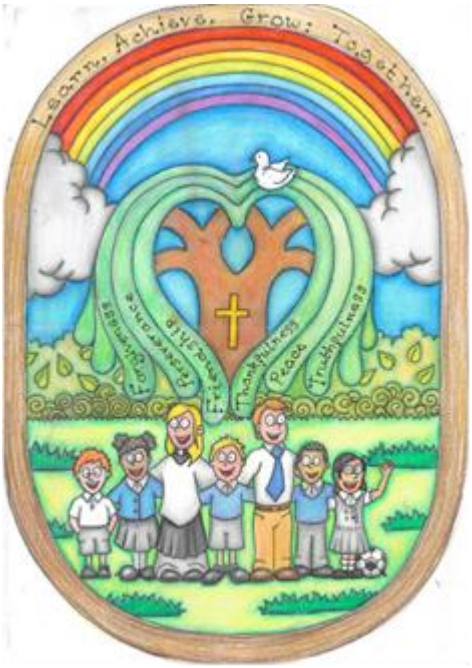
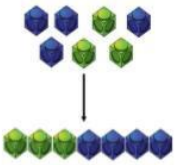
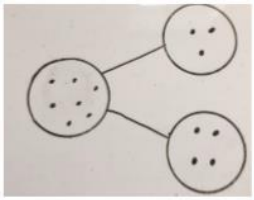
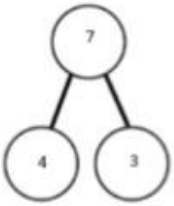
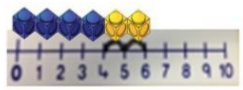
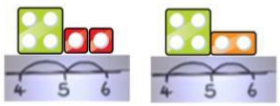
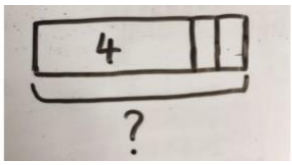
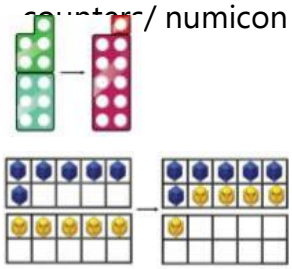
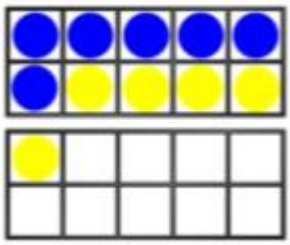
St Nicholas C.E Primary School



Calculation Progression Policy

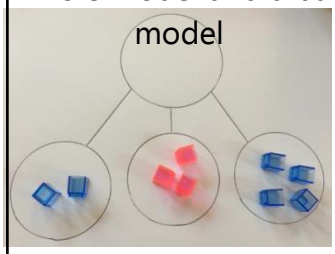
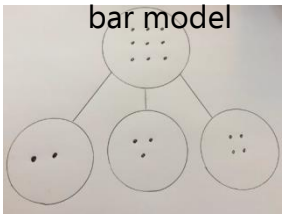
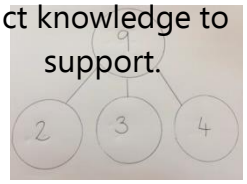
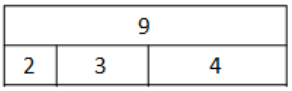
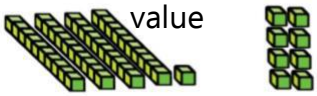
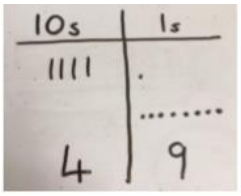
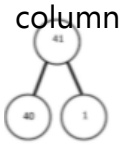
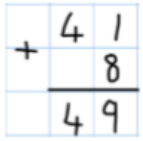
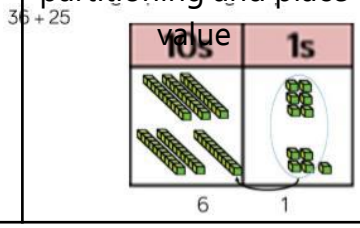
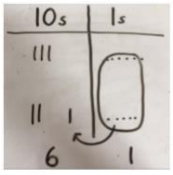
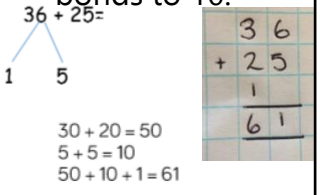
Addition

