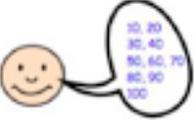
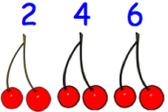
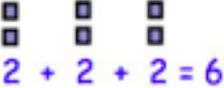
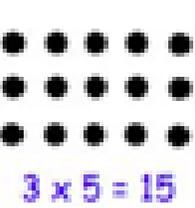
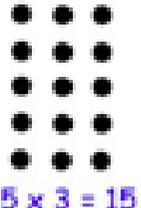
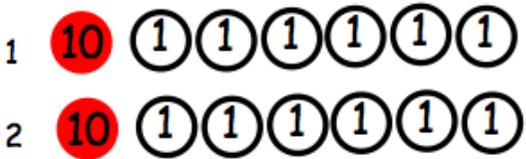
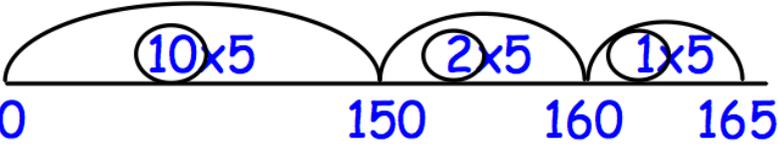
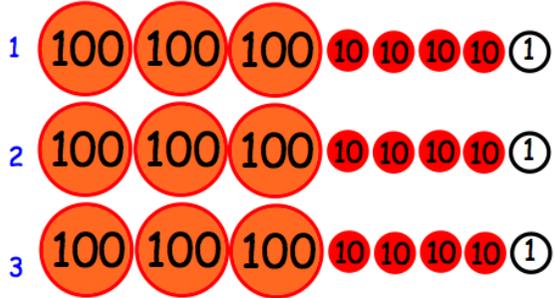
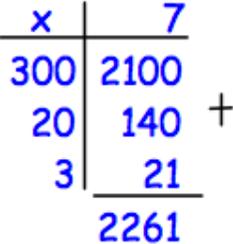


Progression	MULTIPLICATION	Underlying skills	Success criteria
<p>Foundation Stage:</p> <p>Children in the Foundation Stage start multiplication in the summer term. Children chant in 10's, 2's and 5's.</p>  <p>Year 1:</p> <p>Children learn multiplication as 'lots of' e.g. 3×2 is three lots of 2. This would be represented visually for the children.</p>  <p>Concept counters</p> <p>$3 \times 2 =$ (1)(1) (1)(1) (1)(1)</p> <p>Arrays</p> <p>Children represent multiplication as repeated addition and arrays. Children are taught that arrays can represent both number sentences.</p>   	<ul style="list-style-type: none"> Count up to 100. Count in 2s, 5s, 10s. Understand $\times 2$ as doubling, getting the same group twice. Count objects accurately using one to one correspondence matching a number name to each object. Count objects accurately using one to one correspondence matching a number name to each object. Count in 2s, 5s, 10s. 	<ul style="list-style-type: none"> Use fingers as denominations of 10s, 2s and 5s, touching them as they count. Count objects in lots of 2 by whispering 1, loud 2, whisper 3, loud 4... Arrange the concept counters to match the number sentence. Tap the concept counters saying the last counter in the group as a loud number. The total number of concept counters is the answer. Draw lots of 10s, 2s, 5s to match the number sentence. Count the number of spots, the total is the answer. 	

Progression	MULTIPLICATION	Underlying skills	Success criteria
<p data-bbox="147 197 342 233">Year 2 / 3:</p> <p data-bbox="147 240 421 276">Concept counters</p> <div data-bbox="147 288 1095 400"> $16 \times 2 =$  </div> <div data-bbox="147 560 909 730"> $16 \times 2 =$  </div> <p data-bbox="147 927 651 962">Vertical grid method. $16 \times 2 = 32$</p> <div data-bbox="409 975 584 1214"> $\begin{array}{r l} \times & 2 \\ \hline 10 & 20 \\ 6 & 12 \\ \hline & 32 \end{array}$ </div>	<ul data-bbox="1182 197 1554 1390" style="list-style-type: none"> Count in 2s, 5s, 10s. Know by heart multiplication facts for 2, 5 and 10 times tables. Count in 2s, 5s, 10s, 3s, 4s, 8s, (Y3). Know by heart multiplication facts for 2, 5, 10, 3, 4, and 8 times tables, (Y3). Know multiplication can be done in any order. Count in 2s, 5s, 10s. Know by heart multiplication facts for 2, 5 and 10 times tables. Count in 2s, 5s, 10s, 3s, 4s, 8s, (Y3). Know by heart multiplication facts for 2, 5, 10, 3, 4, and 8 times tables, (Y3). Partitioning. Count in 2s, 5s, 10s. Know by heart multiplication facts for 2, 5 and 10 times tables. Count in 2s, 5s, 10s, 3s, 4s, 8s, (Y3). Know by heart multiplication facts for 2, 5, 10, 3, 4, and 8 times tables, (Y3). Know multiplication can be done in any order. Partitioning. Multiply multiples of 10. Understand addition of two 2-digit numbers. Begin to apply column addition. 	<ul data-bbox="1630 197 2056 1390" style="list-style-type: none"> Make the 1-digit number using concept counters. Repeat making it lots of times (2-digit number). Count the counters, the total is the answer. Make the 2-digit number using concept counters as many times as the 1-digit number. Count the tens and then the units, the total is the answer. Partition the 2-digit number into tens and units - write them below each other in a multiplication grid. Multiply the tens row by the 1-digit number, writing the answer in the appropriate place, (hundreds and tens). Multiply the units row by the 1-digit number, writing the answer in the appropriate place, (tens and units). Add the two answers together, this is the answer to the multiplication number sentence. 	

