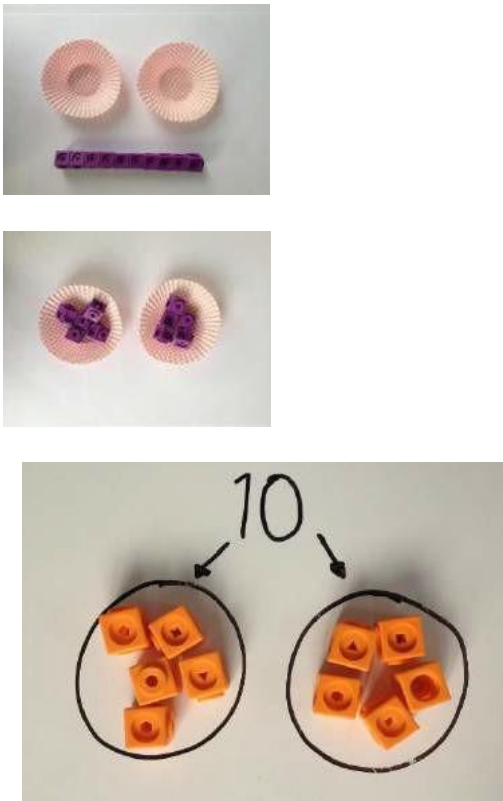
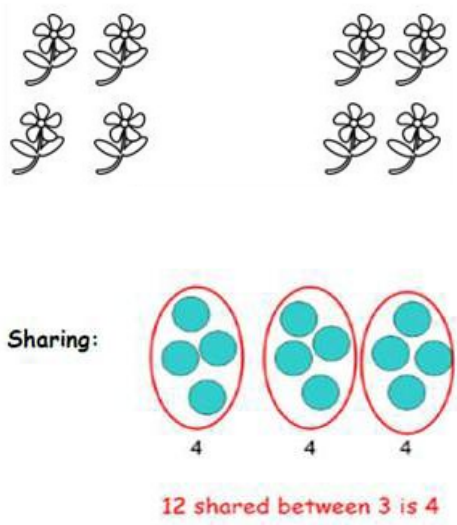
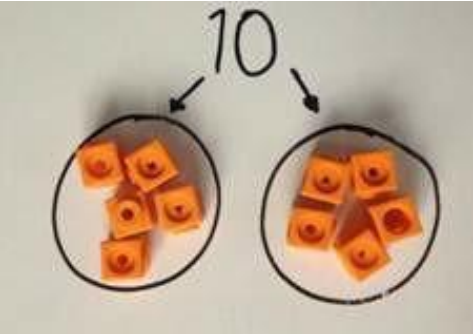
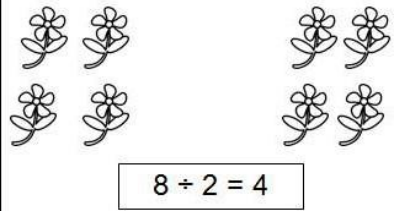
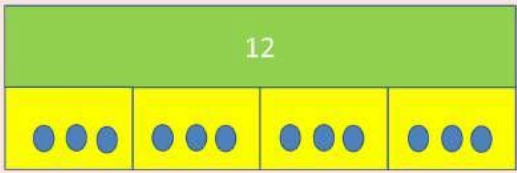
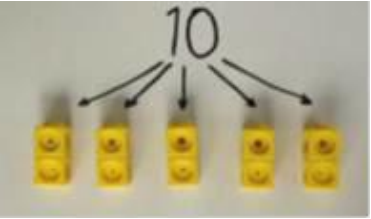
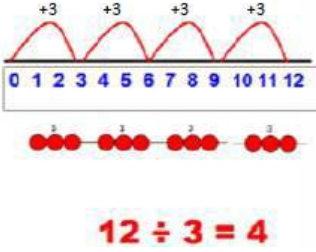
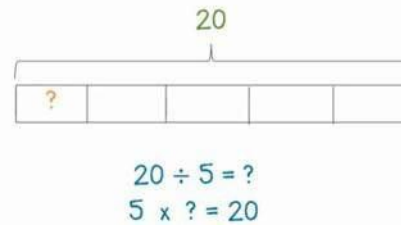
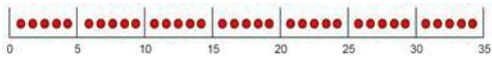


Year 1 Division

Objective & Strategy	Concrete	Pictorial	Abstract	Key Vocabulary
<p>Division as sharing</p>	<p>I have 10 cubes, can you share them equally in 2 groups?</p> 	<p>Children use pictures or shapes to share quantities.</p> <p>8 shared between 2 is 4</p> 	<p>12 shared between 3 is 4</p>	<p>share, lots of, groups of, equally, plus, sum, total, how many more to make? Half, equals</p>

