

Maths Policy – Appendix C Calculations overview St George's Catholic Primary School



	EYFS/Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition	Add one-digit and two-digit numbers to 20, including zero Combining two parts to make a whole: part whole model. Starting at the bigger number and counting on- using cubes. Use + and = sign Use Numicon, Cuisenaire, ten frame	Add a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers Use + and = sign Use Numicon, Cuisenaire, ten frame Columns used	Use formal written methods of columnar addition (up to 3 digits) Estimate the answer to a calculation and use inverse operations to check answers Use Numicon, Cuisenaire, ten frame, Place Value counters	Use formal written methods of columnar addition (up to 4 digits) Estimate the answer to a calculation and use inverse operations to check answers Use Numicon, Cuisenaire, ten frame, Place Value counters	Use formal written methods of columnar addition (more than 4 digits and to two decimal places) Estimate the answer to a calculation and use inverse operations to check answers Place value counters may be used for adding decimals.	Use formal written methods of columnar addition (more than 4 digits and to three decimal places) Estimate the answer to a calculation and use inverse operations to check answers Place value counters may be used for adding decimal numbers.
Subtraction	Use number bonds and related subtraction facts within 20 including zero Taking away ones Counting back Find the difference Part whole model Use - and = sign Use Numicon, Cuisenaire, ten frame	Subtract a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers Counting back Find the difference Part whole model Make 10 Make 20 Use of Numicon, Cuisenaire, ten frame Use - and = sign Columns used	Use formal written methods of columnar subtraction (up to 3 digits) Column method with regrouping. Estimate the answer to a calculation and use inverse operations to check Use Numicon, Cuisenaire, ten frame, Place Value counters	Use formal written methods of columnar subtraction (up to 4 digits) Column method with regrouping. Estimate the answer to a calculation and use inverse operations to check Use Numicon, Base 10, Place Value counters	Use formal written methods of columnar subtraction (more than 4 digits and to two decimal places) Estimate the answer to a calculation and use inverse operations to check answers Use place value counters for decimals- with the same amount of decimal places.	Use formal written methods of columnar subtraction (more than 4 digits and to three decimal places) Estimate the answer to a calculation and use inverse operations to check answers Place value counters for decimals- with different amounts of decimal places

Multiplication	Recognising and making equal groups. Doubling Counting in multiples Use cubes, Numicon and other objects in the classroom	Recall and use multiplication facts for the 2, 5 10 multiplication tables Use arrays to show commutative law of multiplication Use concrete resources such as cubes, numicon or counters Repeated addition Use x and = signs	Recall and use multiplication facts for the 3, 4, 8 multiplication tables Use arrays to show commutative law of multiplication Repeated addition Use concrete resources such as cubes, numicon or counters Formal written method 2digits × 1digit	Column multiplication- introduced with place value counters. (2 and 3 digit multiplied by 1digit)	Column multiplication Abstract only but might need a repeat of year 4 first (up to 4 digit numbers multiplied by 1 or 2 digits)	Column multiplication Abstract methods (multi-digit up to 4 digits by a 2 digit number)
Division	Sharing objects into groups Division as grouping e.g. I have 12 sweets and put them in groups of 3, how many groups? Use cubes and draw round 3 cubes at a time.	Recall and use division facts for the 2, 5 and 10 multiplication tables Division as grouping Division within arrays- linking to multiplication Repeated subtraction	Division with a remainder-use a variety of concrete resources such as lollipop sticks and counters. Use times tables facts and repeated subtraction. 2digits divided by 1digit Formal written method for short division	Division with a remainder Short division (up to 3 digits by 1digit-concrete and pictorial)	Short division (up to 4 digits by a 1 digit number including remainders)	Short division Long division (up to 4 digits by a 2 digit number) Children should exchange into the tenths and hundredths column too. (See remainders as decimals.)