ST NICHOLAS C.E. PRIMARY SCHOOL
ADDITION- YEAR ONE

Objective	Concrete	Pictorial	Abstract
Combining two parts to make a whole	Use a range of manipulatives (e.g. cubes, shells, teddy bears) 	Represent cubes using dots on a representation (e.g part whole/bar model) 	4 + 3 = 7. Four is a part, three is a part and 
Counting on using number lines	Use manipulatives alongside a numberline  	Use a bar model. This encourages count on rather than counting all 	The abstract number line. What is 2 more than? What is the sum of? 
Regrouping to make ten	Use ten frames and counters/ numicon 	Use ten frames template and draw 	Develop understanding of equality. $6 + \square = 11$ $6 + 5 = 5 + \square$ $6 + 5 = \square + 4$

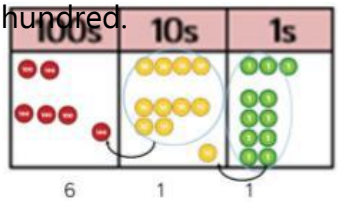
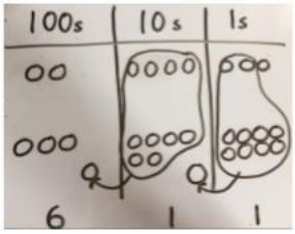
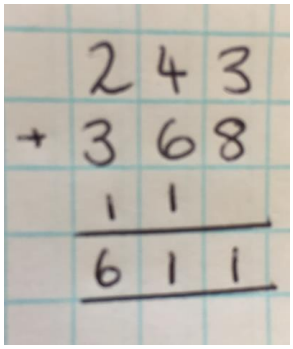
Vocabulary	Stem Sentences
part whole total sum add counting tens ones equal equal to same value plus more than less than	The whole is_____ so _____ is a part and _____ is a part (The whole is 10 so 6 is a part and 4 is a part) ____ is a part and ____ is a part so ____ is a whole (7 is a part and 3 is a part so 10 is the whole) The total of ____ and ____ is ____. (The total of 6 and 4 is 10)

STNICHOLAS C.E. PRIMARY SCHOOL
ADDITION- YEAR TWO

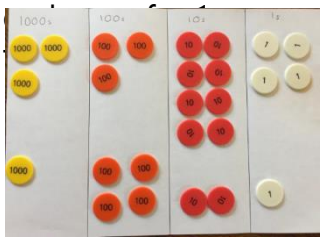
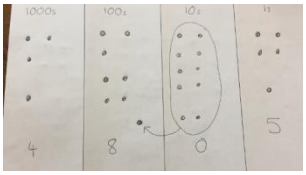
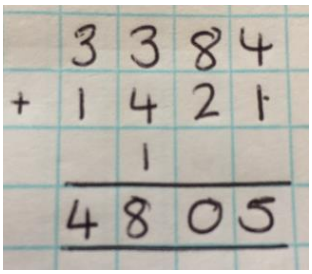
Objective	Concrete	Pictorial	Abstract
Adding 3 single digit numbers	Use concrete resources of a 3 part whole model and a bar model 	Represent the dots on both a part whole and bar model 	2 + 3 + 4 = ? Use known number fact knowledge to support.  
A two digit number plus ones	Use manipulatives to develop understanding of partitioning and place value 	Represent resources using lines for tens and circles for ones 	Answer a question by using partitioning or column addition  
Two digit number plus a two digit number	Use manipulatives to develop understanding of partitioning and place value 	Represent resources in a place value chart 	Answer a question by using their knowledge of partitioning and b bonds to 10. 

Vocabulary	Stem Sentences
part whole total sum add counting tens ones equal equal to same value plus more than less than	The whole is_____ so _____ is a part and _____ is a part (The whole is 10 so 6 is a part and 4 is a part) ____ is a part and ____ is a part so ____ is a whole (7 is a part and 3 is a part so 10 is the whole) The total of ____ and ____ is ____. (The total of 6 and 4 is 10)