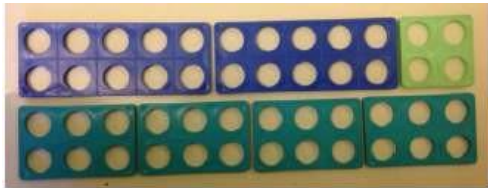
Year 2 Division

Objective & Strategy	Concrete	Pictorial	Abstract	Key Vocabulary
<p>Division as sharing</p>	<p>I have 10 cubes, can you share them equally in 2 groups?</p> 	<p>Children use pictures or shapes to share quantities.</p>  <p>Children use bar modelling to show and support understanding.</p>  <p>$12 \div 4 = 3$</p>	<p>$12 \div 3 = 4$</p>	<p>share, groups, lots of, times, multiply, multiplied by, array, double, halve, equal, divide, divided by, divided into</p>
<p>Division as grouping</p>	<p>Divide quantities into equal groups. Use cubes, counters, objects or place value counters to aid understanding.</p> 	<p>Use number lines for grouping</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>	<p>Divide 28 into 7 groups. How many are in each group?</p> <p>$28 \div 7 = 4$</p>	



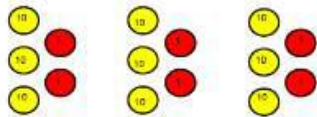
Division as grouping

Use cubes, counters, objects or place value counters to aid understanding.

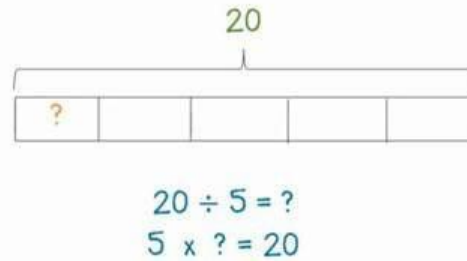


24 divided into groups of 6 = 4

$$96 \div 3 = 32$$



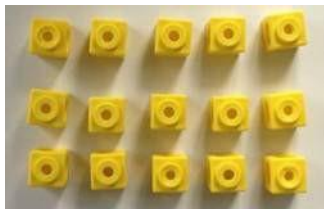
Continue to use bar modelling to aid solving division problems.



How many groups of 6
in 24?

$$24 \div 6 = 4$$

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 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.

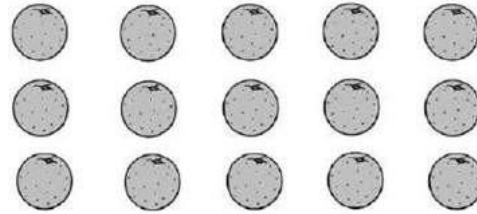
$$7 \times 4 = 28$$

$$4 \times 7 = 28$$

$$28 \div 7 = 4$$

$$28 \div 4 = 7$$

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



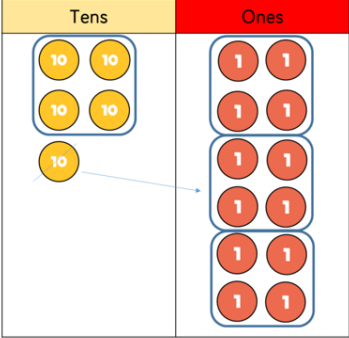
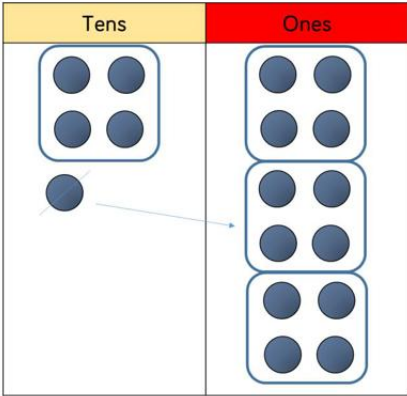

$$28 = 7 \times 4$$

$$28 = 4 \times 7$$

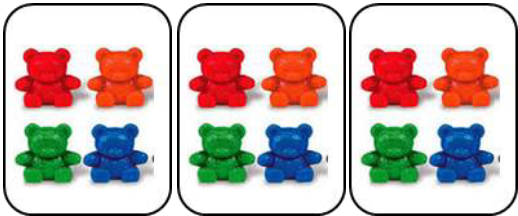
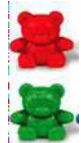


