





	National Curriculum Statement	All students																	
		Fluency	Reasoning	Problem Solving															
Decimals	Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	<ul style="list-style-type: none"> Complete the table below: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Starting number</th> <th>÷ 10</th> <th>÷ 100</th> </tr> </thead> <tbody> <tr> <td>34</td> <td></td> <td></td> </tr> <tr> <td>57</td> <td></td> <td></td> </tr> <tr> <td>60</td> <td></td> <td></td> </tr> <tr> <td>7</td> <td></td> <td></td> </tr> </tbody> </table> Divide  by 10 Complete the calculations <ul style="list-style-type: none"> ○ $42 \div 10 =$ ○ $42 \div 100 =$ ○ $9 \div 10 =$ ○ $9 \div 100 =$ <p>What do you notice?</p> 	Starting number	÷ 10	÷ 100	34			57			60			7			<ul style="list-style-type: none"> I divide a number by 100 and the answer is 0.5. What number did I start with? Prove how you know True or False A two digit number divided by 10 always gives an answer with one decimal place. E.g. $52 \div 10 = 5.2$ Prove it. Jessie and Tammy are dividing numbers by 10 and 100. They start with the same 1 digit number. <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0; text-align: center;"> My number has 0 ones and 4 tenths </div>   <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0; text-align: center;"> My number has 0 ones, 0 tenths and 4 hundredths </div> <p>What number did they start with? Prove it.</p> 	<ul style="list-style-type: none"> Katya has multiplied a number by 100. Her answer is between 40 and 45. What number could she have multiplied? How many possibilities can you find? Use the number cards below to fill in the missing digits. <p> $\square 0 \div 10 = \square$ $\square .4 \times 10 = 3\square$ $\square 8\square \div 100 = 1\square 6$ 5. $\square 2 \times 100 = \square 7\square$ </p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; margin: 5px;">9</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">7</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">3</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">2</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">1</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">8</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">4</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">9</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">5</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">6</div> </div>
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Decimals	Round decimals with one decimal place to the nearest whole number.	<ul style="list-style-type: none"> Round the following numbers to the nearest whole number: 3.2 = 4.7 = 25.5 = Write all the decimals with one decimal place that round to 32 to the nearest whole number. Sort the numbers below into the table rounding each of them to the nearest whole number. <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">23.1</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">23.2</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">24.4</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">23.5</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">23.4</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">24.3</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">23.9</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">22.8</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">22.5</div> </div> <table border="1" style="margin-top: 10px; width: 100%;"> <thead> <tr> <th style="width: 50%;">Rounds to 23</th> <th style="width: 50%;">Rounds to 24</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> </tr> </tbody> </table>	Rounds to 23	Rounds to 24			<ul style="list-style-type: none"> Which decimals below round to 4 when rounded to the nearest whole number? 4.2, 3.8, 4.5, 3.5, 4.7 Explain your reasoning. Two numbers with one decimal place both round to 23 The numbers add up to 46 What could the two numbers be? Explain your thinking. 	<ul style="list-style-type: none"> Roll two dice. Using the numbers make two numbers with one decimal place. Round the numbers to the nearest whole number. How many combinations of the two dice can you find that would round to the same whole number?  Using the digit cards below, how many numbers can you make with one decimal place that would round to 45. You can only use each card once per number. <div style="display: flex; justify-content: center; gap: 10px; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">3</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">4</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">4</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">5</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px;">6</div> </div> <p>Can you make more or less numbers that round to 46?</p> <p>If you were given this number card:</p> <div style="text-align: center; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; display: inline-block;">7</div> </div> <p>How many numbers could you make that round to 47?</p>
Rounds to 23	Rounds to 24							