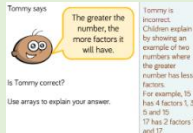
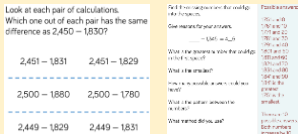
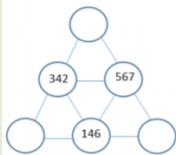
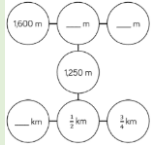


# Y4 Maths Medium Term Plan 2020-21: Autumn Cycle 1

Back to School	Addition	Multiplication: Tables	Subtraction	Multiply & Divide (1 & 10 & 100)	Count in Multiples	Contingency weeks to give space for longer than a week for some areas or single session recall of taught topics.	Back to School	Multiplication: Tables
Place Value: read, write, order and compare Th.H.T.O.		Multiplication: Factors & Factor Pairs	Inverse (+/-)	Measure: Conversion	Shape: classify and compare properties		Decimals ordering and comparing decimals & integers	Division

Week	Arithmetic	Reasoning																				
1	<p>Back to school</p>	<p><b>Place Value</b></p> <p><b>Recall from Y3:</b></p> <ol style="list-style-type: none"> <li>1. Read and write numbers up to 1000 in numerals and in words</li> <li>2. Recognise the place value of each digit in a three-digit number (HTO)</li> <li>3. Compare and order numbers up to 1000</li> </ol> <p><b>One Star:</b> L: Can I use <b>place value</b> to compare 2-digit numbers? Use <math>&lt; = &gt;</math> to compare the 2-digit numbers. 45 <u>   </u> 54</p> <p><b>Two Star:</b> L: Can I read and write 3-digit numbers using <b>partitioning</b>? <math>400 + 70 + 3 = \underline{\quad\quad}</math>, <math>894 = \text{H: } \underline{\quad} + \text{T: } \underline{\quad} + \text{O: } \underline{\quad}</math></p> <p><b>Expected Standard:</b> Can I recognise <b>place value</b> in a four-digit number? (ThHTO) What is the value of the underlined digit? <u>4</u>502</p> <p><b>Stretch:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; font-size: 8px;"> <p>1) Sort the numbers into the correct place on the table.</p> <p>3495    6274    1093    4106    2871    8264    2779</p> <p>A number can be in more than one column!</p> <table border="1" style="width: 100%; text-align: center; font-size: 6px;"> <tr> <td>My thousands digit is less than 4</td> <td>My hundreds digit is odd</td> <td>My tens digit is greater than 5</td> <td>I am an even number</td> </tr> <tr> <td>3495</td> <td></td> <td>3495</td> <td></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; font-size: 8px;"> <p>Use the clues to find the missing digits.</p> <table style="width: 100%; text-align: center;"> <tr> <td><input style="width: 20px; height: 20px;" type="text"/></td> <td><input style="width: 20px; height: 20px;" type="text"/></td> <td><input style="width: 20px; height: 20px;" type="text"/></td> <td><input style="width: 20px; height: 20px;" type="text"/></td> </tr> </table> <p>The thousands and tens digit multiply together to make 36</p> </div> <div style="border: 1px solid black; padding: 5px; font-size: 8px;"> <p>The hundreds and tens digit have a digit total of 9</p> <p>The ones digit is double the thousands digit.</p> <p>The whole number has a digit total of 21</p> </div> </div>	My thousands digit is less than 4	My hundreds digit is odd	My tens digit is greater than 5	I am an even number	3495		3495		<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>								
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2	<p><b>Addition</b></p> <p><b>Recall from Y3:</b> Add numbers with up to three digits, using formal written (column) methods</p> <p><b>One Star:</b> L: Can I use an <b>efficient</b> method to add 2-digit numbers? <math>23 + 12 =</math></p> <p><b>Two Star:</b> Can I use the <b>column method</b> to add 3-digit numbers using?</p> <p><b>Expected Standard:</b> L: Can I use the column method (with up to 4 digits) with <b>regrouping</b>?</p> <p><b>Stretch:</b></p> <table border="1" style="display: inline-table; margin-right: 10px;"> <tr><td></td><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td></td><td>4</td><td>—</td><td>6</td><td>—</td></tr> <tr><td>+</td><td>2</td><td>5</td><td>—</td><td>1</td></tr> <tr><td></td><td>—</td><td>7</td><td>8</td><td>9</td></tr> </table> <div style="font-size: 8px;"> <p>Rosie adds 2 numbers together that total 8,664</p> <p>Both numbers have 4 digits.</p> <p>All the digits in both numbers are even.</p> <p>What could the numbers be? Prove it. How many ways can you find?</p> </div>			Th	H	T	O		4	—	6	—	+	2	5	—	1		—	7	8	9
	Th	H	T	O																		
	4	—	6	—																		
+	2	5	—	1																		
	—	7	8	9																		
3	<p><b>Multiplication Tables</b></p> <p><b>Recall from Y3:</b> Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p> <p><b>One Star:</b> L: Can I recall <b>multiplication</b> facts using <math>\times 2</math>, <math>\times 5</math> and <math>\times 10</math>? <math>7 \times 5 = \underline{\quad}</math>, <math>8 \times 10 = \underline{\quad}</math></p>	<p><b>Multiplication: Factors &amp; Commutativity</b></p> <p><b>Recall from Y3:</b> N/A</p> <p><b>One Star:</b> Can I find the missing <b>factor</b>? Find the missing factor to complete the number sentence: <math>2 \times \underline{\quad} = 8</math></p> <p><b>Two Star:</b> L: Can I identify <b>factor pairs</b>?</p>																				

