Long Multiplication – UKS2

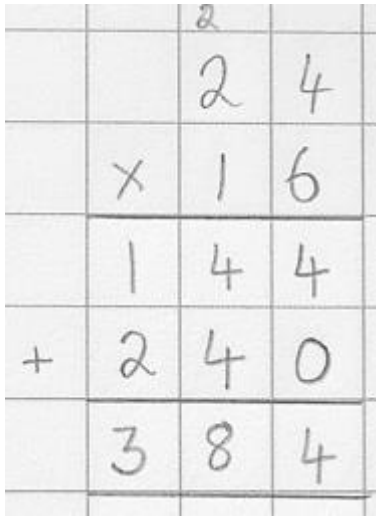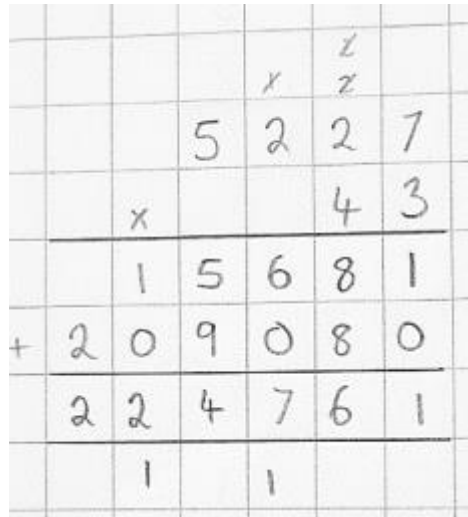| **Selected National Curriculum Programme of Study**	**The Big Ideas (NCTEM)**
Year 5 Pupils should be taught to: • multiply numbers up to four digits by a 1 or 2-digit number using a formal written method, including long multiplication for 2-digit numbers. Year 6 Pupils should be taught to: • multiply multi-digit numbers up to four digits by a 2-digit whole number using the formal written method of long multiplication.	Standard written algorithms use the conceptual structures of the mathematics to produce efficient methods of calculation. Standard written multiplication method involves a number of partial products. For example, 36 × 24 is made up of four partial products 30 × 20, 30 × 4, 6 × 20, 6 × 4.

Stage 1	**Stage 2**	**End of year expectation**
Multiply up to four digits by a 2-digit number. Formal written method of long multiplication for 2-digit numbers, e.g: 24 x 16 = □	Multiply up to four digits by a 2-digit number. Formal written method of long multiplication for 2-digit numbers, e.g: 124 x 26 = □	Multiply up to four digits by a 2-digit number. Formal written method of long multiplication for 2-digit numbers, e.g: 5227 x 43 = □

HIAS Progression in Calculation

Long Division – UKS2
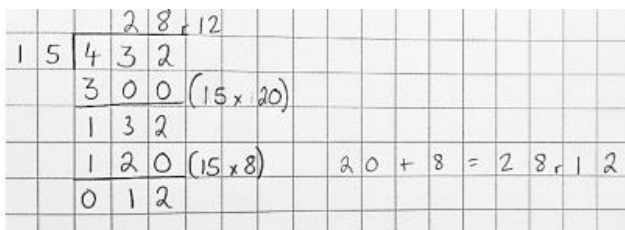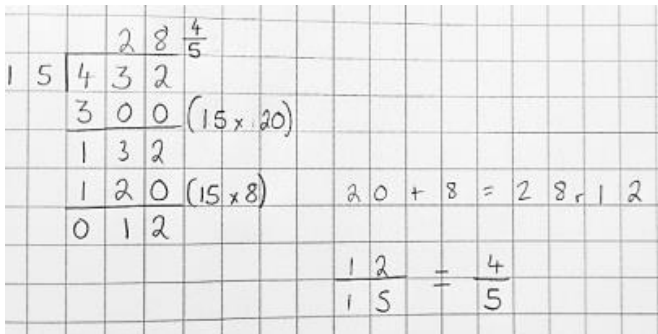
Selected National Curriculum Programme of Study Statements Pupils should be taught to:	The Big Ideas (NCETM)
• divide numbers up to four digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. • divide numbers up to four digits by a 2-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.	Standard written algorithms use the conceptual structures of the mathematics to produce efficient methods of calculation. Standard written multiplication method involves a number of partial products. For example, 36 × 24 is made up of four partial products 30 × 20, 30 × 4, 6 × 20, 6 × 4.

Please note that pupils should not move on to this method until they are conceptually and procedurally secure with strategies outlined in previous year groups. As a result, some pupils may not complete the long division strategies whilst in Key Stage 2.

Stage 1	Stage 2	End of year expectation
Long division. Chunking method, e.g: 432 ÷ 15 = □	Long division. Chunking method with fraction remainders, e.g: 432 ÷ 15 = □	Long division. Formal written method, e.g: 432 ÷ 15 = □