

## Division

### up to 3-digit numbers by a single digit

Remember to;	Abstract																																																																																																																														
<ul style="list-style-type: none"> <li>• Write one digit per square</li> <li>• Write the number you are dividing by outside (3)</li> <li>• Write the number you are dividing inside (378)</li> <li>• Divide the first digit by the outside number (3 ÷ 3)</li> <li>• Write the answer on the top line (1)</li> <li>• Multiply the answer (the number on the top line) by the outside number (3)</li> <li>• Write that answer below (3)</li> <li>• Subtract that answer from the digit your divided (3-3)</li> <li>• Write the answer below</li> <li>• Bring down the next digit (7)</li> <li>• Repeat, starting with dividing the new number you have created below by the outside number</li> <li>• Repeat all of the steps as above until you reach the last digit of the number you are dividing.</li> </ul>	<p>Without remainders</p> <p><math>378 \div 3 = 126</math></p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td><td></td><td></td><td style="text-align: center;">✓ D</td><td style="text-align: center;">✓ M</td><td style="text-align: center;">✓ S</td><td style="text-align: center;">✓ B</td> </tr> <tr> <td></td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">6</td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">3</td><td style="border-left: 1px solid black; border-right: 1px solid black; text-align: center;">3</td><td style="border-right: 1px solid black; text-align: center;">7</td><td style="border-right: 1px solid black; text-align: center;">8</td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">-</td><td style="text-align: center;">3</td><td style="text-align: center;">↓</td><td style="text-align: center;"> </td><td></td><td></td><td></td> </tr> <tr> <td></td><td style="text-align: center;">0</td><td style="text-align: center;">7</td><td style="text-align: center;">↓</td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">-</td><td style="text-align: center;">6</td><td style="text-align: center;">↓</td><td style="text-align: center;"> </td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td style="text-align: center;">1</td><td style="text-align: center;">8</td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">-</td><td style="text-align: center;">1</td><td style="text-align: center;">8</td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td style="text-align: center;">0</td><td></td><td></td><td></td><td></td> </tr> </table> <p>With remainders</p> <p><math>456 \div 5 = 91 \text{ r } 1</math></p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td><td></td><td></td><td style="text-align: center;">✓ D</td><td style="text-align: center;">✓ M</td><td style="text-align: center;">✓ S</td><td style="text-align: center;">✓ B</td> </tr> <tr> <td></td><td style="text-align: center;">0</td><td style="text-align: center;">9</td><td style="text-align: center;">1</td><td style="text-align: center;">r</td><td style="text-align: center;">1</td><td></td> </tr> <tr> <td style="text-align: center;">5</td><td style="border-left: 1px solid black; border-right: 1px solid black; text-align: center;">4</td><td style="border-right: 1px solid black; text-align: center;">5</td><td style="border-right: 1px solid black; text-align: center;">6</td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">-</td><td style="text-align: center;">0</td><td style="text-align: center;">↓</td><td style="text-align: center;"> </td><td></td><td></td><td></td> </tr> <tr> <td></td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">↓</td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">-</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">↓</td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td style="text-align: center;">6</td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td style="text-align: center;">-</td><td style="text-align: center;">5</td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td style="text-align: center;">1</td><td></td><td></td><td></td><td></td> </tr> </table>				✓ D	✓ M	✓ S	✓ B		1	2	6				3	3	7	8				-	3	↓						0	7	↓				-	6	↓							1	8				-	1	8							0								✓ D	✓ M	✓ S	✓ B		0	9	1	r	1		5	4	5	6				-	0	↓						4	5	↓				-	4	5	↓						6							-	5						1				
			✓ D	✓ M	✓ S	✓ B																																																																																																																									
	1	2	6																																																																																																																												
3	3	7	8																																																																																																																												
-	3	↓																																																																																																																													
	0	7	↓																																																																																																																												
-	6	↓																																																																																																																													
		1	8																																																																																																																												
-	1	8																																																																																																																													
		0																																																																																																																													
			✓ D	✓ M	✓ S	✓ B																																																																																																																									
	0	9	1	r	1																																																																																																																										
5	4	5	6																																																																																																																												
-	0	↓																																																																																																																													
	4	5	↓																																																																																																																												
-	4	5	↓																																																																																																																												
		6																																																																																																																													
		-	5																																																																																																																												
		1																																																																																																																													
<p>Children working within band 4 should be secure with the written method for division to allow them to use the abstract representation shown opposite.</p>																																																																																																																															