# Y4 Maths Medium Term Plan 2020-21: Autumn Cycle 1

	<p><b>Two Star:</b> L: Can I recall <b>multiplication</b> and <b>division</b> facts up to <math>12 \times 6</math>? <math>7 \times 3 = \underline{\quad}</math>, <math>8 \times 4 = \underline{\quad}</math></p> <p><b>Expected Standard:</b> L: Can I recall <b>multiplication</b> and <b>division</b> facts up to <math>12 \times 12</math>? <math>6 \times 9 = \underline{\quad}</math> so <math>\underline{\quad} \div 9 = 6</math></p> <p><b>Stretch:</b></p>	<p>Identify the factor pair to complete the number sentence: <math>\underline{\quad} \times \underline{\quad} = 15</math></p> <p><b>Expected Standard:</b> Can I recognise and use <b>factor pairs</b> and <b>commutativity</b>?</p> <p>Q: <math>3 \times 5 = 15 = 5 \times \underline{\quad} = \underline{\quad}</math>     <math>2 \times \underline{\quad} = 10 = \underline{\quad} \times \underline{\quad} = \underline{\quad}</math></p> <p><b>Stretch:</b></p> 									
<p><b>4</b></p>	<p style="text-align: center;"><b>Subtraction</b></p> <p><b>Recall from Y3:</b> Subtract numbers with up to three digits, using formal written (column) methods</p> <p><b>One Star:</b> L: Can I use an <b>efficient</b> method to subtract 1 and 2-digit numbers? <math>23 - 12 = \underline{\quad}</math></p> <p><b>Two Star:</b> L: Can I use column <b>subtraction</b> with 3-digit numbers? <math>453 - 221</math></p> <p><b>Expected Standard:</b> L: Can I use column <b>subtraction</b> with <b>regrouping</b>? E.g. <math>383 - 105</math></p> <p><b>Stretch:</b></p> 	<p style="text-align: center;"><b>Inverse Operations: Addition &amp; Subtraction</b></p> <p><b>Recall from Y3:</b> Use inverse operations (+/-) to check answers</p> <p><b>One Star:</b> L: Can I complete the <b>inverse</b> number sentences? <math>9 + 3 = \underline{\quad}</math>, <math>12 - 9 = \underline{\quad}</math></p> <p><b>Two Star:</b> L: Can I use <b>inverse</b> operations? Using the digits complete the inverse number sentences: 9, 17, 8, <math>\underline{\quad} + \underline{\quad} = \underline{\quad}</math>, <math>\underline{\quad} - \underline{\quad} = \underline{\quad}</math></p> <p><b>Expected Standard:</b> L: Can I use <b>inverse</b> operations (+/-) to check answers to calculations? Use addition to check if this sentence is correct: <math>25 - 8 = 17</math></p> <p><b>Stretch:</b> If we know <math>3,450 + 4,520 = 7,970</math>, what other addition and subtraction facts do we know?</p> <p style="text-align: center;"> <math>\underline{\quad} + \underline{\quad} = \underline{\quad}</math>  <math>\underline{\quad} - \underline{\quad} = \underline{\quad}</math>  <math>\underline{\quad} - \underline{\quad} = \underline{\quad}</math> </p> 									
