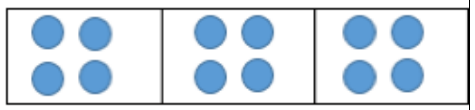
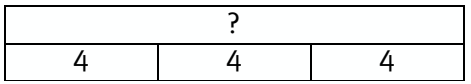
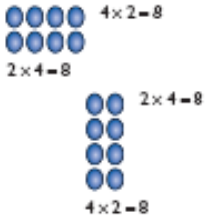
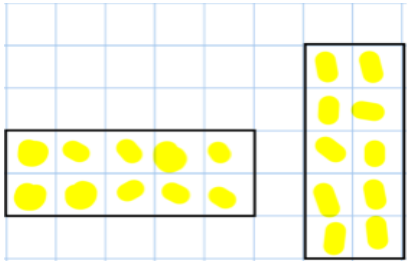
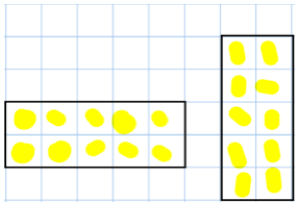
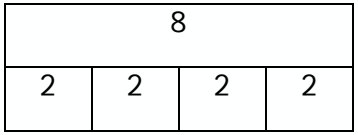
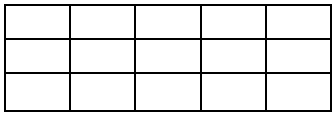
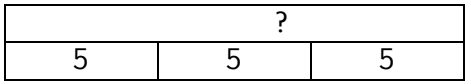
Abbey C of E Infant School Calculation Policy

Multiplication- *Key language which should be used: double, times, multiplied by, multiply, the product of, groups of, lots of, 'is equal to' 'is the same as', array, repeated addition, multiplication tables*

Skip counting in 10s, 5s, 2s and then 3s	How many socks on the washing line?  How many fingers? 	 2 4 6 8  5 10 15	2, 4, 6, ___, 10 25, 30, ____, 40, 45
Repeated grouping/repeated addition (does not have to be restricted to cubes) 3 x 4 or 3 lots of 4	 4 + 4 + 4 	Children to represent the practical resources in a picture e.g. **XX XX XX** **XX XX XX** Use of a bar model for a more structured method 	 4 + 4 + 4 3 x 4

Use arrays to illustrate commutativity (counters and other objects can also be used) **2 x 5 = 5 x2** **Children should understand that multiplication is commutative, the order of the multiplication does not affect the answer**	**2 x 5 = 5 x 2** 	 Children can draw dots or use stickers to represent an array 	Children to be able to use an array to write a range of calculations e.g. 2 x 5 = 10 5 x 2 = 10 2 + 2 + 2 + 2 + 2 = 10 5 + 5 =10 double 5 5 doubled
Division should be taught alongside or after multiplication so children can see the links between multiplication and division This can be illustrated in arrays and the Part- whole method / Bar model Links should also be made with fractions.			2 x 5 = 10 5 | 5 10 ÷ 2 = 5 10 2 | 2 | 2 | 2 | 2 5 x 2 = 10 ÷ 5 = 2 and later.... links to fractions half of 10 is 5

Always use missing number problems at all stages of learning ? x 4 = 8			 ? x 4 = 8 8 ÷ 4 = ?
Fluency variation, different ways to ask children to solve: 5 x 3			
	With the counters, prove that 5 x 3 = 15 Tom saved £3 each week. How much did he save in 5 weeks?	Mai had to swim 3 lengths, 5 times a week. How many lengths did she swim in one week?  What's the calculation? What's the answer? How many different calculations can you write for this array?	3 x 5 = ?= 3 x 5  3 x 5 = 15 Write a division sentence using the same numbers.