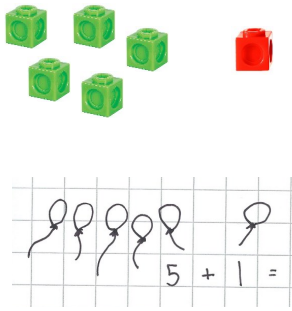
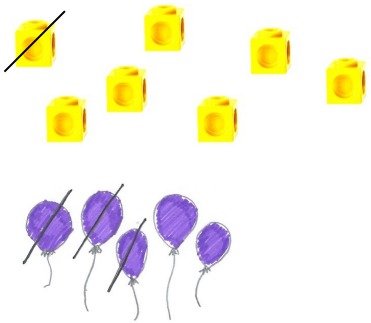
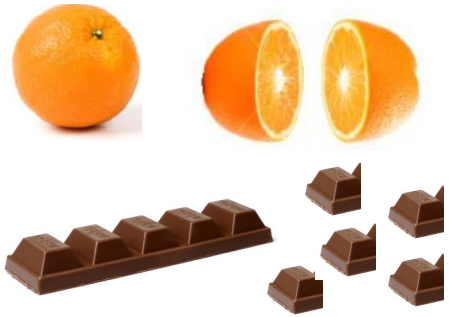
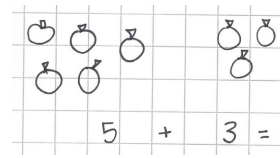
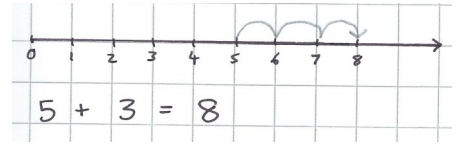
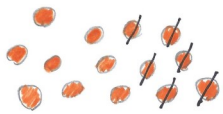
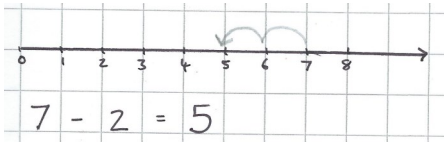
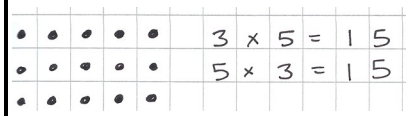
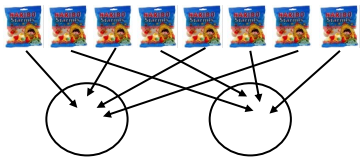
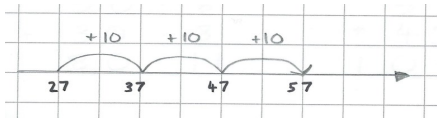
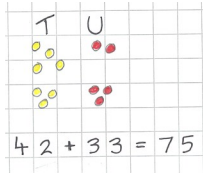
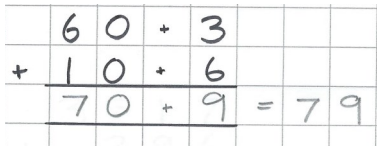
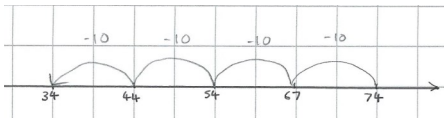
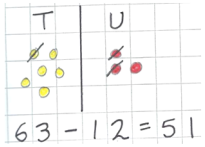
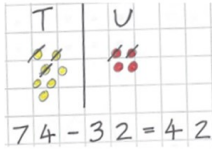
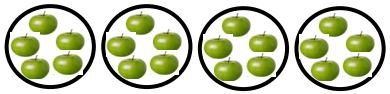
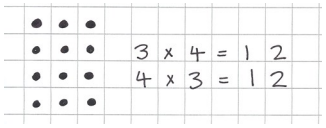
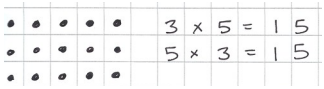
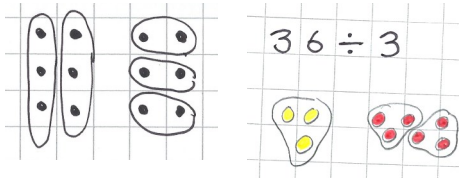
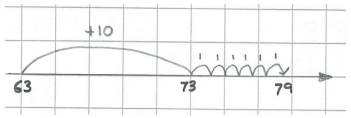
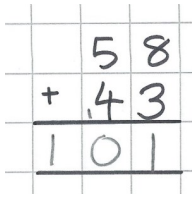
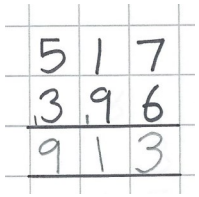
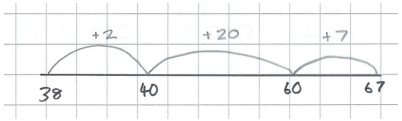
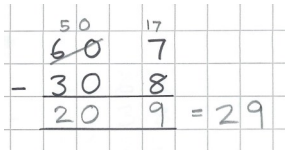
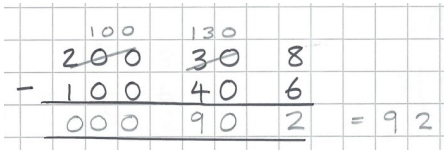
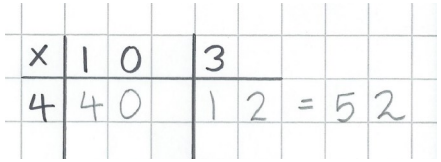
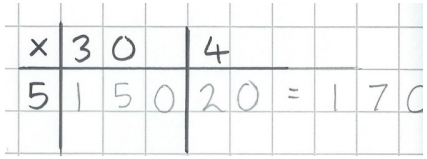
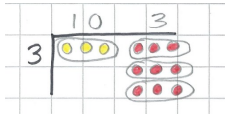
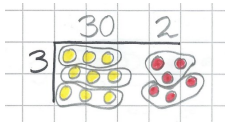
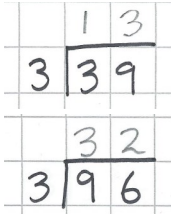
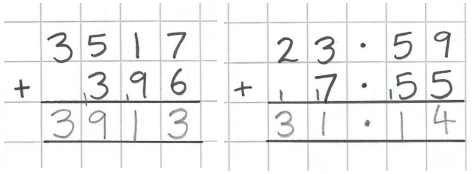
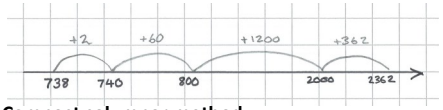
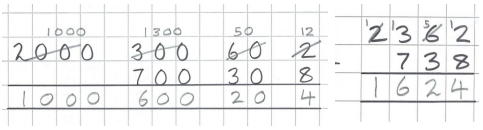
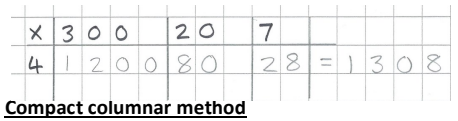
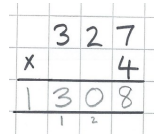
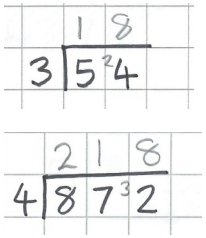
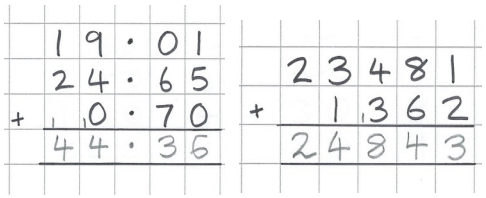
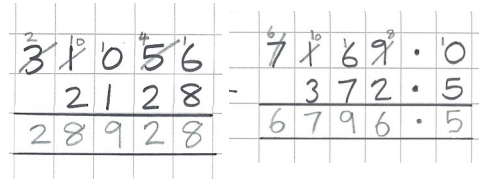
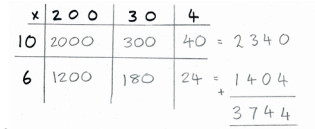
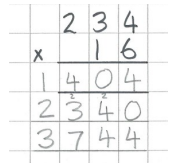
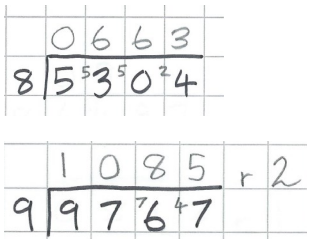
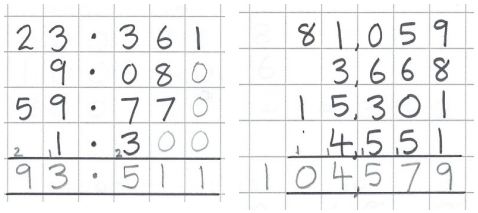
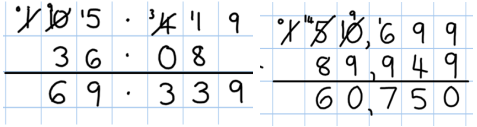
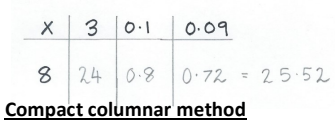
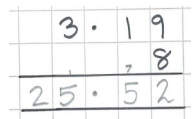
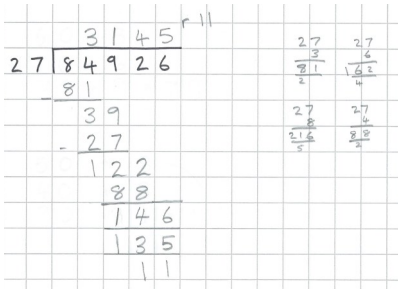
Rise Park Primary and Nursery School Written Calculation Policy - 2014 National Curriculum

	Addition	Subtraction	Multiplication	Division
