Calculation Policy

	EYFS/Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition	Combining two parts to make a whole: part whole model. Starting at the bigger number and counting on- using cubes. Regrouping to make 10 using ten frame.	Adding three single digits. Use of base 10 to combine two numbers.	Column method- regrouping. Using place value counters (up to 3 digits).	Column method- regrouping. (up to 4 digits)	Column method- regrouping. Use of place value counters for adding decimals.	Column method- regrouping. Abstract methods. Place value counters to be used for adding decimal numbers.
Subtraction	Taking away ones Counting back Find the difference Part whole model Make 10 using the ten frame	Counting back Find the difference Part whole model Make 10 Use of base 10	Column method with regrouping. (up to 3 digits using place value counters)	Column method with regrouping. (up to 4 digits)	Column method with regrouping. Abstract for whole numbers. Start with place value counters for decimals- with the same amount of decimal places.	Column method with regrouping. Abstract methods. Place value counters for decimals- with different amounts of decimal places.

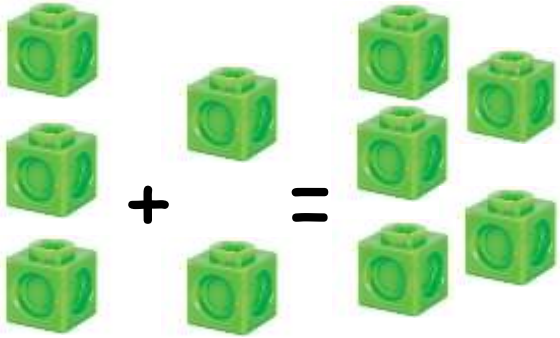
	EYFS/Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication	Recognising and making equal groups. Doubling Counting in multiples Use cubes, Numicon and other objects in the classroom	Arrays- showing commutative multiplication	Arrays 2d × 1d using base 10	Column multiplication- introduced with place value counters. (2 and 3 digit multiplied by 1 digit)	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.	Division as grouping Division within arrays- linking to multiplication Repeated subtraction	Division with a remainder-using lollipop sticks, times tables facts and repeated subtraction. 2d divided by 1d using base 10 or place value counters	Division with a remainder Short division (up to 3 digits by 1 digit- concrete and pictorial)	Short division (up to 4 digits by a 1 digit number including remainders)	Short division Long division with place value counters (up to 4 digits by a 2 digit number) Children should exchange into the tenths and hundredths column too

Although each calculation in split into year groups, children's prior learning and current ability is taken into consideration

Addition

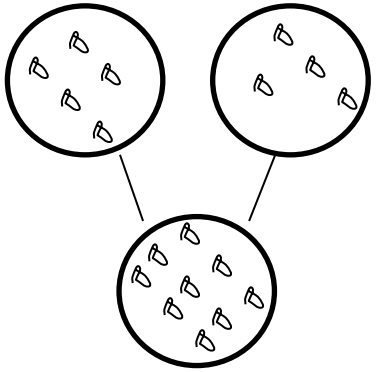
EYFS/Year 1 - Phase 1 - Using practical equipment (always starting with the biggest number)

3 + 2 = 5



EYFS/Year 1 – Phase 2 – Whole Part Models

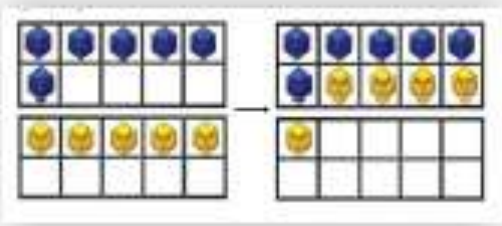
5 + 4 = 9



Pictoral first and then using numbers

EYFS/Year 1 – Phase 3 – Ten Frame

6 + 5 = 11

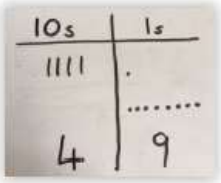


Using practical equipment on the ten frames and then drawing the amounts themselves on the ten frames.

