



Maths

Calculation Policy

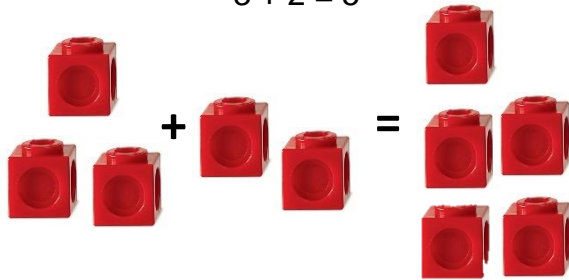
September 2023

Addition

EYFS

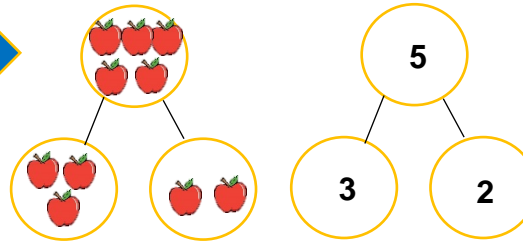
Practical equipment – start with biggest number

$$3 + 2 = 5$$



Year 1

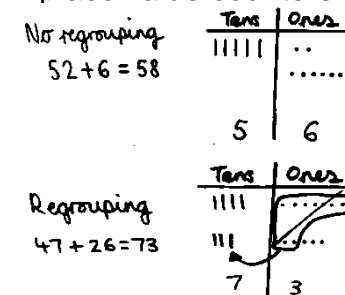
Part whole models – practical, visual, abstract



Year 2

2 digit numbers

Base 10 – tens and ones moving onto place value counters



Year 5/6

Up to 1 million and use of decimals

Formal column method

$$6452.31 + 986.07 = 7438.38$$

$$\begin{array}{r} 6452.31 \\ + 986.07 \\ \hline 7438.38 \\ \times \times \end{array}$$

Year 4

4 digit numbers

Formal column method - PV counters if needed

$$4865 + 3726 = 8591$$

Th	H	T	O
4	8	6	5
+	3	7	2
8	5	9	1
\times	\times		

Year 3

3 digit numbers

Place value counters HTO moving onto column

$$372 + 488 = 860$$

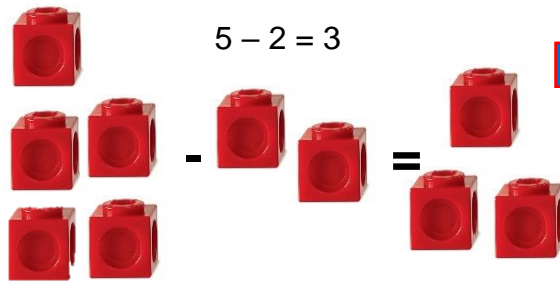
H	T	O
000	000000	00
000	000000	00
8	6	0

H	T	O
3	7	2
+	4	8
8	6	0
\times	\times	

Subtraction

EYFS

Practical equipment – start with biggest number and physically move objects to subtract