<p><b>5</b></p>	<p style="text-align: center;"><b>Multiplication by 1, 10 &amp; 100</b></p> <p><b>Recall from Y3:</b> Multiply and divide up to three-digit numbers by one, ten and a hundred</p> <p><b>One Star:</b> L: Can I <b>multiply</b> 1 and 2-digit numbers by one and ten? <math>3 \times 10 = \underline{\quad}</math>, <math>27 \times 10 = \underline{\quad}</math>, <math>4 \times 1 = \underline{\quad}</math>, <math>19 \times 1 = \underline{\quad}</math></p> <p><b>Two Star:</b> L: Can I <b>multiply</b> and <b>divide</b> 2 and 3-digit numbers by one and ten? <math>23 \times 10 = \underline{\quad}</math>, <math>40 \div 10 = \underline{\quad}</math>, <math>34 \times 1 = \underline{\quad}</math>, <math>23 \div 1 = \underline{\quad}</math></p> <p><b>Expected Standard:</b> L: Can I <b>multiply</b> and <b>divide</b> up to 4-digit numbers by one, ten and a hundred? <math>203 \times 100 = \underline{\quad}</math>, <math>400 \div 100 = \underline{\quad}</math>, <math>394 \times 1 = \underline{\quad}</math>, <math>720 \div 10 = \underline{\quad}</math></p> <p><b>Stretch:</b> Use &lt;, &gt; or = to make the statements correct.</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><math>75 \times 100</math></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><math>75 \times 10</math></td> </tr> <tr> <td style="text-align: center;"><math>39 \times 100</math></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><math>39 \times 10 \times 10</math></td> </tr> <tr> <td style="text-align: center;"><math>460 \times 10</math></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><math>100 \times 47</math></td> </tr> </table>	$75 \times 100$	<input type="radio"/>	$75 \times 10$	$39 \times 100$	<input type="radio"/>	$39 \times 10 \times 10$	$460 \times 10$	<input type="radio"/>	$100 \times 47$	<p style="text-align: center;"><b>Measure: Length &amp; Mass</b></p> <p><b>Recall from Y3:</b> Measure, compare, add and subtract lengths (m/cm/mm), mass (kg/g), volume/capacity (l/ml)</p> <p><b>One Star:</b> L: Can I calculate units of measure including <b>length</b> (cm &amp; mm) and <b>mass</b> (g &amp; kg)? Use the scale to calculate length and mass.</p> <p><b>Two Star:</b> L: Can I calculate and convert units of measure including <b>length</b> and <b>mass</b>? Convert the units of length and mass: <math>20\text{cm} = \underline{\quad}\text{mm}</math>   <math>0.8\text{kg} = \underline{\quad}\text{g}</math></p> <p><b>Expected Standard:</b> L: Can I convert and compare units of measure including <b>length</b> and <b>mass</b>? Use <math>&lt; &gt; =</math> to compare the units of lengths and mass: <math>100\text{g} \underline{\quad} 1\text{kg}</math>   <math>50\text{mm} \underline{\quad} 2\text{cm}</math></p> <p><b>Stretch:</b> Complete the missing measurements so that each line of three gives a total distance of 2 km.</p> 
$75 \times 100$	<input type="radio"/>	$75 \times 10$									
$39 \times 100$	<input type="radio"/>	$39 \times 10 \times 10$									
$460 \times 10$	<input type="radio"/>	$100 \times 47$									

