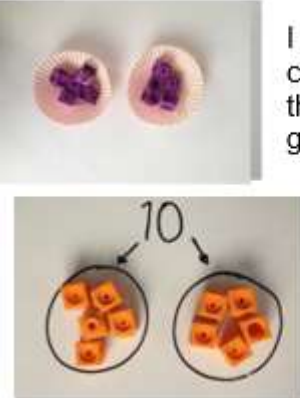
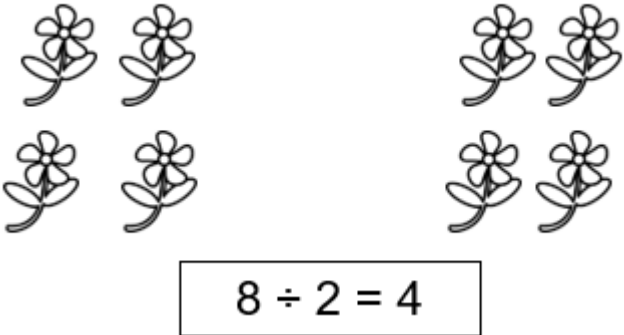
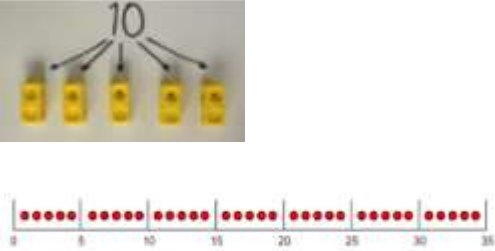

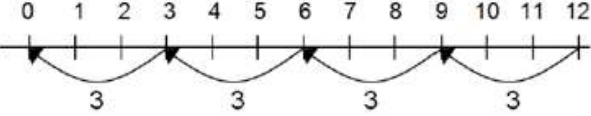
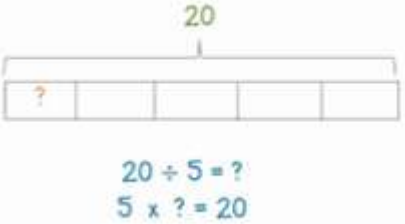
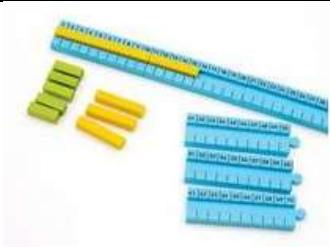
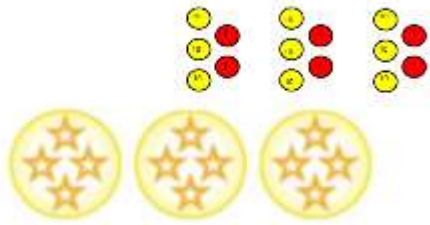


Yr	Division Strategies	Concrete	Pictorial	Abstract
R /Yr1	Sharing objects into groups	 <p>I have 10 cubes, can you share them equally in 2 groups?</p>	<p>Children use pictures or shapes to share quantities.</p>  $8 \div 2 = 4$	<p>Share 9 buns between three people.</p> $9 \div 3 = 3$
1 2 3 4	Division as grouping	<p>Divide quantities into equal groups. Use cubes, counters, objects, numicon, Cuisenaire or place value counters to aid understanding.</p>  $20 \div 5 = 4$ 	<p>Use a number line to show jumps in groups. The number of jumps equals the number of groups.</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>  $20 \div 5 = ?$ $5 \times ? = 20$	$28 \div 7 = 4$ <p>Divide 28 into 7 groups. How many are in each group?</p>



Use Cuisenaire and number tracks to work out division questions.

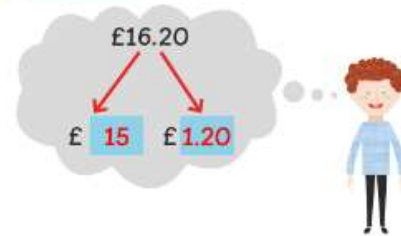
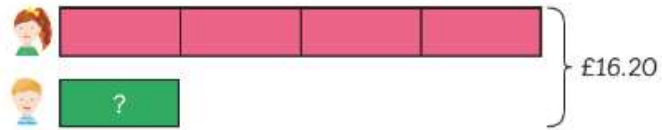
$$96 \div 3 = 32$$



Year 4

and share the cost of a gift for a friend. The gift costs £16.20

What if pays 4 times as much as ?



