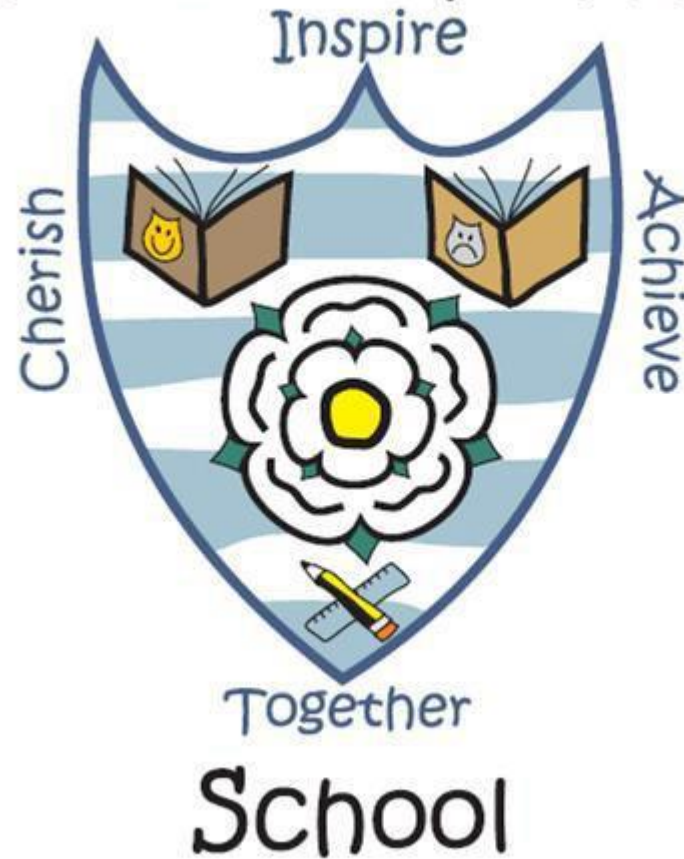
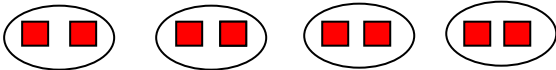
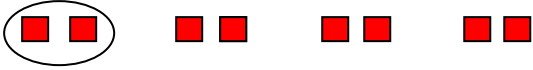
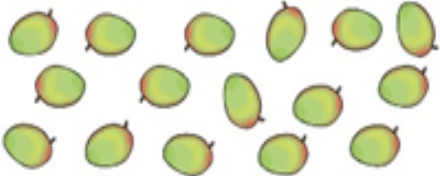
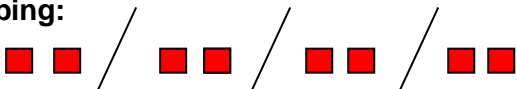
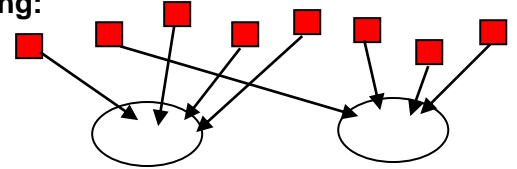



# Birkwood Primary

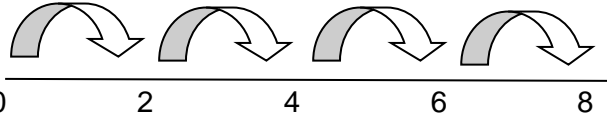
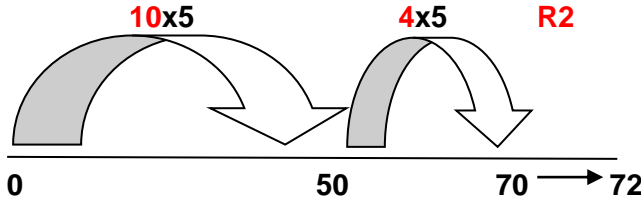


