Calculation Policy

Division

January 2024

EYFS:

Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide	**Manipulatives & scaffolds:**	

Small step:	Concrete:	Pictorial:	Abstract:
Explore sharing	March 2024		
Sharing			
Explore grouping			
Grouping			
Even and odd sharing			

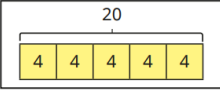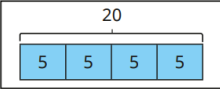| Y1			
Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide Divided by Left over	**Manipulatives & scaffolds:**	Cubes Counters
Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Make equal groups – grouping		 There are _____ altogether. There are _____ equal groups of _____	There are _____ altogether. There are _____ equal groups of _____
Make equal groups – sharing		Share the apples equally between the 3 boxes. Complete the sentences. _____ apples are shared equally between _____ boxes. There are _____ in each group.	__ are shared equally into __ groups. There are __ in each group.

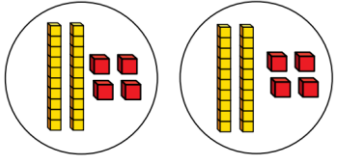| Y2			
Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide Divided by Left over ÷	**Manipulatives & scaffolds:**	Counters Number line Bar models Part whole models

Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Make equal groups – grouping	 4 groups of 3	 ► Complete the sentences. 12 is made up of _____ equal groups of _____ 12 ÷ 2 = _____ 6 groups of 2	15 ÷ 5 = 5 groups of 3 =
Make equal groups – sharing	I have 12 cubes, can you share them equally into 3 groups? 3 groups of 4 : 12 shared by 3 equals 4.	 20 ÷ 4 = 5 20 shared by 4 : 4 groups of 5.	__ ÷ __ = __

Y3			
Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide Divided by Left over ÷ Remainders 2-digit number Partitioning Flexible partitioning	**Manipulatives & scaffolds:**	Counters Lolly sticks Bar models Part whole models Place value counters Place value charts

Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Sharing and grouping	Here are 14 counters. ▶ Share the counters equally into 2 groups. Complete the sentences. There are _____ counters altogether. There are _____ groups. There are _____ counters in each group. 14 ÷ _____ = _____	20 pencils are shared equally between 5 people. 20 pencils are grouped into packs of 5 20 → 4 4 4 4 4 20 → 5 5 5 5	$27 \div 3 =$