FS	ELG: Add one more to numbers up to 20 Puzzle Objective: Calculate 1 more without concrete support	ELG: Take one away from numbers up to 20 Puzzle Objective: Calculate 1 less without concrete support	ELG: Count repeated groups of the same size in 2, 5 and 10s Puzzle Objective: Count in 2,s 5s and 10s	ELG: To understand the concept of sharing and halving Puzzle Objective: Use the vocabulary *sharing*
	Practical methods, pictures and jottings 	**Practical methods, pictures and jottings** 	**Practical methodsa and pictures** 	**Practical methods** 
1	Understand addition as combining amounts Add and subtract one-digit and two-digit numbers to 20,(9+9, 18-9) including zero.	Understand subtraction as 'taking away' and 'difference between' (by counting on) Add and subtract one-digit and two-digit numbers to 20,(9+9, 18-9) including zero	Solve practical problems that involve combining groups of 2 , 5 or 10, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Solve practical problems which involve sharing into equal groups. ÷ 2, ÷ 5, ÷ 10, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
	Practical methods, pictures and jottings  **Numberline and hundred square** 	**Practical methods, pictures and jottings**  **Numberline and hundred square** 	**Practical Methods, pictures and jottings** **Arrays** 	**Practical Methods and jottings** Sharing  Grouping

	Addition	Subtraction	Multiplication	Division
2	Add and subtract numbers with 2 digts. Recording addition and subtraction in columns supports place value and prepares for efficient written methods with larger numbers.	Add and subtract numbers with 2 digts. Recording addition and subtraction in columns supports place value and prepares for efficient written methods with larger numbers.	Solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication facts x2, x5, x 10 as times tables.	Solve problems involving division through sharing and grouping including remainders, where divisor is 2, 5 or 10, using materials, arrays, mental methods, and division facts
	Numberline and hundred square work  **Partitioning**  	**Numberline and hundred square work**  **Partitioning**  	**Practical methods**  **Arrays**  	**Practical methods** Grouping: Sharing: **Arrays - Grouping** 