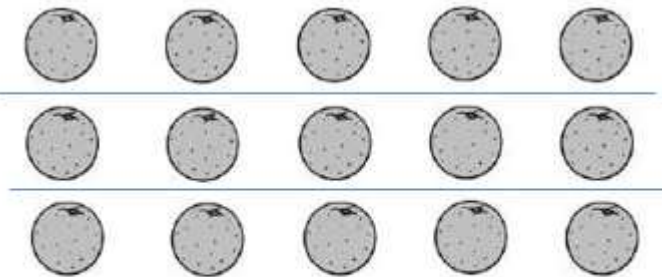
$$£16.20 \div 5 = £ 3.24$$

2
3
Division within arrays



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

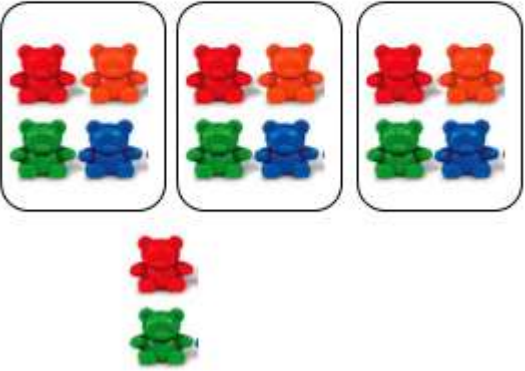



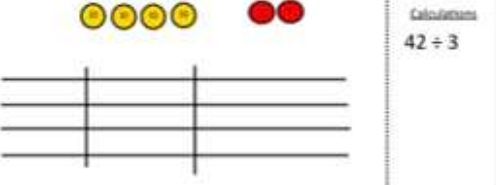
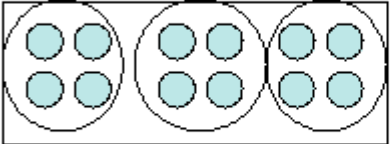
Eg $15 \div 3 = 5$ $5 \times 3 = 15$
 $15 \div 5 = 3$ $3 \times 5 = 15$



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

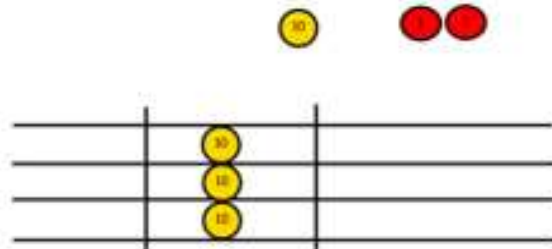
Find the inverse of multiplication and division sentences by creating four linking number sentences.

$7 \times 4 = 28$
 $4 \times 7 = 28$
 $28 \div 7 = 4$
 $28 \div 4 = 7$

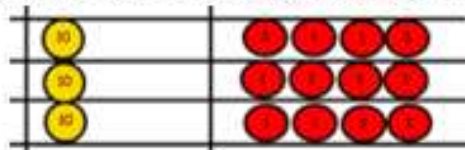
<p>3</p>	<p>Division with a remainder</p>	<p>$14 \div 3 =$ Divide objects between groups and see how much is left over</p> 	<p>Jump forward in equal jumps on a number line then see how many more you need to jump to find a remainder.</p>  <p>Draw dots and group them to divide an amount and clearly show a remainder.</p> 	<p>Complete written divisions and show the remainder using r.</p> $\begin{array}{ccccccc} 29 & = & 8 & \times & 3 & \text{REMAINDER } & 5 \\ \uparrow & & \uparrow & & \uparrow & & \uparrow \\ \text{dividend} & & \text{divisor} & & \text{quotient} & & \text{remainder} \end{array}$ <p>This is beyond End of year expectations.</p>
<p>4 5 6</p>	<p>Short Division</p>	<p>Tens Ones 3 2</p>  <p>Use place value counters to divide using the bus stop method alongside</p>  <p>Calculations $42 \div 3$</p>	<p>Students can continue to use drawn diagrams with dots or circles to help them divide numbers into equal groups.</p>  <p>Encourage them to move towards counting in multiples to divide more efficiently.</p>	<p>Begin with divisions that divide equally with no remainder.</p> $\begin{array}{r} 218 \\ 3 \overline{) 654} \\ \underline{6} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \end{array}$ <p>Move onto divisions with a remainder</p>

$$42 \div 3 =$$

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.



We exchange this ten for ten ones and then share the ones equally among the groups.



We look how much in 1 group so the answer is 14.

$$\begin{array}{r} 86 \text{ r } 2 \\ 3 \overline{) 432} \\ \underline{432} \\ 0 \end{array}$$

Represent remainder as a fraction

$$86 \frac{2}{3}$$

And then as a decimal

$$86.4$$

Finally move into decimal places to divide the total accurately.

$$\begin{array}{r} 14.6 \\ 35 \overline{) 511.0} \\ \underline{35} \\ 16 \\ \underline{15} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

You need to apply your knowledge of fractions and decimals to solve