

Tigers and Crocodiles Maths 8 Multiplication and Division Links

<p>Task 1 <u>Multiplication Refresher</u></p> <p><u>Warm up</u> Find your number square count up the hill from 30 to 60. Count all the way down the hill again. Find these numbers quickly on your 100square 32,36 41,45,49,56,59</p> <p><u>Lesson</u> 3 lots of 3 can be worked out like this $3 + 3 + 3 = 9$ (repeated addition) OR we can use the multiplication sign like this $3 \times 3 = 9$ Let's have some multiplication practise, you can use your counters to help you. Have a go at these:</p> <p>Good work!</p>	<p>$2 \times 4 =$ $3 \times 2 =$ $1 \times 5 =$ $5 \times 3 =$ $3 \times 4 =$ $4 \times 5 =$ $6 \times 2 =$ $5 \times 5 =$ $2 \times 6 =$ $3 \times 7 =$</p>																																																	
<p>Task 2 <u>Noticing patterns with multiplication sums.</u></p> <p><u>Warm up.</u> Find your number square, count up the hill from 60 to 80. Count all the way down the hill again. Quickly find: 62, 64, 68, 71, 74, 76, 79,</p> <p><u>Lesson</u> Use your counters and count them into groups to work out this sum $4 \times 3 =$ What was your answer? Yes 12 Now move the same counters into groups to work out this sum $3 \times 4 =$ What was the answer this time? Oh yes 12 again. We can organise the counters into rows and columns, called arrays.</p> <p>4×3 looks like this</p> <table style="margin-left: 100px;"> <tr><td></td><td>O</td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td>3</td><td>O</td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td></td><td>O</td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>4</td><td></td></tr> </table> <p style="margin-left: 100px;">4 columns and 3 in each column</p> <p>What will 3×4 look like?</p> <table style="margin-left: 100px;"> <tr><td></td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td>4</td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td></td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td></td><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td></td><td></td><td></td><td>3</td><td></td></tr> </table> <p style="margin-left: 100px;">3 columns and 4 in each column</p> <p>Now draw some arrays for these:</p> <p>What have you found out? Yes with multiplication whichever way around you multiply your two numbers the answer will be the same. Well done, clever learning!</p>		O	O	O	O		3	O	O	O	O			O	O	O	O						4			O	O	O		4	O	O	O			O	O	O			O	O	O					3		<p>$3 \times 5 =$ $5 \times 3 =$ $4 \times 2 =$ $2 \times 4 =$ $3 \times 6 =$ $6 \times 3 =$ $7 \times 2 =$ $2 \times 7 =$ $4 \times 6 =$ $6 \times 4 =$ $5 \times 6 =$ $6 \times 5 =$</p>
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<p>Task 3 <u>Lets look at the multiplication and division link</u></p> <p><u>Warm up</u> : Find your number square. Count up the hill from 80 to 100 Count all the way down again. Quickly find 81,84,87,89, 91 94,97</p> <p><u>Lesson</u> :Use your counters again We know that $4 \times 3 = 12$ and $3 \times 4 = 12$. Let's start with 12 and share it out again. What is $12 \div 3$? Oh yes the answer is 4. What do you see? That's right Clever clogs, 3 groups of 4 make 12 and 12 shared into 3 makes 4 in each group.</p> <table style="margin-left: 100px;"> <tr><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td>O</td><td>O</td><td>O</td><td></td></tr> <tr><td>O</td><td>O</td><td>O</td><td></td></tr> </table> <p style="margin-left: 100px;">So we can write $3 \times 4 = 12$ and $12 \div 3 = 4$</p>	O	O	O		O	O	O		O	O	O		O	O	O		<p><u>Draw arrays for these:</u></p> <p>$5 \times 3 =$ $15 \div 3 =$ $4 \times 2 =$ $8 \div 4 =$ $3 \times 6 =$ $18 \div 3 =$</p>																																	
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<p><u>Task 4 More Arrays</u></p> <p><u>Warm up</u> : Find your number square. Count up the hill from 90 to 100 then over the hill to 120. Then come back down again.</p> <p><u>Lesson</u> :</p> <p>Let's try some more of these: Draw arrays to go with each of these:</p> <p>Superstars! You are getting good at these!</p>	<p><u>$6 \times 4 =$</u> <u>$24 \div 4 =$</u></p> <p><u>$7 \times 2 =$</u> <u>$14 \div 2 =$</u></p> <p><u>$6 \times 5 =$</u> <u>$30 \div 5 =$</u></p> <p><u>Choose 2</u> <u>more</u> <u>pairs of</u> <u>your own.</u></p>
<p><u>Task 5 Problem solving</u></p> <p><u>Warm up</u>: Write the numbers from 90 to 110</p> <p><u>Lesson</u> Have a go at these. Write the sum for each.</p> <p>Fred has 8 children and 24 sweets. How many sweets will they each get?</p> <p>Donna has 25 fish and 5 penguins. How many fish will each have for supper?</p> <p>There are 6 hungry dogs and 12 bones. How many will they each get?</p> <p>There are 30 wriggly worms and 6 hungry baby birds. How many will each get?</p> <p>There are 6 clucking hens and 18 grains of wheat. How many will each get?</p> <p>Mrs Rix has 4 cute rabbits and 16 carrots. How many carrots will each rabbit get?</p> <p><u>Well done children . You have worked hard this week!</u></p>	