Wilkinson Division Policy

Division

Year 1

Sharing
Requires secure counting skills.
Need to develop one-to-one correspondence

Sharing—9 sweets are shared between 3 people. How many do they each have?

Practical activities involving sharing, distributing cards when playing a game, putting objects onto plates, into cups, hoops, etc.

Grouping
Sorting objects into 2s/3s/4s etc.
How many pairs of socks are there?

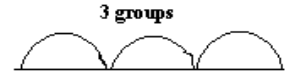
There are 16 daffodil bulbs. Plant 4 in each pot.
How many pots are there?
Jo has 8 lego wheels. How many bikes can she make?

Year 2

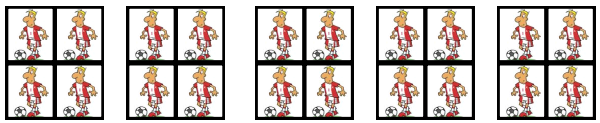
÷ = signs and missing numbers

20÷2=_	_ =20 ÷2
20÷_=10	2 =20÷ 10
_÷ 10=2	10=_20 ÷2
_÷ A=10	11 =_÷A

Grouping
Link to counting and understanding number strand
Count up to 100 objects by grouping them and counting in tens, fives or twos.
Find one half, one quarter and three quarters of shapes and sets of objects
6÷2 can be modelled as:
There are 6 strawberries.
How many people can have 2 each? How many 2s make 6?



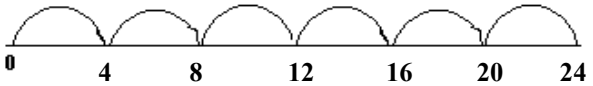
In money you can count forwards and backwards using 2p, 5p, and 10p coins.
Practical grouping eg. in PE
20 children get into teams of 4 to play a game. How many teams are there?



Year 3

÷ = signs and missing numbers
Continue using a range of equations as in Year 2 but with appropriate numbers.

Understand division as sharing and grouping
24÷4 can be modelled as:
Sharing—24 shared between 4
OR
Grouping - how many 4's make 24?



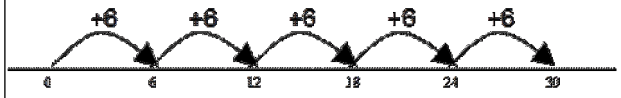
Remainders
25÷3=8 r1
Sharing - 30 shared between 5, how many left over?
Grouping - How many 5's make 32, how many left over?

Division

Year 4

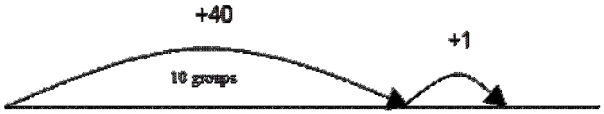
÷ = signs and missing numbers
Continue using a range of equations as in Year 2 but with appropriate numbers.

Sharing and grouping
30 ÷ 6 can be modelled as:
Grouping - groups of 6 placed on no. line and the number of groups counted; e.g.



Sharing - sharing among 6 the number given to each person.

Remainders



41 ÷ 4 = 10 r1 41 = (10 x 4) + 1

Pencil and paper procedures—Chunking
78÷5 lies between 50÷5=10 and 100÷5=20
Partition the dividend into multiples of the divisor:
E.g. 78=50+28

50÷5=10 28÷5=5 r3 10+5 r3=15 r 3

OR

78	78	
	- 50	(10 groups)
50+28	28	
	- 25	(5 groups)
10 + 5 r 3	3	

Answer: 15 remainder 3

Short Division

$$5\overline{)78} \quad 15\text{r}3$$

Consider Each Column starting from the Left. See Year 6 for full explanation.

Year 5

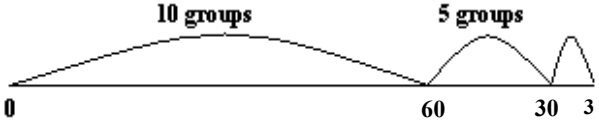
÷ = signs and missing numbers
Continue but with appropriate numbers.

Sharing and grouping
Continue to understand division as both sharing and grouping (repeated subtraction)

Remainders
Quotients expressed as fractions or decimal fractions
93÷6=15 1/2 or 15.50

Pencil and paper procedures - Chunking
257÷6 lies between 240÷6=40 and 300÷6=50

Partition the dividend into multiples of the divisor:
E.g. 240 = 240+17
240÷6=40 17÷6= 40+ 2 r 5 = 42 r 5



OR

257	257	
	- 240	(40 groups)
240 + 17	17	
	- 12	(2 groups)
40 + 2 r 5	5	

Answer: 42 remainder 5

Short Division

Consider the Left.

$$6\overline{)257} \quad 042\text{r}5$$

Each Column starting from See Year 6 for full explanation.

Year 6

÷ = signs and missing numbers
Continue but with appropriate numbers.

Sharing, grouping and remainders as Year 5.

Pencil and paper procedures- Chunking
977 ÷ 36 is approximately 1000 , 40 = 25

* Partition the dividend into multiples of the divisor:
e.g. 977 = 720 + 180 + 77
720 ÷ 36 = 20
180 ÷ 36 = 5
77 ÷ 36 = 2r5 → 20 + 5 + 2r5 = 27r5

OR

	977	
-	720	(20 groups)
	257	
-	180	(5 groups)
	77	
-	72	(2 groups)
	5	

Answer: $27\ ^{5/36}$

Pencil and Paper procedures- Short Division Method
Both methods above are necessary at this stage, to deal with the wide range of problems experienced at Year 6.

quotient
divisor 5 ⟌ 847 dividend

Write down how many times your divisor goes into the first number of the dividend. If there is a remainder, that's okay.
Write down your remainder to the left of the next digit in the dividend.
Continue. Repeat steps 1-3 until you are done.

$$5\overline{)847} \quad 169\text{r}2$$