
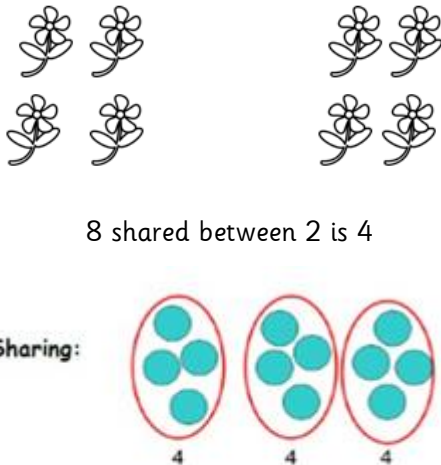
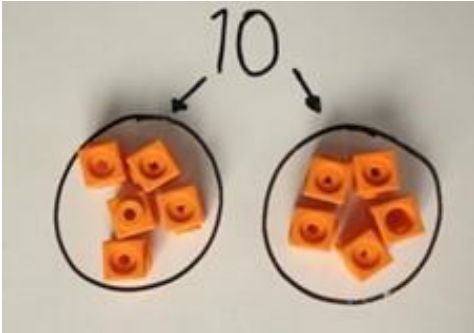

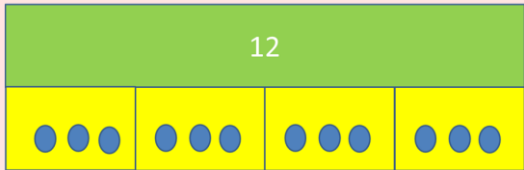
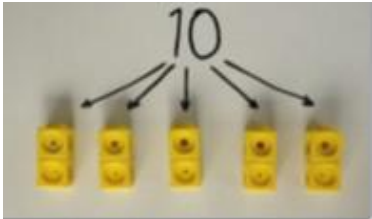
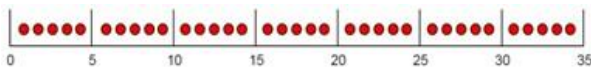



# CPA Policy

## Division – Y1

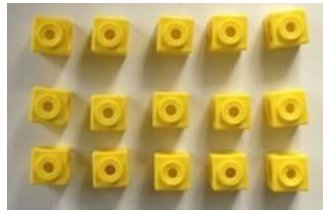
Objective and Strategy	Concrete	Pictorial	Abstract
<p>Division as sharing</p>	<p>Children are given lots of opportunities to share different resources between equal groups.</p>  <p>I have 10 cubes, can you share them equally between 2 groups.</p>	<p>Children use pictures or shapes to share quantities.</p>  <p>8 shared between 2 is 4</p> <p>Sharing: 4 4 4</p> <p>12 shared between 3 is 4</p>	<p>12 shared between 3 is ____</p>

## Division – Y2

Objective and Strategy	Concrete	Pictorial	Abstract
<p>Division as sharing</p>	<p>I have 10 cubes; can you share them equally in 2 groups?</p> <p>Building on from Y1 children share equally using multiples that they are familiar with 2, 3, 5 and 10</p> 	<p>Children use pictures or shapes to share quantities. The division sign is introduced.</p>  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <math>8 \div 2 = 4</math> </div> <p>Children use bar modelling to show and support understanding.</p> $12 \div 4 = 3$ 	$12 \div 3 = 4$
<p>Division as grouping</p>	<p>Divide quantities into equal groups. Use cubes, counters, objects or place value counters to aid understanding.</p>  	<p>Think of the bar as a whole. Split it into the number of groups you are dividing by and work out how many would be within each group.</p>  <div style="margin-top: 10px;"> <math>20 \div 5 = ?</math>  <math>5 \times ? = 20</math> </div>	$20 \div 5 = 4$ <p>Divide 20 into 5 groups. How many are in each group?</p>

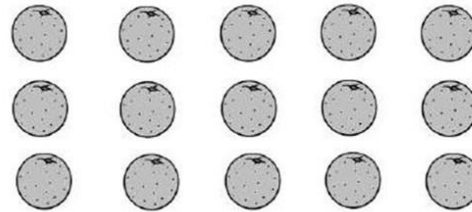
## Division with arrays

Link division to multiplication by creating an array and thinking about the number sentences that can be created.



$$\begin{array}{ll} 15 \div 3 = 5 & 5 \times 3 = 15 \\ 15 \div 5 = 3 & 3 \times 5 = 15 \end{array}$$

Draw an array and use lines to split the array into groups to make multiplication and division sentences



Find the inverse of multiplication and division sentences by creating eight linking number sentences.

