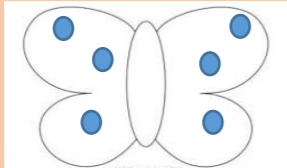
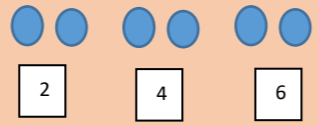
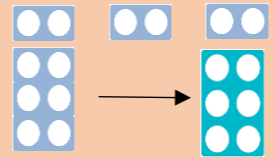
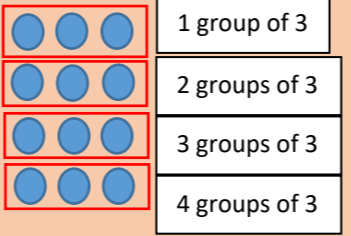
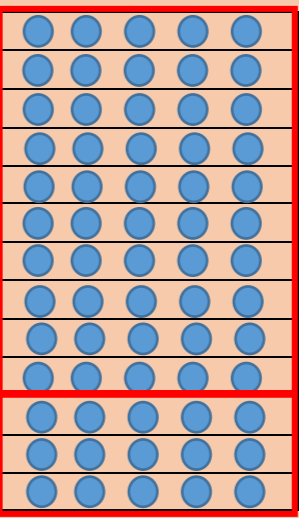




Understanding the concept of multiplication:											
<ul style="list-style-type: none"> Repeated addition Can be represented as an array It is the inverse of division It is commutative It is associative 											
	Doubling	Repeated Addition	Arrays	Arrays using known facts	Grid Method						
Skill – Practical/Fluency	e.g. $3 + 3$  $3 + 3 = 6$ or Double 3 is 6	e.g. $2 + 2 + 2$   Children should then be encouraged to use the language of multiplication to enable them to correctly write multiplication number sentences e.g. 3 lots of 2 = 6 This can be modelled as equal jumps on a number line too	e.g. 3×4  $3 + 3 + 3 + 3 =$ $3 \times 4 = 12$ This array would be 3×4 not 4×3 3×4 should be spoken as 3, 4 times not 3 lots of 4 as that would be wrote $4 + 4 + 4$.	e.g. 5×13  Use known facts $(5 \times 10) = 50$ $(5 \times 3) = 15$	e.g. 24×5 <table border="1" style="display: inline-table;"> <tr> <td>x</td> <td>20</td> <td>4</td> </tr> <tr> <td>5</td> <td>100</td> <td>20</td> </tr> </table> Then add up 100 and 20 to find the total e.g. $24 \times 5 = 120$	x	20	4	5	100	20
x	20	4									
5	100	20									
Vocabulary	Double Same Equal	Double Same Equal Repeat Lots of	Array Times Lots of Groups of Row Column Repeat Representation Multiply	Array Times Lots of Groups of Multiply Row Column Facts Repeat Product Multiple Factor	Grid Multiply Product Multiple Factor Column Row Partition						
Skill – Knowledge (Address this knowledge through taught input and diagnostic questioning)	<ul style="list-style-type: none"> Understanding the meaning of the language 'same' Understanding basic equivalence 	<ul style="list-style-type: none"> Understanding of counting in 2's, 5's and 10's Understanding equal groups of 2, 5 and 10 	<ul style="list-style-type: none"> Understanding the difference between a row and a column Understanding of the x symbol 	<ul style="list-style-type: none"> Double any multiple of 10 up to 100 Understanding that doubling is adding any number to itself Understanding that doubling is multiplying by 2 Recall multiplication tables 	<ul style="list-style-type: none"> Understanding of partitioning a 2 digit number into tens and ones Understanding the language of multiplication 						
Skill - Evaluation	Evaluate learning through REACH questioning and evidence of mathematical vocabulary in pupil voice and responses										