# Y4 Maths Medium Term Plan 2020-21: Autumn Cycle 1

<p style="text-align: center;"><b>6</b></p>	<p style="text-align: center;"><b>Place Value: Count in Multiples</b></p> <p><b>Recall from Y3:</b> Count from 0 in multiples of 4, 8, 50 and 100.</p> <p><b>One Star:</b> L: Can I count up in <b>multiples</b> of 2 and 5? Count up in 2's from:</p> <table border="1" style="width: 100px; border-collapse: collapse;"> <tr><td>0</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <p><b>Two Star:</b> L: Can I count up in <b>multiples</b> of 3, 4 and 6? Count up in 4's from:</p> <table border="1" style="width: 100px; border-collapse: collapse;"> <tr><td>0</td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <p><b>Expected Standard:</b> L: Can I count up in <b>multiples</b> of 7, 9, 25 and 1000? Count up in 7's from:</p> <table border="1" style="width: 100px; border-collapse: collapse;"> <tr><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p><b>Stretch:</b> Ron is counting down in 25s from 790. Will he say 725? Explain your answer.</p> </div> <div style="width: 45%; font-size: 0.8em;"> <p><small>Whitney is counting in 25s and 1000s. She says:</small></p> <ul style="list-style-type: none"> <li>Multiples of 1000 are also multiples of 25</li> <li>Multiples of 25 are therefore multiples of 1000</li> </ul> <p><small>Do you agree with Whitney? Explain why.</small></p> </div> <div style="width: 45%; font-size: 0.8em;"> <p><small>I don't agree. Multiples of 1000 are multiples of 25 because 25 goes into 1000 exactly, but not all multiples of 25 are multiples of 1000 e.g. 1075</small></p> </div> </div>	0	2															0	4																7															<p style="text-align: center;"><b>Shape</b></p> <p><b>Recall from Y3:</b> Recognise angles as a property of shape</p> <p><b>One Star:</b> L: Can I identify <b>sides</b> and <b>vertices</b>? How many sides and vertices does this shape have?</p> <p><b>Two Star:</b> L: Can I classify <b>triangles, quadrilaterals, pentagons</b> and <b>hexagons</b>? A triangle has 3 sides and 3 vertices. A quadrilateral has 4 sides and 4 vertices. A pentagon has 5 sides and vertices. Classify this shape: _____</p> <p><b>Expected Standard:</b> L: Can classify <b>regular</b> and <b>irregular</b> 2D shapes (using their properties)? Read the information about the properties of 2D shapes and (using a ruler) connect the name to the correct 2D shape.</p> <p><b>Stretch:</b> Draw an irregular quadrilateral with two parallel lines.</p>
0	2																																																	
0	4																																																	
	7																																																	
<p style="text-align: center;"><b>7</b></p>	<p><b>Consolidation Weeks</b></p>																																																	
<p style="text-align: center;"><b>8</b></p>																																																		
<p style="text-align: center;"><b>9</b></p>	<p><b>Back to school</b></p>	<p style="text-align: center;"><b>Place Value: Decimals</b></p> <p><b>Recall from Y3:</b> Compare and order numbers up to 1000</p> <p><b>One Star:</b> Can I order <b>integers</b> with the same number of digits? Put the integers in <b>ascending</b> order: 17, 77, 16, 76, 67</p> <p><b>Two Star:</b> L: Can I order and compare <b>decimals</b> numbers (with the same number of digits up to two decimal places)? Use <math>&lt; = &gt;</math> to compare the decimals: 0.5 ___ 0.7, 0.05 ___ 0.11, 0.75 ___ 0.59</p> <p><b>Expected Standard:</b> L: Can I order and compare <b>integers</b> and <b>decimals</b> numbers with the same number of digits (up to two decimal places)? Put the decimals in <b>ascending</b> order: 0.23, 0.32, 0.03, 0.22, 0.02</p> <p><b>Stretch:</b></p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%; border: 1px solid orange; padding: 5px;"> <math>0.09 &lt; 0.99 &lt; 10.01 &lt; 1.35 &lt; 9.09</math> </div> <div style="width: 30%; font-size: 0.8em;"> <p>A number with one decimal place rounded to the nearest whole number is 45</p> <p>What could the number be?</p> </div> <div style="width: 30%; font-size: 0.8em;"> <p>The number could be:</p> <p>44.5, 44.6, 44.7, 44.8, 44.9, 45.1, 45.2, 45.3 or 45.4</p> </div> </div> <div style="margin-top: 10px; font-size: 0.7em;"> <p>Use each digit card <b>once</b> to make the statement correct.</p> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>0</td><td>1</td><td>2</td><td>4</td><td>5</td></tr> </table> <p style="margin-left: 20px;"><math>3 \square \square &gt; \square \square \square</math></p> <p>Can you find eight different possible solutions?</p> </div> <div style="margin-top: 10px; font-size: 0.7em;"> <p>Some possible solutions:</p> <ul style="list-style-type: none"> <li>3.12 &gt; 0.45</li> <li>3.24 &gt; 1.05</li> <li>3.45 &gt; 1.02</li> <li>3.01 &gt; 2.45</li> <li>3.42 &gt; 2.01</li> <li>3.45 &gt; 0.12</li> <li>3.02 &gt; 1.45</li> <li>3.24 &gt; 1.05</li> </ul> </div>	0	1	2	4	5																																											
0	1	2	4	5																																														

