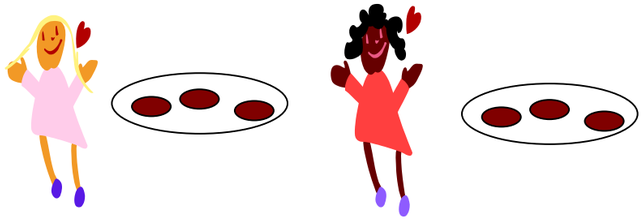
Comberton Primary School

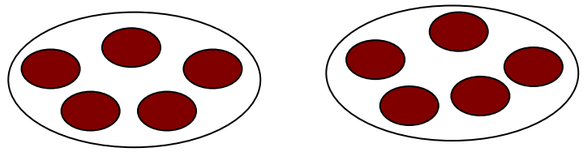
Progression in calculation: division

Division as sharing

6 cookies shared between 2 girls, 3 cookies each.
6 shared into 2 groups = 3 in each group
6 ÷ 2 = 3

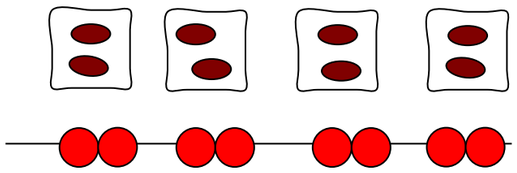


10 cookies shared between 2 plates, 5 cookies each.
10 shared into 2 groups = 5 in each group
10 ÷ 2 = 5



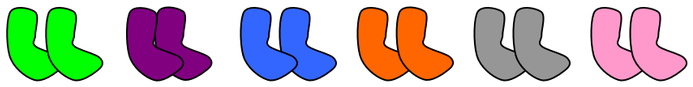
Division as grouping

8 cookies grouped in 2s = 4 groups.
8 ÷ 2 = 4



If I have 12 socks – how many pairs do I have? i.e. How many groups of 2?

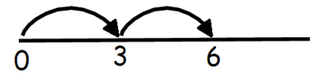
12 socks grouped in 2s = 6 pairs of socks (6 groups)
12 ÷ 2 = 6



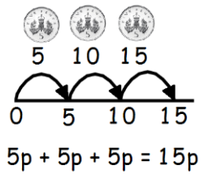
Using Number Lines

How many groups of 2 are there in 6? – there are 3
2 + 2 + 2 = 6
6 ÷ 2 = 3
6 divided into 2s is 3 groups

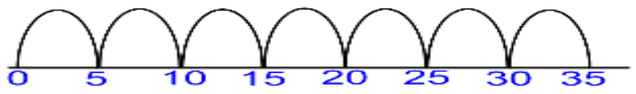
6 grouped into 3s is 2 groups
3 + 3 = 6
6 ÷ 3 = 2
6 divided into 3s is 2 groups



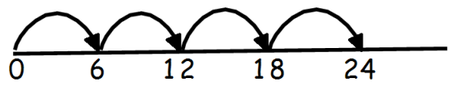
I have 15p how many 5p coins have I got?
5p + 5p + 5p = 15p
15p ÷ 5p = 3



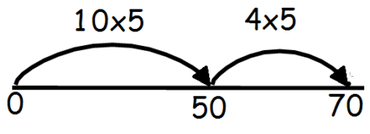
Lollipops cost 5p, how many could I buy for 35p
35 ÷ 5 = 7



24 ÷ 6 = 4



70 ÷ 5 = 14



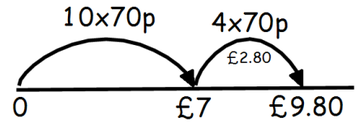
Chunking

70 ÷ 5 = 14

7 0	start with total amount
10 x 5 = 5 0	subtract a known multiple of 5
2 0	
4 x 5 = 2 0	subtract a known multiple of 5
0	

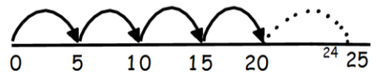
Making sense of remainders

We have £10. Chocolate bars cost 70p each. How many bars can we buy?



We can buy 14 bars and we will get 20p change.

Using a number line to begin to express a quotient as a fraction
24 ÷ 5 = 4 4/5



I can make 4 jumps of 5. I can only jump 4 parts of the last jump of 5. So the answer is 4 4/5.

Formal Division Method

98 ÷ 7 becomes

$$7\overline{)98} = 14$$

Answer: 14

432 ÷ 5 becomes

$$5\overline{)432} = 86\ r2$$

Answer: 86 remainder 2

496 ÷ 11 becomes

$$11\overline{)496} = 45\ r1$$

Answer: $45\frac{1}{11}$