


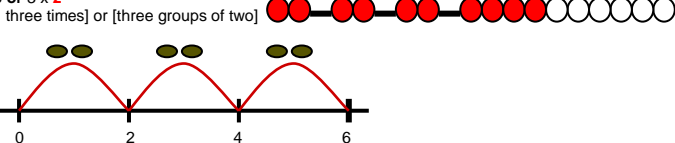
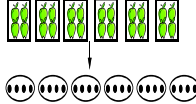
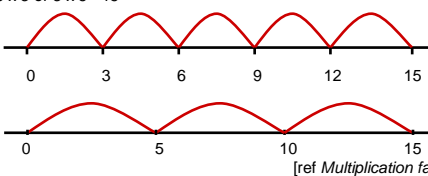
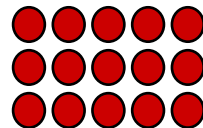
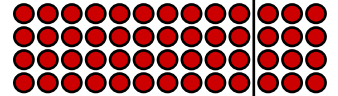
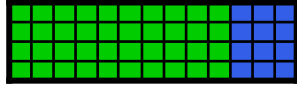

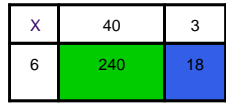
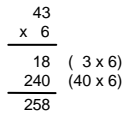

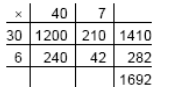
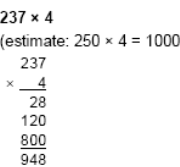

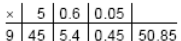
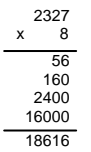
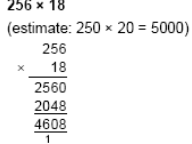


YR	Count repeated groups of the same size (1s / 2s / 5s / 10s) <i>ref Overview of learning 5</i>	Practical / recorded using ICT (eg digital photos / pictures on IWB)	Pictures / Objects 3 plates, 2 cakes on each plate: 	Symbols 3 plates, 2 cakes on each plate: 	Counting on in 1s and 2s	(see recording)	
Y1	Solve (practical) problems that involve combining groups of 2, 5 or 10	Practical / recorded using ICT	Pictures / Symbols There are three sweets in one bag. How many sweets are there in five bags? 	Number tracks / Number line (modelled using bead strings) $2 \times 3$ or $3 \times 2$ [two, three times] or [three groups of two] 	Count on / back in 1s, 2s, 5s and 10s Doubles of numbers to 10	(see recording)	
Y2	Multiplication as <i>repeated addition</i> and <i>arrays</i>	Pictures / Symbols There are four apples in each box. How many apples in six boxes? 	Repeated addition $5 \times 3$ or $3 \times 5 = 15$ 	Arrays $5 \times 3$ or $3 \times 5$  Also $14 \times 2$ as $(10 \times 2$ and $4 \times 2)$	Count in 2s, 5s and 10s Derive multiples of 2, 5 & 10 Relate to x facts (and derive related ÷ facts) Doubles of numbers to 20	Doubles of TU numbers	
Y3	TU x U (eg $13 \times 4$ )	Arrays $13 \times 4 = 52$  $10 \times 4 = 40$ $3 \times 4 = 12$ [ref Arrays spreadsheet]	Expanded grid method $13 \times 4 = 52$ 	Compact grid method $13 \times 4 = 52$ 	Partitioning (possible use of number line to record steps) $13 \times 4 = 52$ $10 \times 4 = 40$ $3 \times 4 = 12$	Derive / recall 2, 3, 4, 5, 6 and 10 times tables (Derive related division facts) Recognise multiples of 2, 5 and 10 up to 1000	U / TU x 10 / 100 (describe the effect) Doubles of TU / HTU numbers
Y4	Record, support and explain: TU x U (eg $16 \times 8$ ; $43 \times 6$ )	Partitioning $43 \times 6$ (estimate: $40 \times 6 = 240$ ) $40 \times 6 = 240$ $3 \times 6 = 18$	Compact grid method $43 \times 6 = 258$  [ref Multiplication grid ITP] =258	Expanded vertical $43 \times 6 = 258$ 	Compact vertical $43 \times 6 = 258$ 	Derive / recall facts to 10 x 10 Multiples of numbers to 10 up to the 10 <sup>th</sup> multiple	Numbers up to 1000 x 10 / 100 (whole number answers and understand the effect) Doubles of TU / HTU numbers and multiples of 10 / 100
Y5	Refine and use efficient methods: HTU x U TU x TU U.t x U	Grid method $47 \times 36$ (estimate: $50 \times 40 = 2000$ ) 	Expanded vertical $237 \times 4$ (estimate: $250 \times 4 = 1000$ ) 	Compact vertical $4.7 \times 8$ (estimate: $5 \times 8 = 40$ ) 	Recall quickly facts to 10 x 10 Use facts to multiply pairs of multiples of 10 / 100 Use known facts to derive other facts [Find common multiples of two numbers]	TU x U (eg $12 \times 9$ ) TU x TU (eg $16 \times 25$ ) Doubles of U.t / 0.th Multiply whole numbers / decimals by 10 / 100 / 1000	
Y6	Use efficient methods: Integer x U (eg $2307 \times 8$ ) Decimal x U (eg $31.6 \times 7$ ) TU x TU HTU x TU	Grid method $5.65 \times 9$ (estimate: $6 \times 9 = 54$ )  Answer: $5.65 \times 9 = 50.85$	Expanded vertical $2327 \times 8 = 18,616$ (est: $2300 \times 10 = 23,000$ ) 	Compact vertical $256 \times 18$ (estimate: $250 \times 20 = 5000$ )  Answer: $256 \times 18 = 4608$	Use facts up to 12 x 12 to derive facts involving multiples of 10 / 100 (eg $80 \times 30$ ) and decimals (eg $0.8 \times 7$ ) Derive squares of numbers to 12 x 12 Derive corresponding squares of multiples of 10	TU x U U.t x U Integer x 1000 / 100 / 10 / 0.1 / 0.01	

Estimate first

