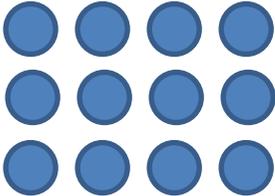


	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
<b>Multiplication and Division</b>	<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p>	<ul style="list-style-type: none"> <li>Solve:            <math>3 \times 4 =</math>  <math>4 \times 3 =</math>  <math>12 \div 3 =</math>  <math>24 \div 8 =</math> </li> <li>Fill in the boxes:            <math>3 \times \square = 21</math>  <math>\square \times 8 = 32</math>  <math>40 \div \square = 8</math> </li> <li>Shakira buys 8 boxes of cupcakes. There are 4 cupcakes in each box. How many cupcakes does she buy altogether?</li> </ul>	<ul style="list-style-type: none"> <li>Use the array to complete the number sentences below:              <math>3 \times \square = \square</math>  <math>\square \times 3 = \square</math>  <math>\square \div 3 = \square</math>  <math>\square \div \square = 3</math> </li> <li>What is wrong with this division sentence?            <math>4 \div 10 = 40</math>  Can you correct it?         </li> </ul>	<ul style="list-style-type: none"> <li>Fill in the boxes below using 8 <b>different</b> whole numbers.             <math>\times</math>  <math>= 24</math>   <math>\times</math>  <math>= 24</math>   <math>\times</math>  <math>= 24</math>   <math>\times</math>  <math>= 24</math> </li> <li>Mia has 17 pounds. She wants to buy some cakes and chocolates. Cakes cost £3 and chocolates cost £4. How many different combinations of cakes and chocolates could she buy?</li> </ul>

	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Multiplication and Division	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	<ul style="list-style-type: none"> <li>Calculate: <math>3 \times 4 = 4 \times 7 = 8 \times 3 =</math></li> <li>If I know <math>3 \times 8 = 24</math>. What other multiplication and division facts do I know?</li> <li>Fill in the gaps <math>3 \times \underline{\quad} = 24</math> <math>\underline{\quad} = 56 \div 8</math> <math>6 \times 4 = 8 \times \underline{\quad}</math></li> </ul>	<ul style="list-style-type: none"> <li>Tom says 'I can use my 4 times table to help me work out my 8 times table'. Is he correct? Convince me.</li> <li>What pair of numbers could be written in the boxes? <math>\square \times \square = 24</math></li> <li>Start this rhythm, clap, clap, click, clap, clap, click. </li> </ul> <p>Carry on the rhythm, what will you be doing on the 15<sup>th</sup> beat? How do you know? What will you be doing on the 20<sup>th</sup> beat? Explain and prove your answer.</p>	<ul style="list-style-type: none"> <li>A group of aliens live on Planet Xert. Tinions have three legs, Quinions have four legs. The group has 22 legs altogether. How many Tinions and Quinions might there be? Is there more than one solution?</li> <li>Sally has baked some buns. She counted her buns in 4's and had 3 left over. She counted them in fives and had four left over. How many buns has Sally got?</li> <li>Can you sort the cards below so that they would follow round in a loop? The number at the top is the answer, then follow the instruction at the bottom to get the next answer.</li> </ul> <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; margin: 5px;">18 -3</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">21 +3</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">15 +3</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">8 -5</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">5 X2</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">10 X2</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">20 +1</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">4 X2</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">14 -2</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">12 +3</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">3 X6</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">7 X2</div> </div>

	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Multiplication and Division	<p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.</p>	<ul style="list-style-type: none"> <li>Cards come in packs of 4. How many packs do I need to buy to get 32 cards? Show your working in a number sentence.</li> <li>Use the three numbers below to make 4 multiplication and division sentences.                             <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; background-color: #f4a460;">12</div> <div style="border: 1px solid black; padding: 5px; background-color: #66b3e0;">4</div> <div style="border: 1px solid black; padding: 5px; background-color: #90c080;">3</div> </div> </li> <li>Harry bought 5 bags of sweets. There are 8 sweets in each. How many sweets are there altogether? Show your answer in a number sentence.</li> </ul>	<ul style="list-style-type: none"> <li>Andy says 'I can use my three times table to work out <math>180 \div 3</math>'. Explain what Andy could do to work out this calculation.</li> <li>Which of the problems below can be solved using <math>8 \div 2</math>?                             <ul style="list-style-type: none"> <li>-There are 2 bags of sweets with 8 sweets in each. How many altogether?</li> <li>-A rollercoaster carriage holds 2 people, how many carriages are needed for 8 people?</li> <li>-I have 8 crayons and share them out so people have 2 crayons each. How many people did I share them between?</li> <li>-I have 8 buns and I give two to my brother. How many do I have left?</li> </ul> </li> <li>Explain your reasoning.</li> <li>You are asked to work out <math>54 \times 3</math>. Would you need to know <math>3 \times 5</math> to solve it? Convince me.</li> </ul>	<ul style="list-style-type: none"> <li>Holly bought a chocolate bar costing 55p. She paid using 8 coins which were either 5p's or 10p's. How many different ways could she have paid? Write down the multiplication sentences you have used to solve the problem.</li> <li>Use the numbers 1-8 to fill in the circles below.                             <div style="text-align: center; margin-top: 10px;"> <math>\textcircled{?} \div \textcircled{?} = \textcircled{?}</math>  <math>\textcircled{?} \times \textcircled{?}</math>  <math>\textcircled{?} + \textcircled{?} = \textcircled{?}</math> </div> </li> <li>Solve the problem and write down all the steps you went through in number sentences: I think of a number, I divide my number by 3, add 4 and times by 2. My answer is 20. What number did I start with?</li> </ul>