**Calculation Policy (Division)**  
**UPDATED SEPTEMBER 2017**

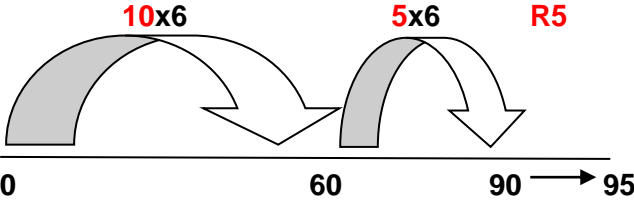

**Birkwood Primary School**  
**Calculation Policy (Division)**

Stage	Key Vocabulary	How it looks in practice	Resources	Mastery Examples
1	<ul style="list-style-type: none"> <li>-Sharing</li> <li>-Grouping</li> <li>-Sorting</li> <li>-Set</li> <li>-Pairs</li> <li>-Even</li> </ul>	<p><b>Practical activities with pictorial representations:</b></p> <p><b>Grouping:</b></p>  <p><i>How many groups have we created?</i></p> <p><b>Sharing:</b></p>  <p><i>How many in a group?</i></p>	<p>Counters, Small toys, Buttons, Cubes, Pegs.</p>	<p>Could you sort these mangoes into groups of 2?</p> 
2	<ul style="list-style-type: none"> <li>-Share</li> <li>-Equally</li> <li>-Pairs, threes</li> <li>-Divide</li> <li>-Divided into</li> <li>-Left over</li> <li>-Group</li> <li>-Set</li> <li>-Remainder</li> </ul>	<p><b>Pictorial representations:</b></p> <p><b>Grouping:</b></p>  <p><i>How many twos make up 8?</i></p> <p><b>Sharing:</b></p> 	<p>Concrete objects (If still required) Hoops for sharing.</p>	<p>John, Paul and Petra shared a bag of sweets. How many did they get each? How many would they have if they shared between 4 people?</p> 

**Birkwood Primary School**  
**Calculation Policy (Division)**

Stage	Key Vocabulary	How it looks in practice	Resources	Mastery Examples
3	<ul style="list-style-type: none"> <li>-Share</li> <li>-Equally</li> <li>-Pairs, threes</li> <li>-Divide</li> <li>-Divided into</li> <li>-Left over</li> <li>-Group</li> <li>-Set</li> <li>-Remainder</li> <li>-How many?</li> </ul>	<p><b>Number lines:</b> 8 divided by 2 = 4</p> <p style="text-align: center;"><b>1x2      2x2      3x2      4x2</b></p>  <p>0                  2                  4                  6                  8</p> <p><b>Arrays (Including remainders):</b></p> <p>10 divided by 4</p> <pre> * * * * * * * *   * * </pre> <p>2 groups, remainder 2.</p>	<p>Arrays (Link to multiplication) Number lines.</p>	<p>Which of these calculations is the odd one out?</p> <p>40 divided by 10</p> <p>16 divided by 4</p> <p>28 divided by 6</p> <p>20 divided by 5</p> <p>Explain your answer.</p>
4	<ul style="list-style-type: none"> <li>-Share</li> <li>-Equally</li> <li>-Pairs, threes</li> <li>-Divide</li> <li>-Divided into</li> <li>-Left over</li> <li>-Group</li> <li>-Set</li> <li>-Remainder</li> <li>-How many?</li> <li>-Divisible by</li> </ul>	<p><b>Number lines:</b></p> <p><b>Counting on: 72 divided by 5= 14 r2</b></p>  <p>0                          50                          70 → 72</p> <p><i>*At this stage, the children will be asked to make estimations first. They will use their times table knowledge to work up to the total.</i></p>	<p>Arrays, Multiplication squares, Number lines, Place value mats.</p>	<p>There are 64 children in year 4. They have to be put into teams of 8 for their sports day. How many teams can be made out of the year group?</p> <p>I have 62 cakes and 7 boxes. Each box holds 8 boxes. How many boxes can I fill?</p>