3	Add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction	Add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtrac-tion	Record, calculate and explain, using mental and progressing to formal written methods, TU x U x2, x3, x4, x5, x8, x10	Record, calculate and explain, using mental and progressing to short written methods, TU ÷ U (Where divisor is 2, 3, 4, 5, 8 or 10).
	Efficient jumps on a numberline  **Compact calculation method**  	**Efficient jumps on a numberline**  **Expanded calculation method**  	**Continue using arrays and numberlines.** **Grid method**  	**Arrays - Grouping**   **Short division** 

	Addition	Subtraction	Multiplication	Division
4	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Solve simple problems with up to 2 decimal places.	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Solve simple problems with up to 2 decimal places.	Record, calculate and explain using formal written layout TU x U , HTU X U x2, x3, x4, x5, x6, x7, x8, x9, x10, x11, x12	Record, calculate and explain using formal written layout TU ÷ U
	Compact columnar method 	**Continue efficient use of numerlines**  **Compact columnar method** 	**Grid method**  **Compact columnar method** 	**Short division** 
5	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Decimals up to 3dp (23.74 + 48.525)	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Decimals up to 3dp	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 ThHTU X TU	Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. ThHTU ÷ U
	Compact columnar method 	**Continue efficient use of numerlines** **Compact columnar method** 	**Grid method**  **Long columnar method** 	**Short division** 
6	Consolidate and extend work in Year 5	Consolidate and extend work in Year 5	Multiply numbers up to 4 digits by a 2-digit whole number using the formal written method of long multiplication. Multiply one-digit numbers with up to two decimal places by whole numbers	Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division. Use written division methods in cases where the answer has up to two decimal places
	Compact columnar method 	**Continue efficient use of numberlines** **Compact columnar method** 	**Grid method**  **Compact columnar method**  **Long columnar method** - As above	**Long division**