# Y4 Maths Medium Term Plan 2020-21: Autumn Cycle 1

10

## Multiplication Tables

**Recall from Y3:** Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

**One Star:** L: Can I recall **multiplication** facts using x2, x5 and x10?  $7 \times 5 = \underline{\quad}$ ,  $8 \times 10 = \underline{\quad}$

**Two Star:** L: Can I recall **multiplication** and **division** facts up to  $12 \times 6$ ?  $7 \times 3 = \underline{\quad}$ ,  $8 \times 4 = \underline{\quad}$

**Expected Standard:** L: Can I recall **multiplication** and **division** facts up to  $12 \times 12$ ?  $6 \times 9 = \underline{\quad}$  so  $\underline{\quad} \div 9 = 6$

**Stretch:**

## Division

**Recall from Y3:** use multiplication and division facts for the 3, 4 and 8 multiplication tables.

**One Star:** L: Can I **divide** 2-digit numbers using **multiplication** facts?  $30 \div 5 =$

**Two Star:** L: Can I **divide** 2-digit numbers using the bus stop method?  $48 \div 3 =$

**Expected Standard:** L: Can I **divide** 3-digit numbers using the bus stop method?  $126 \div 2 =$

**Stretch:**

Whitney is thinking of a 2-digit number that is less than 50

When it is divided by 2, there is no remainder.

When it is divided by 3, there is a remainder of 1

When it is divided by 5, there is a remainder of 3

What number is Whitney thinking of?

Whitney is thinking of 28

You have 12 counters and the place value grid. You must use all 12 counters to complete the following.

Hundreds	Tens	Ones



Create a 3-digit number divisible by 2  
 Create a 3-digit number divisible by 3  
 Create a 3-digit number divisible by 4  
 Create a 3-digit number divisible by 5  
 Can you find a 3-digit number divisible by 6, 7, 8 or 9?