**Birkwood Primary School**  
**Calculation Policy (Division)**

Stage	Key Vocabulary	How it looks in practice	Resources	Mastery Examples
5	<ul style="list-style-type: none"> <li>-Share</li> <li>-Equally</li> <li>-Pairs, threes</li> <li>-Divide</li> <li>-Divided into</li> <li>-Left over</li> <li>-Group</li> <li>-Set</li> <li>-Remainder</li> <li>-How many?</li> <li>-Quotient</li> </ul>	<p><b>Counting on:</b> 95 divided by 6 = 18 r2</p>  <p><b>Chunking method:</b></p> $\begin{array}{r} 15 \text{ r}5 \\ 6 \overline{) 95} \\ \underline{60} \phantom{0} \\ 35 \phantom{0} \\ \underline{30} \phantom{0} \\ 5 \text{ (Remainder)} \end{array}$ <p> <math>\underline{60} \text{ (10x6)}</math>  <math>\underline{30} \text{ (6 x5)}</math>  <math>\underline{5} \text{ (Remainder)}</math> </p>	<p>Place value resources, Whiteboards, Maths books (CM squared)</p>	<p>A sweet shop packs their boiled sweets into packs of 9. They have 186 sweets to pack altogether.</p> <p>How many packs will they make?</p> <p>What will they do with the remainder?</p> 
6	<ul style="list-style-type: none"> <li>-Share</li> <li>-Equally</li> <li>-Pairs, threes</li> <li>-Divide</li> <li>-Divided into</li> <li>-Left over</li> <li>-Group</li> <li>-Set</li> <li>-Remainder</li> <li>-How many?</li> <li>-Quotient</li> <li>-Written method</li> <li>- Short division</li> <li>-Long division</li> </ul>	<p><b>Short division: HTU and ThHTU divided by U</b></p> <p>192 divided by 5=</p> $\begin{array}{r} 038 \text{ r}2 \\ 5 \overline{) 192} \\ \underline{15} \phantom{0} \\ 42 \phantom{0} \\ \underline{40} \phantom{0} \\ 2 \end{array}$ <p><b>Long division:</b></p> $\begin{array}{r} 13 \text{ r}15 \\ 17 \overline{) 256} \\ \underline{17} \phantom{0} \\ 86 \phantom{0} \\ \underline{85} \phantom{0} \\ 16 \phantom{0} \\ \underline{15} \phantom{0} \\ 1 \end{array}$ <p> <math>\underline{170} \text{ (10x17)}</math>  <math>\underline{66} \text{ (3 x 17)}</math>  <math>\underline{15} \text{ (Remainder)}</math> </p>	<p>Place value resources, Whiteboards, Maths books (CM squared)</p>	<p>It cost £165 for a group to visit the cinema. The tickets cost £15 each. How many people went to the cinema?</p> <p>A baker bakes 130 cakes. She puts them into boxes of 8. How many boxes will she fill?</p>

**Birkwood Primary School**  
**Calculation Policy (Division)**

Stage	Key Vocabulary	How it looks in practice	Resources	Mastery Examples
7	<ul style="list-style-type: none"> <li>-Share</li> <li>-Equally</li> <li>-Pairs, threes</li> <li>-Divide</li> <li>-Divided into</li> <li>-Left over</li> <li>-Group</li> <li>-Set</li> <li>-Remainder</li> <li>-How many?</li> <li>-Quotient</li> <li>-Written method</li> <li>- Short division</li> <li>-Long division</li> <li>-Decimals</li> </ul>	<p><b>Long and short division with decimals and expressing remainders as fractions or decimals.</b></p> $\begin{array}{r} 13 \\ 17 \overline{) 256} \end{array} \quad 15/17$ $\begin{array}{r} 170 \\ 66 \\ 51 \\ 15 \end{array}$ <p><b>Decimals:</b></p> $\begin{array}{r} 17.9 \\ 5 \overline{) 89.45} \end{array}$	Place value resources, Whiteboards, Maths books (CM squared)	<p>Choose two digits and arrange them to make 2 two-digit numbers, for example:</p> <p>If you choose 1 and 2, you can make 12 and 21. Now add your two-digit numbers together.</p> <p>Now add your single-digit numbers together. Divide your two-digit answer by your single-digit answer.</p> <p>Try this again using 2 different digits. What happens? Can you explain it?</p>