$$7 \times 4 = 28$$

$$4 \times 7 = 28$$

$$28 \div 7 = 4$$

$$28 \div 4 = 7$$

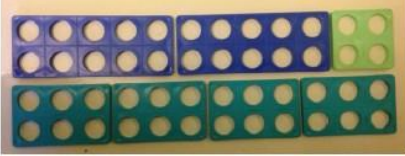

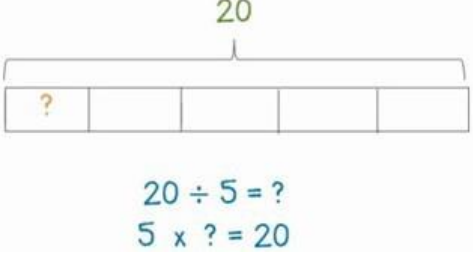
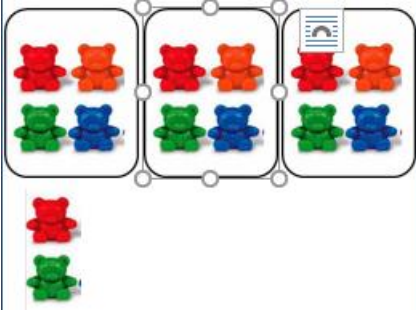
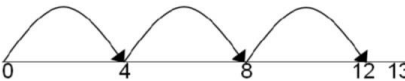

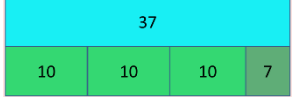
$$28 = 7 \times 4$$

$$28 = 4 \times 7$$

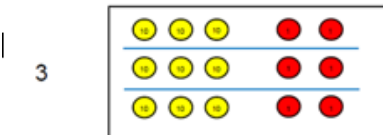
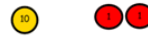
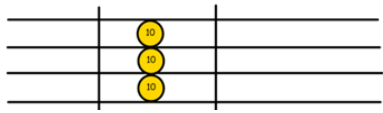
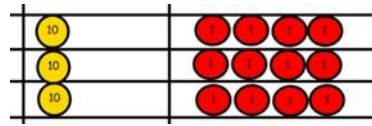
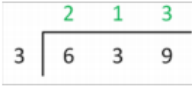
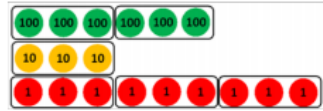

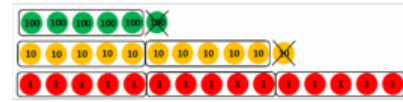
$$4 = 28 \div 7$$

$$7 = 28 \div 4$$

## Division – Y3

Objective and Strategy	Concrete	Pictorial	Abstract
<p>Division as grouping</p>	<p>Use cubes, counters, objects or place value counters to aid understanding.</p>  <p>24 divided into groups of 6 = 4</p> $96 \div 3 = 32$ 	<p>Continue to use bar modelling to aid solving division problems.</p> 	<p>How many groups of 6 in 24?</p> $24 \div 6 = 4$
<p>Division on a number line (with and without remainders)</p>	<p>14 ÷ 3 =</p> <p>Divide objects between groups and see how much is left over</p> 	<p>Jump forward in equal jumps on a number line then see how many more you need to jump to find a remainder.</p>   <p>Draw dots and group them to divide an amount and clearly show a remainder.</p> <p>Use bar models to show division with remainders.</p> 	<p>See calculation policy</p> <p>For calculations with remainders - Complete written divisions and show the remainder using r.</p> $29 \div 8 = 3 \text{ REMAINDER } 5$ <p style="text-align: center;"> <span style="margin-right: 20px;">↑</span> <span style="margin-right: 20px;">↑</span> <span style="margin-right: 20px;">↑</span> <span style="margin-right: 20px;">↑</span> </p> <p style="text-align: center;"> <span style="margin-right: 20px;">dividend</span> <span style="margin-right: 20px;">divisor</span> <span style="margin-right: 20px;">quotient</span> <span>remainder</span> </p>

## Division – Y4

Objective and Strategy	Concrete	Pictorial	Abstract						
<p>Division of 3 digit numbers by 1 digit.</p> <p>Short Division</p>	<p>Use place value counters to divide using the bus stop method</p> <p><math>96 \div 3</math></p> <table><tr><td></td><td>Tens</td><td>Units</td></tr><tr><td></td><td>3</td><td>2</td></tr></table>  <p>For division with exchanging e.g. <math>42 \div 3 =</math></p> <p>Start with the biggest place value, we are sharing 40 into three groups. We can put 1 ten in each group and we have 1 ten left over.</p>   <p>We exchange this ten for ten ones and then share the ones equally among the groups.</p>  <p>We look how much in 1 group so the answer is 14.</p>		Tens	Units		3	2	<p>Students can continue to use drawn diagrams with dots or circles to help them divide numbers into equal groups.</p> <p>No regrouping</p>   <p>With regrouping</p>  	<p>See Calculation Policy</p>
	Tens	Units							
	3	2							