Year 2 – Using Base 10 to combine 2 numbers (TO + O and TO + TO)

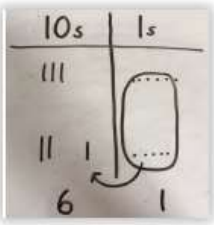
No regrouping

41 + 8 = 49



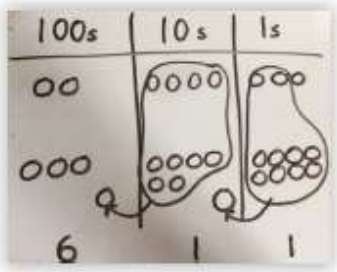
Regrouping

36 + 25 = 61



Year 3 – Place Value Counters with column alongside using regrouping (up to 3 digits)

243 + 368 = 611



	234
+	368
	012
	090
	500
	602

Years 4-6 – Column Method using regrouping (using Place Value Counters to support if ever needed)

Year 4 – up to 4 digits

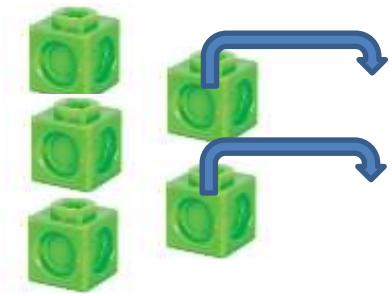
Year 5 – including decimals with same amount of decimal places

Year 6 – including decimals with different amount of decimal places

Subtraction

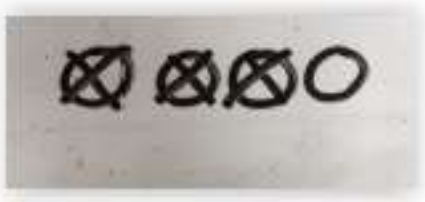
EYFS/Year 1 – Phase 1 – Using practical equipment to physically take away

5 – 2 = 3



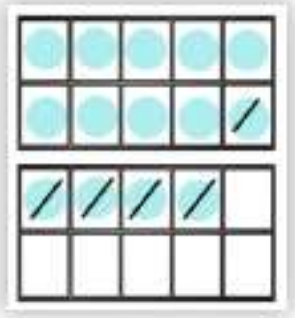
EYFS/Year 1 – Phase 2 – Draw the concrete and cross out

4 – 3 = 1



EYFS/Year 1 – Phase 3 – Using a ten frame to take away (practical first and then drawn like below)

14 – 5 = 9



Years 4 to 6 – Column method using exchanging (using Place Value Counters to support if ever needed)

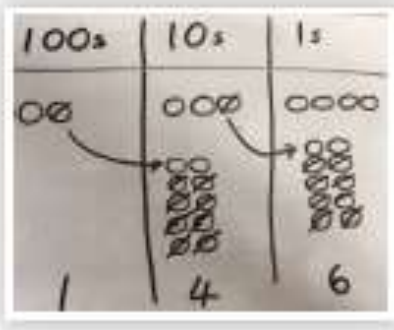
Year 4 – up to 4 digits

Year 5 – including decimals with same amount of same decimal places

Year 6 – including decimals with different amount of decimal places

Year 3 – Place Value Counters with column alongside using exchanging

234 – 88 = 146

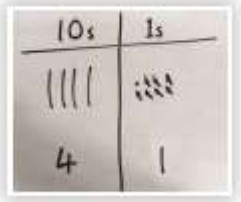


1 12 1
~~2~~ ~~3~~4
- 88
006
040
100
146

Year 2 – Using Base 10 (TO – O and TO – TO)

No exchanging

48 – 7 = 41



Exchanging

41 – 26 = 15

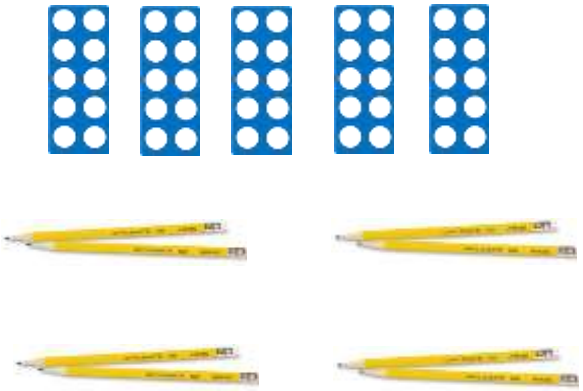
(always start with 1s)

Multiplication

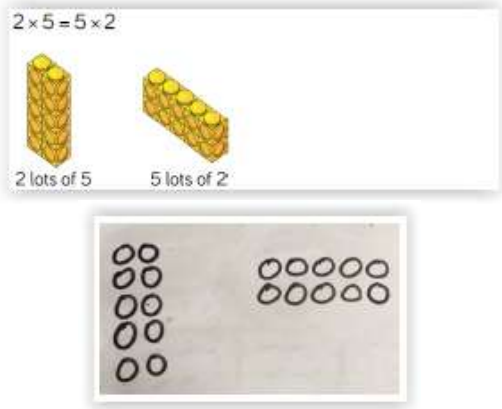
EYFS/Year 1 - Recognising and making equal groups

e.g. 3 groups of 2

EYFS/Year 1 – Counting in multiples of 2s, 5s and 10s using range of classroom objects