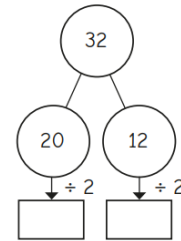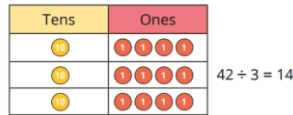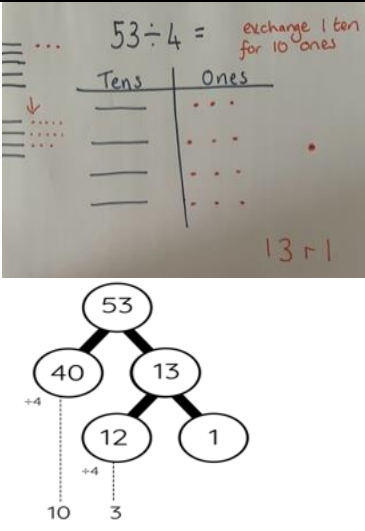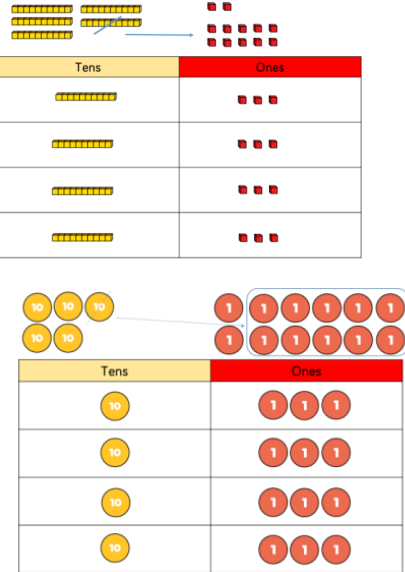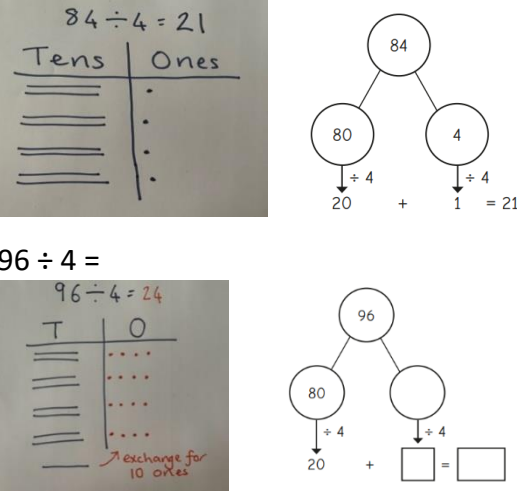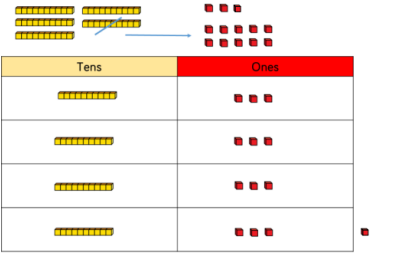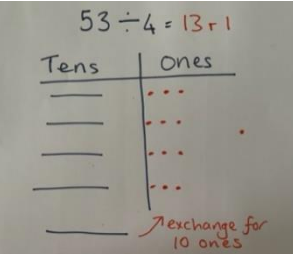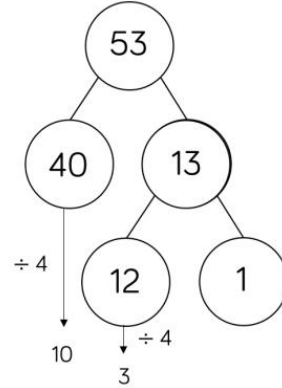|			
Divide a 2-digit number by a 1-digit number - no exchange	**48 ÷ 2 = 24** Tens / Ones table with place value counters 39 ÷ 3 = 13	64 ÷ 2 = _____ 64 → 60, 4 → ÷ 2, ÷ 2	48 ÷ 4 =
Divide a 2-digit number by a 1-digit number - flexible partitioning	Ron uses place value counters to work out 42 ÷ 3 First, he shares the tens into 3 equal groups. He has 1 ten and 2 ones left over. Ron exchanges the remaining ten for 10 ones. Then he shares the ones into 3 equal groups. 42 ÷ 3 = 14	32 → 20, 12 → ÷ 2, ÷ 2 32 ÷ 2 = _____	96 ÷ 6 =
Divide a 2-digit number by a 1-digit number -	Esther has 13 lolly sticks. She uses them to make squares. Complete the sentences. There are _____ lolly sticks. There are _____ groups of 4. There is _____ lolly stick remaining. 13 ÷ 4 = _____ remainder _____ Esther can make _____ squares.	53 ÷ 4 =	38 ÷ 3 = 12 r 2
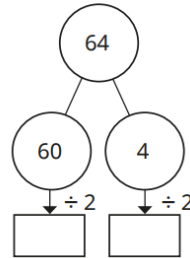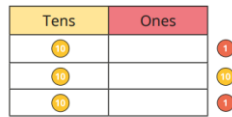
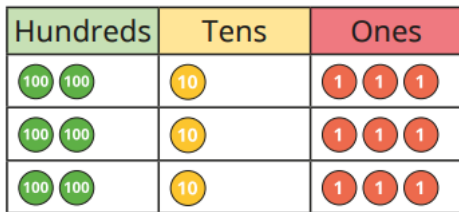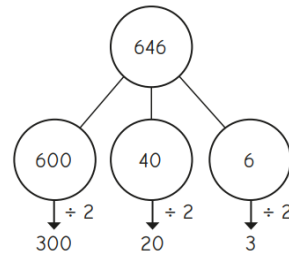| with remainders			
Y4			
Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide Divided by Left over ÷ Remainders 2-digit number Partitioning Flexible partitioning	**Manipulatives & scaffolds:**	Part whole models Place value counters Place value charts

Small step:	Concrete:	Pictorial:	Abstract:
Divide a 2-digit number by a 1-digit number (no remainders)	$52 \div 4 = 13$	$84 \div 4 =$ $96 \div 4 =$	$78 \div 6 =$
Divide a 2-digit number by a 1-digit number (with remainders)	$53 \div 4 = 13 \, r1$	$53 \div 4 = 13 \, r1$	$53 \div 4 =$

