given questions (no exchange) using a pictoral grid method to solve( example below)</p>	<p>Discuss challenge. Ask children to share reasoning.</p>

Calculation- Multiplication and Division

		<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p><math>42 \times 3 = 126</math></p>  </div> <div style="text-align: center;"> <p><b>Challenge:</b></p> <p>Dexter says,</p>  <p>Is Dexter correct?</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;"> <p><math>23 \times 6 = 138</math></p> </div> </div>	
<p><b>Fri</b></p>	<p>Adding and subtracting 100 and multiples of 100 to any number.</p>	<p><b>L.O. To multiply 1 digit by 2 digit.</b>          Children use their understanding of repeated addition to represent a two-digit number multiplied by a one-digit number with concrete manipulatives and picture images. Use pictures to develop fluency alongside place value counters and base 10.          Work through some examples of problems involving 2 digits X 1 digit (exchange). Model how to do grid method using place value counters and base 10. Revise carrying over the extra 10s made by 10 ones into the tens column. Model this using place value counters.</p> <p><b>All children:</b> Children to work through given questions (exchanging) using a pictorial grid method to solve.</p> <p>How close can you get to 100?          Use each digit card once in the multiplication.</p> <p><b>Challenge:</b></p> <div style="display: flex; justify-content: center; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 5px;">2</div> <div style="border: 1px solid black; padding: 5px;">3</div> <div style="border: 1px solid black; padding: 5px;">4</div> </div> <div style="display: flex; justify-content: center; align-items: center; gap: 10px; margin-top: 10px;"> <div style="border: 1px solid black; width: 30px; height: 30px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px;"></div> <div style="font-size: 24px;">×</div> <div style="border: 1px solid black; width: 30px; height: 30px;"></div> <div style="font-size: 24px;">=</div> </div>	<p>Always, sometimes, never</p> <p>A two-digit number multiplied by a one-digit number has a two-digit product.</p>

Maths

Year 3, EK

Spring 1 2020

wk beg: 6.1.20

Week 1

Calculation- Multiplication and Division