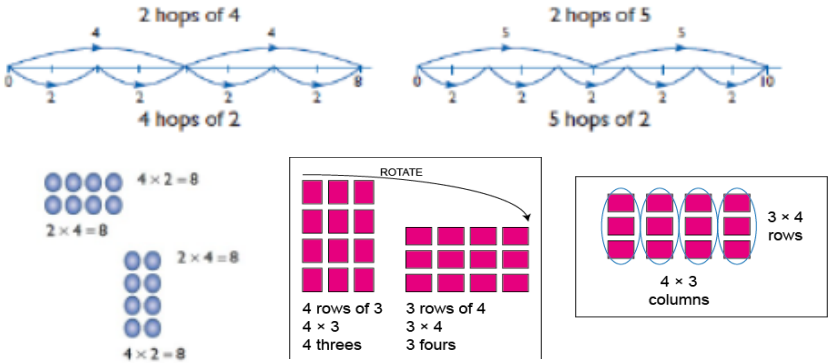
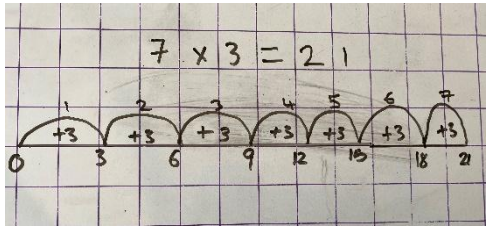
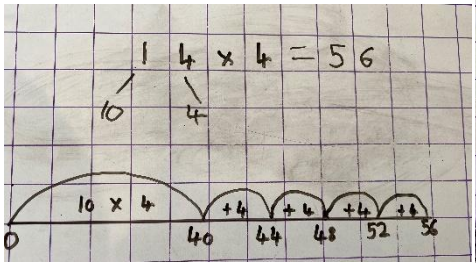
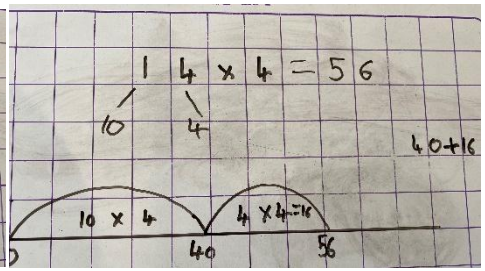
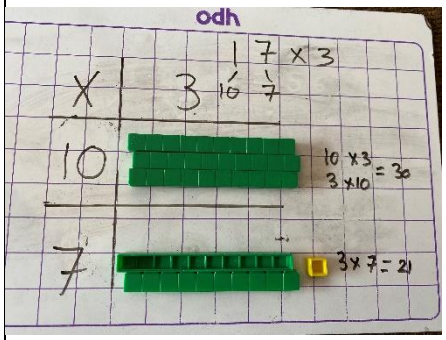
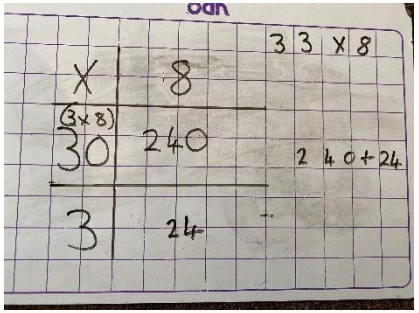
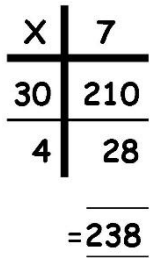
Statements taken from the NC	Multiplication	
Year 3 write and calculate mathematical statements for multiplication using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	**Mental methods for year 3 Multiplication** Children are fluent with the recall of 2x, 10x and 5x table and related division facts from KS1 Year 3 children recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Children understand the power of multiplying any number by 10 (10 x bigger) and can apply this. Children see the commutative link and associativity with calculations and use this to work out mentally some 2-digit x 1 digit numbers (e.g. 3 x 3 = 9 so 30 x 3 =90 and 4 x 5 = 20 so 50 x 4 = 200)	**Written methods for Year 3** **Use of number lines and arrays to investigate commutativity of multiplication**   Use of number lines to solve 1 digit x 1 digit on a number line Progressing onto more efficient strategies on number line using chunked jumps

		  **Progression measured by number of jumps to reach answer.**    **When secure with number line strategy and fluency of facts is at a good level, introduce Grid method.**
Year 4 Multiply two-digit and three-digit numbers by a one-digit number using formal written layout	**Mental methods for year 4 Multiplication** Build on fluency of 2,3,4,5, 8 and 10 x table fluency from Year 3 **daily** Children understand the power of multiplying any number by 10 and 100 (10 x/ 100x bigger) and can apply this.	Written Methods for Year 4 Continue with grid method into fluency level is sufficient for formal short multiplication. Multiplying 2 digit by 1 digit progressing onto 3 digit x 1 digit involving numbers in the 1-12x table.

	Use known **factor pairs and commutativity** to support efficient recall and mental calculations **Children to recall all 12x table facts for Year 4 Times table Check in summer term**	 24 × 6 becomes 2 4 × 6 1 4 4 2 Answer: 144 342 × 7 becomes 3 4 2 × 7 2 3 9 4 2 1 Answer: 2394
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	**Mental methods for Year 5 Multiplication** **Mentally use place value understanding to scale up or down by a factor of 10 to enable to accurately multiply by 10, 100 and 1000.** identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers **Mentally** multiply whole numbers and those involving decimals by 10, 100 and 1000 **Recall all square numbers up to 12** **Recall prime numbers up to 19** *Be able to recognise if a number is prime up to 100*	Written Methods for Year 5 Build on formal written methods from Year 4 extending to 4 digit x 1 or 2 digit numbers. Progression onto long multiplication method for two-digit numbers.  124 × 26 becomes 1 2 1 2 4 × 2 6 7 4 4 2 4 8 0 3 2 2 4 1 1 Answer: 3224 165 X 32 1 1 330 1 1 4950 5280 1 **Multiply proper fractions and mixed numbers by whole numbers supported by materials and diagrams – Use appropriate strategy based on class assessment**

	Be able to recognise and use square numbers and cube numbers	
Year 6 Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal method of long multiplication	**Mental methods for Year 6 Multiplication** **Multiply simple pairs of proper fractions writing the answer in its simplest form** **Multiply numbers by 10, 100 and 1000 giving answers up to 3 decimals places** **Draw upon understanding of equivalence to recall between simple fractions, decimals and percentages.**	Written Methods for Year 6 Progression onto long multiplication for increasingly challenging calculations 124 x 26 becomes 1 2 1 2 4 x 2 6 7 4 4 2 4 8 0 3 2 2 4 1 1 Answer: 3224  973 X 86·2 1 194·6 4 1 5838 5 2 77840 83872·6 1 1 1 1 2.43 x 7 = 17.01 3 2 2.4 x 5 = 12.0 2 Use of short multiplication to multiply decimals by a whole number