Progression	MULTIPLICATION	Underlying skills	Success criteria
<p>Year 2 / 3 Repeated addition on a number line. $13 \times 5 = 165$</p>  <p>Year 3: Concept counters</p>  <p>$341 \times 3 =$</p> <p>Vertical grid method. $323 \times 7 =$</p> 	<ul style="list-style-type: none"> Count in 2s, 5s, 10s. Know by heart multiplication facts for 2, 5 and 10 times tables. Know multiplication can be done in any order. Partitioning. <ul style="list-style-type: none"> Count in 2s, 5s, 10s, 3s, 4s, 8s, 6s, 7s, 9s, 11s, 12s. Know by heart multiplication facts up to 12×12. Know multiplication can be done in any order. Partitioning <ul style="list-style-type: none"> Count in 2s, 5s, 10s, 3s, 4s, 8s, 6s, 7s, 9s, 11s, 12s. Know by heart multiplication facts up to 12×12. Know multiplication can be done in any order. Partitioning. Multiply multiples of 10 and 100. Column addition. 	<ul style="list-style-type: none"> Draw an empty number line. Make the 2-digit number worth of jumps forwards along the number line in multiples of the number you are multiplying (10×5, 2×5, 1×5). Put a circle around the multiples you have jumped (10, 2, 1). The number you land on is the answer. Make the larger number using concept counters. Repeat making it lots of times (1-digit number). Count the counters in hundreds, tens and units, the total is the answer. Partition the 3-digit number into hundreds, tens and units - write them below each other in a multiplication grid. Multiply the hundreds row by the 1-digit number, writing the answer in the appropriate place, (thousands and hundreds). Multiply the tens row by the 1-digit number, writing the answer in the appropriate place, (hundreds and tens). Multiply the units row by the 1-digit number, writing the answer in the appropriate place, (tens and units). Add the three answers together, this is the answer to the multiplication number sentence. 	

Progression	MULTIPLICATION	Underlying skills	Success criteria
<p>Year 4 $314 \times 4 = 1256$</p> <p style="text-align: center;">Th h t u $\begin{array}{r} 314 \\ \times \quad 4 \\ \hline 1200 \\ + \quad 40 \\ \hline 1256 \end{array}$</p> <p>Year 5/6: $2314 \times 12 = 27768$</p> <p style="text-align: center;">Th h t u $\begin{array}{r} 2314 \\ \times \quad 12 \\ \hline 4628 \\ + 23140 \\ \hline 27768 \end{array}$</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center; color: blue;">fact box</p> <p style="text-align: center; color: blue;">$1 \times 4 = 4$</p> <p style="text-align: center; color: blue;">$2 \times 4 = 8$</p> <p style="text-align: center; color: blue;">$3 \times 4 = 12$</p> <p style="text-align: center; color: blue;">$4 \times 4 = 16$</p> </div>	<ul style="list-style-type: none"> • Count in 2s, 5s, 10s, 3s, 4s, 8s, 6s, 7s, 9s, 11s, 12s. • Know by heart multiplication facts up to 12×12. • Know multiplication can be done in any order. • Partitioning. • Multiply multiples of 10, 100 and 1000. • Multiply decimals. • Understand place value. • Column addition. 	<ul style="list-style-type: none"> • Partition the 3-digit number into hundreds, tens and units. • Write the smaller 1-digit number underneath in the units column. • Multiply the units by the 1-digit number and write the answer below the line. • Multiply the tens by the 1-digit number and write the answer below the units multiplication. • Multiply the hundreds by the 1-digit number and write the answer below the tens multiplication. • Ensure all multiplication answers are in the correct columns. • Add all the multiplications answers below the line, this is the total.