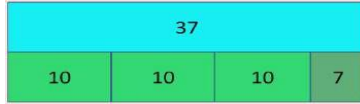
$$4 = 28 \div 7$$

$$7 = 28 \div 4$$


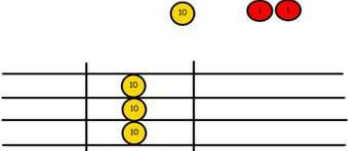
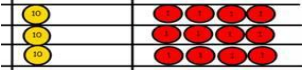
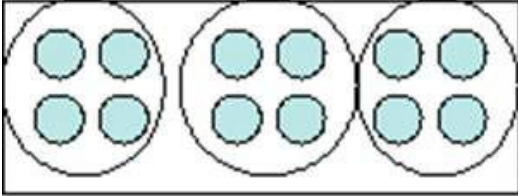
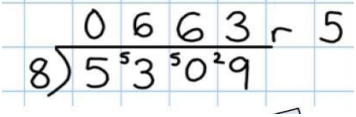
Year 3 Division

Objective & Strategy	Concrete	Pictorial	Abstract	Key Vocabulary
<p>To divide two-digit numbers by one-digit</p>	<p style="text-align: center;">52 divided by 4</p> 	<p style="text-align: center;">52 divided by 4</p> 		<p>lots of, groups, share, divide, division, divided by, divisible by, divided into, left, left over, remainder, quotient, inverse, multiply, multiplication, multiple of, product, equal</p>

Division with remainders

Objective & Strategy	Concrete	Pictorial	Abstract	Key Vocabulary
<p>Division with remainders.</p>	<p>$14 \div 3 =$</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>Complete written divisions and show the remainder using r.</p> $29 \div 8 = 3 \text{ REMAINDER } 5$ <p style="text-align: center;"> ↑ ↑ ↑ ↑ </p> <p style="text-align: center;"> dividend divisor quotient remainder </p>	<p>lots of, groups, share, divide, division, divided by, divisible by, divided into, left, left over, remainder, quotient, inverse, multiply, multiplication, multiple of, product, equal</p>

Year 4 - 6 Division

Objective & Strategy	Concrete	Pictorial	Abstract	Key Vocabulary				
<p>Divide at least 3 digit numbers by 1 digit.</p> <p>Short Division</p>	<p>$96 \div 3$</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 0 10px;">Tens</td> <td style="padding: 0 10px;">Units</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> </table>  <p>Use place value counters to divide using the bus stop method alongside</p> <p>$42 \div 3 =$</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>Encourage them to move towards counting in multiples to divide more efficiently.</p>	<p>Begin with divisions that divide equally with no remainder.</p> $\begin{array}{r} 218 \\ 3 \overline{) 872} \end{array}$ <p>Move onto divisions with a remainder.</p> $\begin{array}{r} 86 \text{ r } 2 \\ 3 \overline{) 432} \end{array}$ 	<p>lots of, groups, share, divide, division, divided by, divisible by, divided into, left, left over, remainder, quotient, inverse, multiply, multiplication, multiple of, product, equal</p>
Tens	Units							
3	2							

Year 6 Short Division

Objective & Strategy

Concrete

Pictorial

Abstract

Key Vocabulary

$$\begin{array}{r}
 \text{h t o} \\
 041R1 \\
 \hline
 4 \overline{) 165}
 \end{array}$$

4 does not go into 1 (hundred). So combine the 1 hundred with the 6 tens (160).

4 goes into 16 four times.

4 goes into 5 once, leaving a remainder of 1.

$$\begin{array}{r}
 \text{th h t o} \\
 0400R7 \\
 \hline
 8 \overline{) 3207}
 \end{array}$$

8 does not go into 3 of the thousands. So combine the 3 thousands with the 2 hundreds (3,200).

8 goes into 32 four times ($3,200 \div 8 = 400$)

8 goes into 0 zero times (tens).

8 goes into 7 zero times, and leaves a remainder of 7.

lots of, groups, share, divide, division, divided by, divisible by, divided into, left, left over, remainder, quotient, inverse, multiply, multiplication, multiple of, product, equal

Year 6 Long Division

D M S B = acronym for division, multiplication, subtraction, bring (the next number) down.

$$\begin{array}{r} 14 \\ 26 \overline{) 364} \\ - 26 \\ \hline 104 \\ - 104 \\ \hline 0 \end{array}$$

Division:

3 divided by 26 can't be done.

36 divided 26 = one whole group of 26

$$26 \times 1 = 26$$

This is written below.

$$36 - 26 = 10$$

Bring down the 4 to make 104

$$104 \text{ divided by } 26 = 4$$

$$26 \times 4 = 104$$

$$104 - 104 = 0$$

There are no more numbers to bring down.

$$\begin{array}{r}
 49 \\
 25 \overline{) 1225} \\
 - 100 \\
 \hline
 225 \\
 - 225 \\
 \hline
 0
 \end{array}$$

Division:

1 divided by 25 can't be done.

12 divided by 25 can't be done.

122 divided 25 = four whole groups of 25

$$25 \times 4 = 100$$

This is written below.

$$122 - 100 = 22$$

Bring down the 5 to make 225

$$225 \text{ divided by } 25 = 9$$

$$25 \times 9 = 225$$

$$225 - 225 = 0$$

There are no more numbers to bring down.