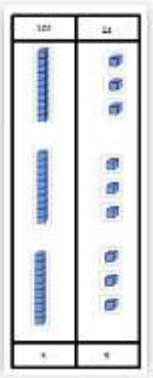


Year 2 – Arrays showing commutative law

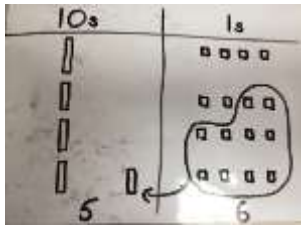


Year 3 – Arrays then moving into Base 10 for 2d x 1d

3 x 13

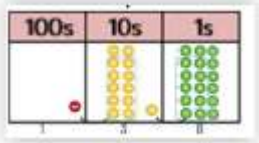


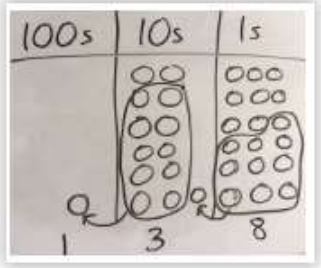
4 x 14



Year 4 – Place Value Counters then moving into Formal Column Method

6 x 23



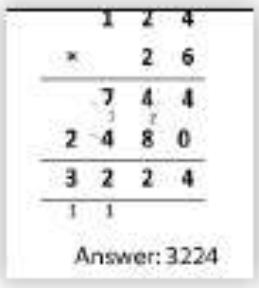


Years 5 & 6 – Formal Column Method

Year 5 – 4d x 1d & 4d x 2d

Year 6 – multi-digit up to 4d x 2d

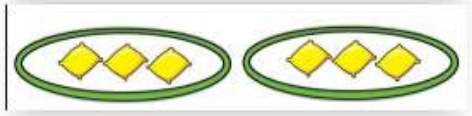
124 x 26



Division

EYFS/Year 1 – Sharing using a range of objects and pictorially

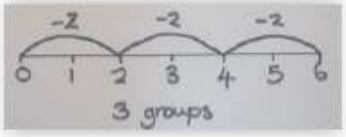
e.g. 6 ÷ 2



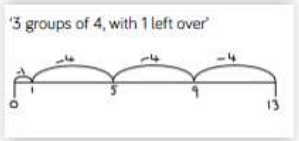
Year 2 – Repeated subtraction

Without remainders 6 ÷ 2 = 3

(3 groups of 2)

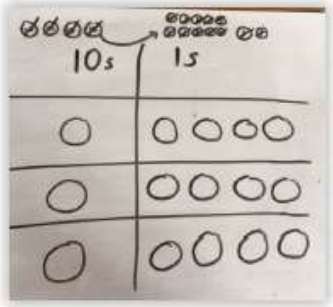


With remainders 13 ÷ 4 = 3 r 1



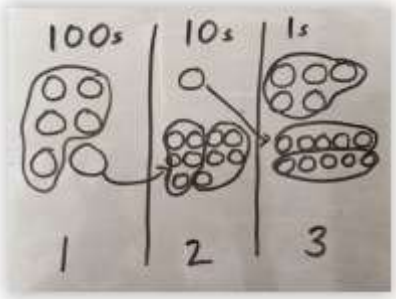
Year 3 – Sharing using Place Value Counters (2d ÷ 1d)

42 ÷ 3 = 14



Year 4 – Short division using PVC (3d ÷ 1d)

615 ÷ 5 = 123

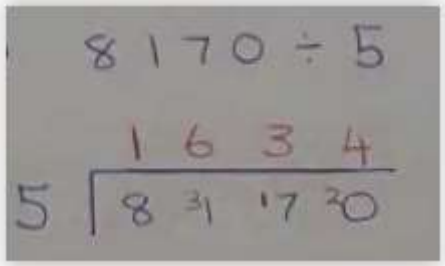


Year 5 & 6 – Short division 'Bus Stop'

(Yr 5 - 4d ÷ 1d)

(Yr 6 – 4d ÷ 2d)

8170 ÷ 5 = 1634



Years 6 – Place Value Counters for long division

2544 ÷ 12 = 212