	National Curriculum Statement	All Students																																			
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<b>Multiplication and Division</b>	<p>Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</p>	<ul style="list-style-type: none"> <li>Use place value counters to multiply a two digit number and one digit number together.</li> </ul> <div style="text-align: center;"> <math>23 \times 4</math>  <table border="1" style="margin: auto;"> <tr><td></td><td>20</td><td>3</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table> <p><math>23 \times 4 =</math></p> <p>Set up a grid with 4 rows as we are finding 4 lots of 23.            Make 23 in each row using the place value counters.            Add up each column, starting with the ones to find out your answer.</p> </div> <ul style="list-style-type: none"> <li><math>3 \times 5 =</math> Complete this statement and use this to solve the multiplication below:  <math>3 \times 50 =</math>  <math>30 \times 5 =</math>  <math>5 \times 3 =</math></li> <li>Solve:</li> </ul> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <table border="1" style="border-collapse: collapse;"> <tr><td>2</td><td>0</td></tr> <tr><td>x</td><td>8</td></tr> <tr><td colspan="2" style="border-top: 1px solid black;"></td></tr> </table> <table border="1" style="border-collapse: collapse;"> <tr><td>3</td><td>8</td></tr> <tr><td>x</td><td>4</td></tr> <tr><td colspan="2" style="border-top: 1px solid black;"></td></tr> </table> </div>		20	3													2	0	x	8			3	8	x	4			<ul style="list-style-type: none"> <li><b>Always, sometimes, never</b> A two digit number multiplied by a one digit number makes a two digit answer.</li> <li>Fill in the missing boxes.</li> </ul> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr><td style="background-color: black;"></td><td>10</td><td></td></tr> <tr><td>5</td><td></td><td>40</td></tr> </table> <p>Explain your answer.</p> <ul style="list-style-type: none"> <li>Hassan is calculating <math>32 \times 5</math>. He writes his answer 15010. Can you work out Hassan's mistake and write an explanation of how he could do it correctly?</li> </ul>		10		5		40	<ul style="list-style-type: none"> <li>Using the digit cards in the multiplication below how close can you get to 100?</li> </ul> <div style="text-align: center; margin: 10px 0;"> <table style="display: inline-table; border: 1px solid black; padding: 5px;">2</table> <table style="display: inline-table; border: 1px solid black; padding: 5px;">3</table> <table style="display: inline-table; border: 1px solid black; padding: 5px;">4</table> </div> <div style="text-align: center; margin: 10px 0;"> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <span style="font-size: 2em; margin: 0 10px;">×</span> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <span style="font-size: 2em; margin: 0 10px;">=</span> </div> <ul style="list-style-type: none"> <li>Fill in the missing digits in the multiplication below:</li> </ul> <div style="text-align: center; margin: 10px 0;"> <table style="display: inline-table; border: 1px solid black; padding: 5px;">2</table> <table style="display: inline-table; border: 1px solid black; padding: 5px;">3</table> </div> <div style="text-align: center; margin: 10px 0;"> <span style="font-size: 2em;">×</span> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> </div> <hr style="width: 100%; border: 0.5px solid black;"/> <div style="text-align: center; margin: 10px 0;"> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <table style="display: inline-table; border: 1px solid black; padding: 5px;">4</table> </div> <div style="text-align: center; margin: 10px 0;"> <span style="font-size: 2em;">+</span> <table style="display: inline-table; border: 1px solid black; padding: 5px;">1</table> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <table style="display: inline-table; border: 1px solid black; padding: 5px;">0</table> </div> <hr style="width: 100%; border: 0.5px solid black;"/> <div style="text-align: center; margin: 10px 0;"> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> <table style="display: inline-table; border: 1px solid black; width: 30px; height: 30px;"></table> </div>
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	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
<b>Multiplication and Division</b>	<p>Solve problems including missing number problems involving multiplication and division, positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objectives.</p>	<ul style="list-style-type: none"> <li>Fill in the boxes:               <math display="block">5 \times \square = 15</math> <math display="block">\square \times 4 = 32</math> <math display="block">48 \div \square = 8</math> </li> <li>Jemima has a toy car measuring 8cm. Aisha has a toy train that is 8 times as long as the car. How long is the train?</li> <li>Kainat is making buns. For every 40g of flour she needs 1 egg.               <p>If she uses 5 eggs, how many grams of flour does she use? If she uses 400g of flour, how many eggs does she need?</p> </li> </ul>	<ul style="list-style-type: none"> <li>12 buns are shared between 3 boys. 16 buns are shared between 4 girls. Who gets more buns, boys or girls? Explain your answer.</li> <li>For every 3 boys in class there are 2 girls. Which of the combinations of boys and girls could be correct?               <p>18 boys and 12 girls 15 boys and 10 girls 21 boys and 9 girls 12 boys and 8 girls</p> <p>Show your thinking using a picture.</p> </li> <li>How many different combinations of numbers can you find that would fit in the empty boxes?               <math display="block">5 \times \square = 10 \times \square</math> </li> </ul>	<ul style="list-style-type: none"> <li>Use the numbers 1 - 8 to fill the circles below:               <math display="block">\textcircled{?} \div \textcircled{?} = \textcircled{?}</math> <math display="block">\begin{array}{r} \textcircled{?} \\ - \textcircled{?} \\ \hline \end{array} \quad \times \quad \begin{array}{r} \textcircled{?} \\ \textcircled{?} \\ \hline \end{array}</math> <math display="block">\textcircled{?} + \textcircled{?} = \textcircled{?}</math> </li> <li>Lottie is counting the number of legs in her house. People and cats live in Lottie's house. People have 2 legs, cats have 4 legs. If there are 26 legs altogether, how many cats and people might there be?</li> <li>William has 3 t-shirts and 4 pairs of trousers, how many different outfits can he make?</li> </ul>