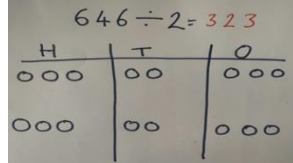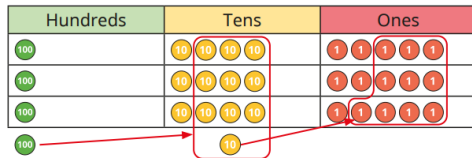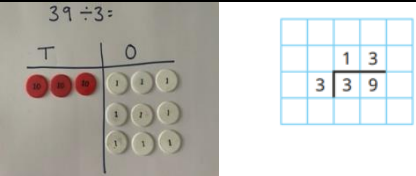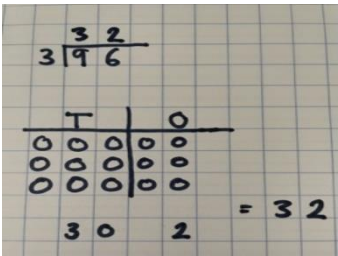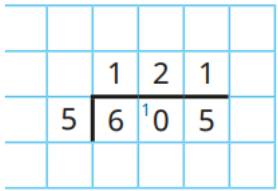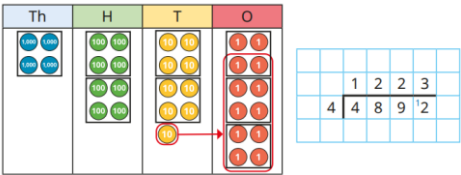|			
		53 40 13 ÷4 12 1 10 ÷4 3	
Divide a 3-digit number by a 1-digit number	639 ÷ 3 = 435 ÷ 3 = 	646 ÷ 2 = 323 646 600 40 6 ÷2 ÷2 ÷2 300 20 3	428 ÷ 2 =
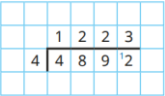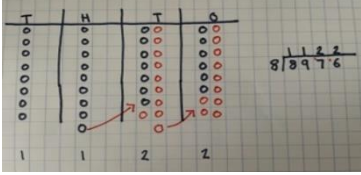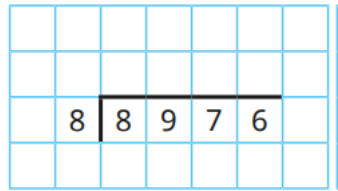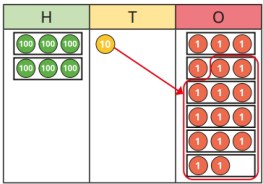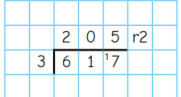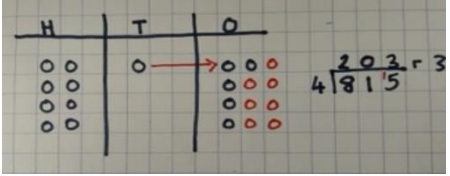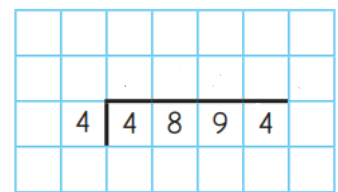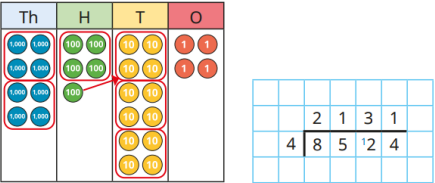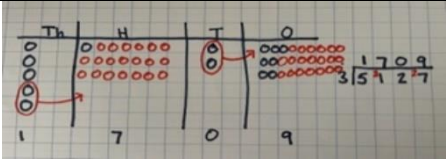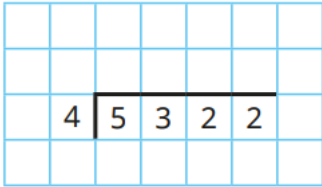
Y5		**Manipulatives & scaffolds:**		Place value counters
Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide ÷ Divided by Left over Remainders Partitioning Flexible partitioning 2/3/4-digit number Short division			Place value charts 'Bus stop'

Small step:	**Concrete:**	**Pictorial:**	**Abstract:**
Short division	 We are dividing by 3. There is 1 group of 3 tens. There are 3 groups of 3 ones. $39 \div 3 = 10$ and $3 = 13$	$96 \div 3 =$ 	
Divide a 4-digit number by a 1-digit number			
Divide with remainders			

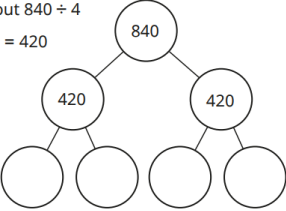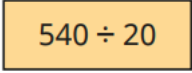| Y6			
Vocabulary:	Odd Even Halve Share Share equally Equal groups of Divide ÷ Divided by Left over Remainders Partitioning Flexible partitioning 2/3/4-digit number Short division Factors Long division	**Manipulatives & scaffolds:**	Place value counters Place value charts 'Bus stop'

Small step:	Concrete:	Pictorial:	Abstract:
Short division			
Division using factors		Esther is working out 840 ÷ 4 She knows 840 ÷ 2 = 420 How can Esther use this fact to help find 840 ÷ 4?	540 ÷ 20
Long division	When children begin to divide larger numbers, written methods become more efficient; concrete and pictorial methods are less effective		7,335 ÷ 15 = 489

Long division with remainders			

```
        0  2  4  r 12
    15 | 3  7  2
        3  0  0        (15 × 20)
           7  2
           6  0        (15 × 4)
           1  2
```

Multiples of 15: 15 × 1 = 15
15 × 2 = 30
15 × 3 = 45
15 × 4 = 60