Year 1

Striking out method

$$5 - 2 = 3$$



Year 2

2 digit numbers

Base 10 – tens and ones moving onto PV counters

$$56 - 14 = 42$$

Tens	Ones
X	+..
4	2
No exchanging	

$$75 - 18 = 58$$

Tens	Ones
X	+..
5	8
Exchanging	

Year 5/6

Up to 1 million and use of decimals

Formal column method

$$277,862 - 148,674 = 129,188$$

	2 ⁶	7 ¹	7 ¹	8 ¹	6 ¹	2
-	1	4	8	6	7	4
	1	2	9	1	8	8

Year 4

4 digit numbers

Formal column method - PV counters if needed

$$8924 - 3648 = 5276$$

	Th	H	T	O
	8	9	2	4
-	3	6	4	8
	5	2	7	6

Year 3

3 digit numbers

PV counters HTO moving onto column

$$657 - 283 = 374$$

	H	T	O		H	T	O
	000	600	50	7	5	5	7
-		200	80	3	2	8	3
	3	7	4		3	7	4

Multiplication

Year 1

Practical equipment

Groups of, leading to arrays



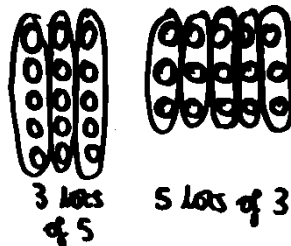
3 groups of 2



Year 2

Arrays that show commutative law

$$3 \times 5 = 5 \times 3$$



3 lots of 5

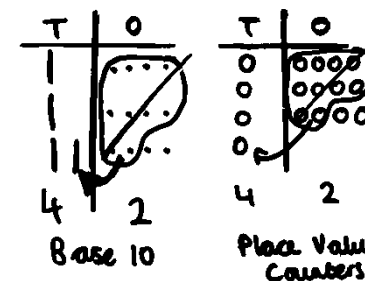
5 lots of 3

Year 3

2 digit numbers

Base 10 leading to PV counters

$$14 \times 3 = 42$$



Year 6

4 digits by 1 or 2 digits

Short and long column multiplication

$$5612 \times 24 = 134688$$

	Th	Th	H	T	O
	5	6	1	2	
x				2	4
+	2	2	4	4	8
+	1	3	4	6	8
	1	3	4	6	8

Year 5

4 digits by 1 or 2 digits

Short and long column multiplication

$$4671 \times 8 = 37368$$

	Th	Th	H	T	O
	4	6	7	1	
x					8
+	3	7	3	6	8
	3	7	3	6	8

$$5612 \times 24 = 134688$$

	Th	Th	H	T	O
	5	6	1	2	
x				2	4
+	2	2	4	4	8
+	1	3	4	6	8
	1	3	4	6	8

Year 4

2 or 3 digits by 1 digit

PV counters leading to column method

$$352 \times 4 = 1408$$

	Th	H	T	O
	3	5	2	
x				4
+	1	4	0	8
	1	4	0	8

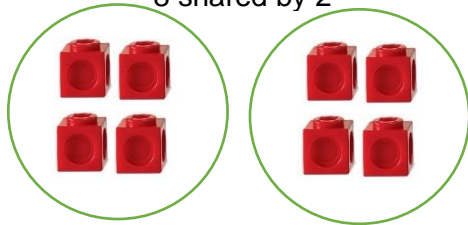
Division

EYFS/ Year 1

Sharing out objects equally into groups

Halving of quantities (practical)

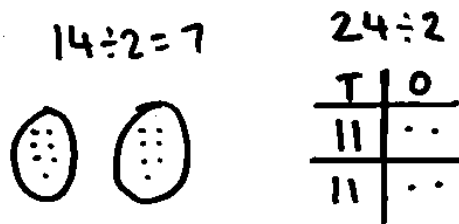
8 shared by 2



Year 2

2 digit numbers

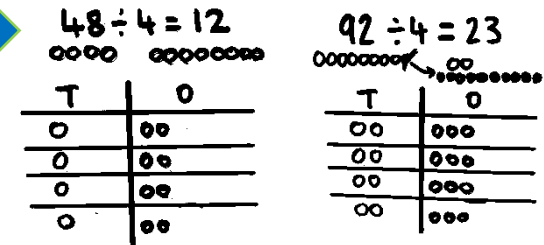
Sharing equally into groups (pictorial)
leading into tens and ones columns



Year 3

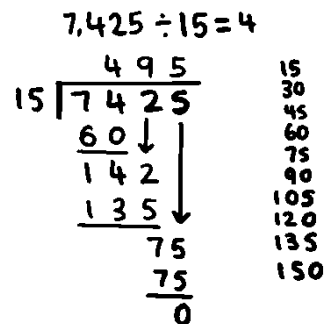
2 digits by 1 digit

No exchange, leading into exchange into ones



Year 6

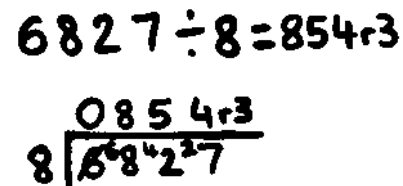
Introduce long division to divide 4 by 2 digits



Year 5/6

4 digits by 1 digit

Formal short division method



Year 4

3 digits by 1 digit

PV counters leading into short division

