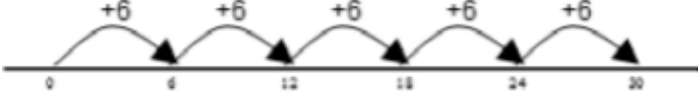
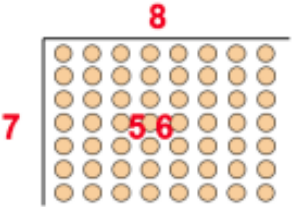


Year 3 and 4 Division	
Year 3	Year 4
Mental strategies	
<p>Children should count regularly, on and back, in steps of 3, 4 and 8.</p> <p>Children are encouraged to use what they know about known times table facts to work out other times tables. This then helps them to make new connections (e.g. through doubling they make connections between the 2, 4 and 8 times tables).</p> <p>Children will make use multiplication and division facts they know to make links with other facts. $3 \times 2 = 6$, $6 \div 3 = 2$, $2 = 6 \div 3$ $30 \times 2 = 60$, $60 \div 3 = 20$, $2 = 60 \div 30$.</p>	<p>Children should experience regular counting on and back from different numbers in multiples of 6, 7, 9, 25 and 1000. Children should learn the multiplication facts to 12×12.</p>
Written methods	
<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>They should be given</p> </div> </div> <p><u>Becoming more efficient using a numberline</u></p> <p>opportunities to solve grouping and sharing problems practically (including where there is a remainder but the answer needs to be given as a whole number) e.g. Pencils are sold in packs of 10. How many packs will I need to buy for 24 children?</p> <p>Grouping How many 6's are in 30? $30 \div 6$ can be modelled as:</p>	<p>Alongside pictorial</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px; border: 1px solid black; padding: 5px;"> <p>$7 \times 8 = 56$</p> </div> </div> <p>representations and the use of models and images, children should progress onto short division using a bus stop method.</p>

Place value counters can be used to support children apply their knowledge of grouping. Reference should be made to the value of each digit in the dividend.

Each digit as a multiple of the divisor

'How many groups of 3 are there in the hundreds column?'

'How many groups of 3 are there in the tens column?'

'How many groups of 3 are there in the units/ones column?'

$$\begin{array}{r} 112 \\ 3 \overline{) 336} \end{array}$$

Children
dots or
equal



can continue to use drawn diagrams with circles to help them divide numbers into groups.

Children need to be able to partition the dividend in different ways.

$$48 \div 4 = 12$$



Remainders

$$49 \div 4 = 12 \text{ r}1$$



Sharing – 49 shared between 4. How many left over?
Grouping – How many 4s make 49. How many are left over?

Rearranging the dividend.

Use dienes to build dividends that can be rearranged into multiples of the divisor.

$$48 \div 3 =$$

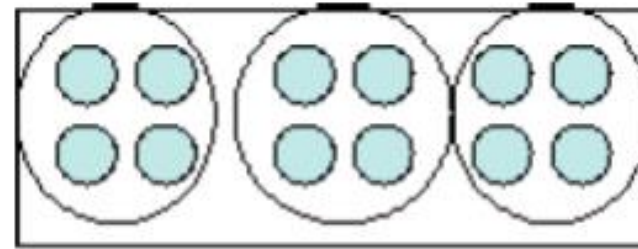
'What do I know about 3 x tables?'

"I know 3 x 10 = 30."



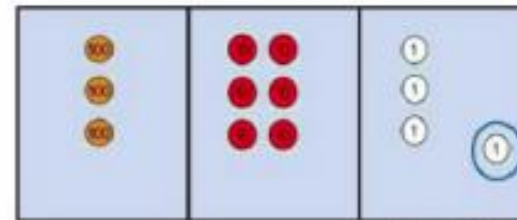
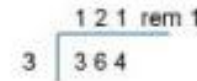
$$48 \div 3 = 16$$

$$10 \times 3 = 30 \quad 6 \times 3 = 18$$



Encourage them to move towards counting in multiples to divide more efficiently.

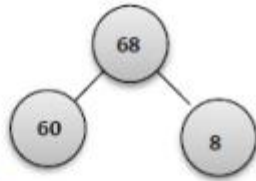
$$364 \div 3 =$$



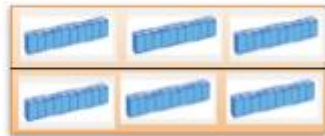
When children have conceptual understanding and fluency using the bus stop method without remainders, they can then progress onto 'carrying' their remainder across to the next digit.

Short division to be modelled for understanding using place value counters as shown below. Calculations with 2 and 3-digit dividends. Language of grouping to be used.

$68 \div 2 =$



$6 \text{ tens} \div 2 = 30$

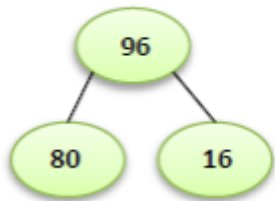


$8 \text{ ones} \div 2 =$



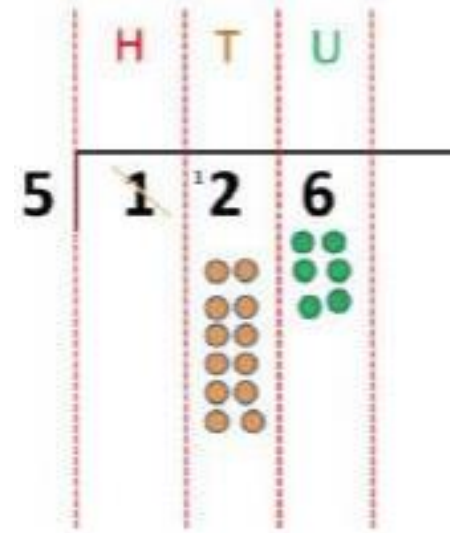
$68 \div 2 = 30 + 4 = 34$

$96 \div 8 = 12$



$8 \text{ tens} \div 8 = 1 \text{ ten}$

$16 \text{ ones} \div 8 = 2 \text{ ones}$





<p>Children should be given the opportunity to further develop understanding of division (sharing) to be used to find a fraction of a quantity or measure.</p>	
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