

St James Addition and Subtraction Journey



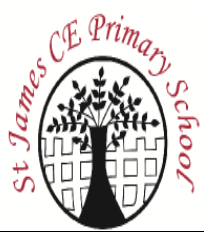
NUMBER BONDS						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	represent and use number bonds and related subtraction facts within 20 Part whole	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				
MENTAL CALCULATION						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Uses the language of 'more' and 'fewer' to compare two sets of objects.	Addition within 10 Cubes Part whole Number lines	Add 3 1 digit numbers Number lines Base 10	add and subtract numbers mentally , including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds Objects Number cards		add and subtract numbers mentally with increasingly large numbers	perform mental calculations , including with mixed operations and large numbers
Finds the total number of items in two groups by counting all of them.		Adding 2 digit and a 1 digit Number line Base 10				
Says the number that is one more than a given number.		Adding 2 digit and tens Base 10 Column addition				
Finds one more or one less from a		Subtraction within 10		Adding 2 digit and 2 digit (not		

Black – The objective

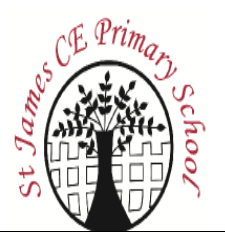
Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



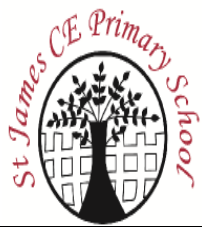
group of up to five objects, then ten objects	Crossing out Part whole Number line	renaming/regrouping) Base 10 Column addition				
In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.		Adding with renaming/regrouping Base 10 Column addition				
Subtract a 1 digit from a 2 digit Number line Base 10						
ELG - Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.	Addition and subtraction within 20. Number line Tens frame Counters Cubes	Subtract a tens number from a 2 digit number. Base 10 Column subtraction				
		Subtract a 2 digit from a 2 digit (not renaming/regrouping) Base 10 Column subtraction				
		Subtract a 2 digit from 2 digit (renaming) Base 10 Column subtraction				
ELG - Children count	read, write and	show that addition of				use their knowledge

Black – The objective

Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



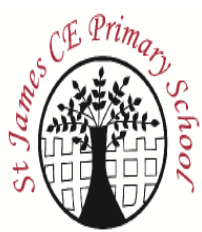
reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number	interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods)	two numbers can be done in any order (commutative) and subtraction of one number from another cannot				of the order of operations to carry out calculations involving the four operations
--	--	--	--	--	--	---

Black – The objective

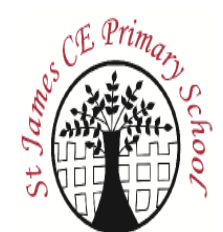
Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



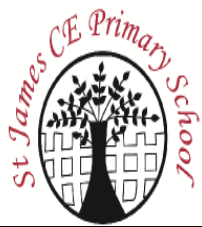
WRITTEN METHODS						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Records, using marks that they can interpret and explain		read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation)	add numbers with up to three digits , using formal written methods of columnar addition Number lines Number strips Base 10 Column Part Wholes Place value charts	add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate Bar models Base10 Number discs (PYP) Column	add whole numbers with more than 4 digits , including using formal written methods (columnar addition) Number discs (PYPO) Number lines Column Number cards	
			add numbers with renaming with up to three digits , using formal written methods of columnar addition Base 10 Part wholes (Partitioning) Column Place value chart	add numbers with renaming with up to 4 digits using the formal written methods of columnar addition where appropriate Base10 Number discs (PYPB) Column Number cards		

Black – The objective

Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



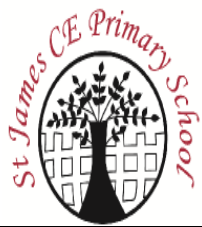
			Place value cards			
			subtract numbers with up to three digits , using formal written methods of columnar subtraction Number lines Number strips Part wholes (Partitioning) Base 10 Column Place value chart	subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate Bar models Number discs (PYPB) Column	subtract whole numbers with more than 4 digits , including using formal written methods (columnar subtraction) Number discs (PYPBOG) Column	
			subtract numbers with renaming with up to three digits , using formal written methods of columnar subtraction Base 10 Column Part wholes	subtract numbers with renaming with up to 4 digits using the formal written methods of columnar subtraction where appropriate Bar models Number discs (PYPB)		

Black – The objective

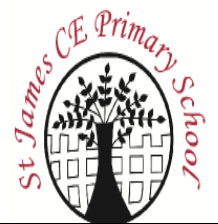
Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



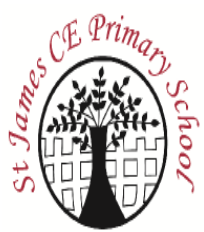
			(Partitioning) Place value chart	Column Part wholes (Partitioning)		
INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Estimates how many objects they can see and checks by counting them		recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	estimate the answer to a calculation and use inverse operations to check answers	estimate and use inverse operations to check answers to a calculation	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Number lines	use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.

Black – The objective

Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



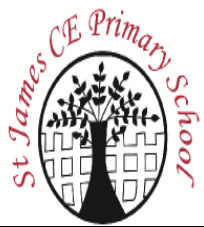
PROBLEM SOLVING						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Begins to identify own mathematical problems based on own interests and fascinations.	solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$	solve problems with addition and subtraction: * using concrete objects and pictorial representations, including those involving numbers, quantities and measures * applying their increasing knowledge of mental and written methods	solve problems , including missing number problems, using number facts, place value, and more complex addition and subtraction Cubes Bar Models Column Part wholes (Partitioning) Place value charts (PYP)	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why Bar models Column	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
ELG - They solve problems, including doubling, halving and sharing.		solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving				Solve problems involving addition, subtraction, multiplication and division

Black – The objective

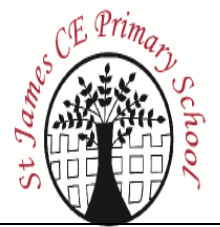
Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.



St James Addition and Subtraction Journey



		change (copied from Measurement)				
--	--	----------------------------------	--	--	--	--

Black – The objective

Blue – The manipulatives that need to be used

Orange – Taught discretely or taught during mental maths/rapid recall

Purple – Covered in within other lessons/objectives.