

Progression in Division at Brunswick House



<u>Stage</u>	<u>Objective</u>	<u>Concrete</u>	<u>Pictorial</u>	<u>Abstract</u>
EYFS	Sharing objects into groups	Sharing a range of objects equally.	Draw this on whiteboards/books	If I share 10 into 2 groups I get 5 in each group
Year 1/Year 2	Division as grouping/sharing	Sharing a range of objects equally.	Represent the sharing pictorially	Children should also be encouraged to use their 2 times table facts. 6 ÷ 2 = Represent with bar model 3 3
Year 1/Year 2	Repeated subtraction	Repeated subtraction using Cuisenaire rods/cubes above a ruler 6 ÷ 2	Children to represent repeated subtraction pictorially.	Abstract number line to represent the equal groups that have been subtracted.
Year 2	Division with arrays	Link division to multiplication by creating an array and thinking about the number sentences that can be created.	Draw an array and split the array into groups using columns and rows	Find the inverse of multiplication and division sentences by creating four linking number sentences. 15 ÷ 3 = 5 5 x 3 = 15 15 ÷ 5 = 3 3 x 5 = 15
Year 3/4	Divide a 2 digit number by ones (No exchange)	Use dienes/place value counters to share tens and ones into equal groups	Draw equal groups to represent sharing	Record portioning method as number sentences 48 ÷ 2 = 24 40 ÷ 2 = 20 8 ÷ 2 = 4

Year 3/4	Divid 0 10 0	llas discostale	Dygu, shin inserted	Danaud woodlan
Year 3/4	Divide a 2 digit number by ones	Use dienes/place value counters to share tens	Draw this into their books, representing	Record number sentence
	(Exchange)	and ones. Where tens cannot be shared,	numbers with dienes or counters	52 ÷ 4 = 13
		equally, exchange for 10 ones	Tens Coat	Use times table to support
			O 000 O 000	
		Tens Ones	0 000	4 x 10 = 40 4 x 3 = 12
		annumb 0 0 0		4 x 13 = 52
Year 3/4	Division with a	Use of lollipop sticks to	Children to	13 ÷ 4 = 3 remainder 1
	remainder	form whole squares are made because we are	represent the	Children should be
		dividing by 4.	lollipop sticks pictorially:	encouraged to use their
			1-1-1-1-1	times table facts; they could also represent
				repeated addition on a number line.
		There are 3 whole squares, with 1 left over.	There are 3 whole squares, with 1 left over.	3 groups of 4 with 1 left over
		Divide objects between groups and see how	Draw dots and	لا حلا الا
		much is left over.	group them to	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
			divide an amount and clearly show a	5 9
		55 55 55	remainder.	0
			remainder 2	
		Cuisenaire rods above a ruler can also be used		
		for this.		
Year 5/6	Short division	Short division using place value counters to	Children to represent the place	Children to write the calculation using the
		group.	value counters	short division scaffold.
		100s 10s 1s	pictorially.	122
		00000	00 0 000	123 5 615
		1 2 3		5 6115
		1. Make 615 with place	1 2 3	5.013
		value counters. 2. How many groups of		
		5 hundreds can you		Using multiplication facts within the short division
		make with 6 hundred counters?		method, box the first 2
		3. Exchange 1 hundred for 10 tens.		digits as a starting point.
	<u>I</u>	joi to tells.	1	1

		4. How many groups of 5 tens can you make with 11 ten counters? 5. Exchange 1 ten for 10 ones. 6. How many groups of 5 ones can you make with 15 ones?		$ \begin{array}{c cccc} & 2 & 1 & 8 \\ 12 & 26 & 21^9 & 6 \\ \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
All	Use bar models to represent addition calculations and problems		18 ÷ 3 = 6	