ST NICHOLAS C.E. PRIMARY SCHOOL
ADDITION- YEAR THREE

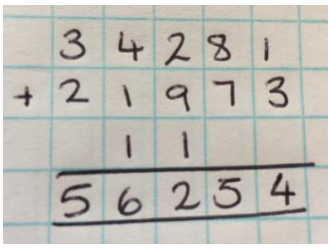
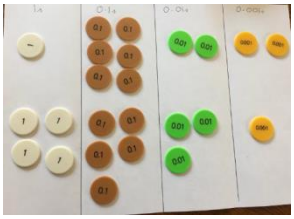
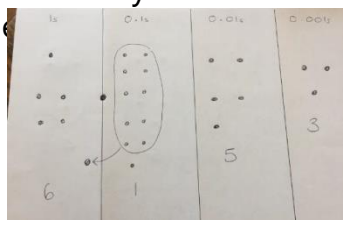
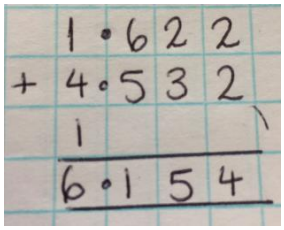
Objective	Concrete	Pictorial	Abstract
Use of place value counters to add HTO + TO, HTO + HTO	When there are 10 ones in the 1s column – we exchange for 1 ten; when there are 10 tens in the 10s column – we exchange for 1 hundred. 	Children to represent the counters in a place value chart, circling when they make an exchange. 	Formal method 
Vocabulary		Stem Sentences	
part whole total sum add counting tens ones equal equal to same value plus more than less than **column hunderds exchange**		The whole is_____ so _____ is a part and _____ is a part (The whole is 10 so 6 is a part and 4 is a part) ____ is a part and ____ is a part so ____ is a whole (7 is a part and 3 is a part so 10 is the whole) The total of ____ and ____ is ____. (The total of 6 and 4 is 10) The sum of ____ and ____ is ____. (The sum of 6 and 4 is 10)	

ST NICHOLAS C.E. PRIMARY SCHOOL
ADDITION- YEAR FOUR

Objective	Concrete	Pictorial	Abstract
Use of place value counters to add ThHTO + TO, ThHTO + HTO, ThHTO + ThHTO etc	When there are 10 ones in the 1s column – we exchange for 1 ten; when there are 10 tens in the 10s column – we exchange for 1 hundred; when there are 10 hundreds in the 100s column – we  .	Children to represent the counters in a place value chart, circling when they make an exchange. 	Formal method . 

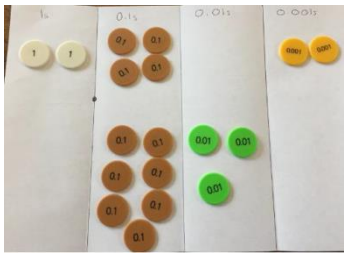
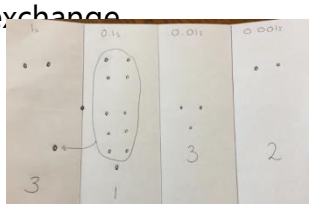
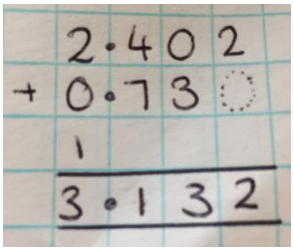
Vocabulary	Stem Sentences
part whole total sum add counting tens ones equal equal to same value plus more than less than column hunderds exchange **thousands**	The whole is_____ so _____ is a part and _____ is a part (The whole is 10 so 6 is a part and 4 is a part) ____ is a part and ____ is a part so ____ is a whole (7 is a part and 3 is a part so 10 is the whole) The total of ____ and ____ is ____. (The total of 6 and 4 is 10) The sum of ____ and ____ is ____. (The sum of 6 and 4 is 10)

ST NICHOLAS C.E. PRIMARY SCHOOL
ADDITION- YEAR FIVE

Objective	Concrete	Pictorial	Abstract
Use of place value counters to add integers	.		Formal method 
Use of place values to add decimals up to 3 d.p (same number of decimal places.	Exchange counters for the next base 10 unit. 	Children to represent the counters in a place value chart, circling when they make an 	Formal method 

Vocabulary	Stem Sentences
part whole total sum add counting tens ones equal equal to same value plus more than less than column hunderds exchange thousands **decimal tenth hundredth thousandth**	The whole is_____ so _____ is a part and _____ is a part (The whole is 10 so 6 is a part and 4 is a part) ____ is a part and ____ is a part so ____ is a whole (7 is a part and 3 is a part so 10 is the whole) The total of ____ and ____ is ____. (The total of 6 and 4 is 10) The sum of ____ and ____ is ____. (The sum of 6 and 4 is 10)

ST NICHOLAS C.E. PRIMARY SCHOOL
ADDITION- YEAR SIX

Objective	Concrete	Pictorial	Abstract
Use of place values to add decimals up to 3 d.p (different number of decimal places.	Exchange counters for the next base 10 unit. 	Children to represent the counters in a place value chart, circling when they make an exchange. 	Formal method 

Vocabulary	Stem Sentences
part whole total sum add counting tens ones equal equal to same value plus more than less than column hunderds exchange thousands decimal tenth hundredth thousandth	The whole is_____ so _____ is a part and _____ is a part (The whole is 10 so 6 is a part and 4 is a part) ____ is a part and ____ is a part so ____ is a whole (7 is a part and 3 is a part so 10 is the whole) The total of ____ and ____ is ____. (The total of 6 and 4 is 10) The sum of ____ and ____ is ____. (The sum of 6 and 4 is 10)