

# Regent Farm First School Calculation Policy

Basic Skills		Active Learning		Curious Minds
<b>Respect</b> <ul style="list-style-type: none"> <li>Embrace differences</li> <li>Remember to use manners</li> <li>Consider other people's feelings</li> <li>Listen to each other's opinions</li> </ul>	<b>Determination</b> <ul style="list-style-type: none"> <li>Never give up, keep on trying</li> <li>Take it one step at a time</li> <li>Focus on the end goal</li> <li>Keep on smiling</li> </ul>	<b>Team Work</b> <ul style="list-style-type: none"> <li>Work together to share ideas</li> <li>Small teams to worldwide teams</li> <li>Listen to others and watch carefully</li> <li>Open your eyes to other options</li> </ul>	<b>Curiosity</b> <ul style="list-style-type: none"> <li>Ask questions and share thoughts</li> <li>Hunt out clues and ideas</li> <li>Be equipped for anything</li> <li>Don't just settle on the first answer, look at things from different angles</li> </ul>	

## Introduction

At Regent Farm we see maths as a journey and therefore ensure consistency across the school. We use the same resources, representations and language to support this throughout the school.

### Key Resources

numicon

multilink cubes

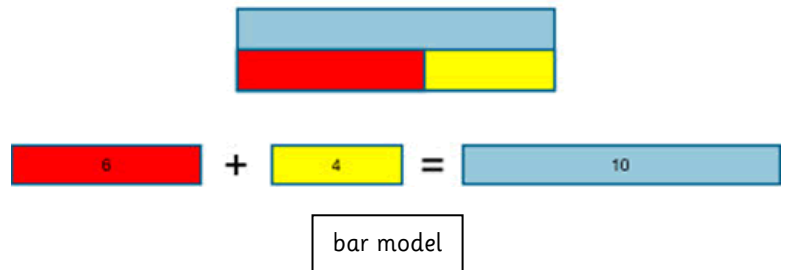
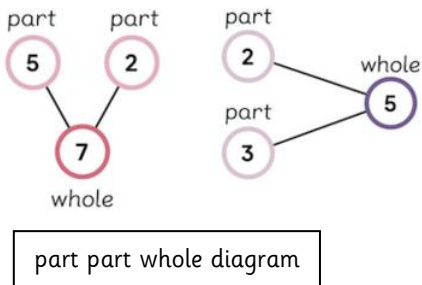
number lines

tens frames

dienes

## CPA

At Regent Farm we recognise that children need to develop their conceptual understanding. In order to develop this we use the concrete, pictorial, abstract approach. This approach recognises that in order for pupils to understand abstract concepts, they must first learn mathematical concepts through the use of concrete resources and pictorial representation. Two key representations children use at Regent Farm are the part part whole model and the bar model. These help children to understand how the numbers in a calculations connect and fit together.





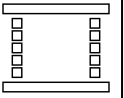
# Regent Farm First School Calculation Policy

## Equality and Inequality

A mathematical equation uses symbols to show that two things are equal or equivalent. The use of the = symbol shows that the two sides of the equation are balanced. Children at Regent Farm are used to reading equations presented in a variety of ways.

Eg.  $2 + 3 = 5$        $7 - 4 = 3$        $10 = 4 + 6$   
 $7 = 10 - 3$

Representations like this help children to understand the meaning of the equals symbol, as both sides are clearly balanced. This is further supported by the use of '**is equal to**' when reading an equation instead of equals.



Inequality is expressed using two different symbols:

< less than

> greater than

When children are introduced to these symbols representations such as these help the children to understand the meaning behind the symbols.



## Language

We have high expectations of the language that children use during maths sessions to ensure misconceptions do not arise. Teachers in school model the correct use of this language and correct pupils where appropriate. We ensure children are exposed to a range of language linked to each area of calculation to ensure they have a deep understanding of the area.

✓	✗
ones	units
is equal to	equals
zero	oh (the letter O)

## Place Value

Before beginning calculation we spend time in each year group developing an understanding of place value. This is the understanding of the value of each number, its properties and where it fits in the number system. Children will understand how many digits each number has and the value of each of these digits.

Eg. 453 is a three digit number. It has 4 hundreds, 5 tens and 3 ones.

# Regent Farm First School Calculation Policy

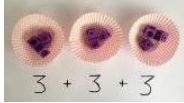
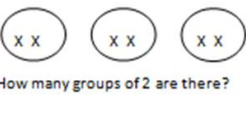
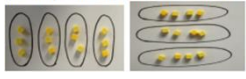
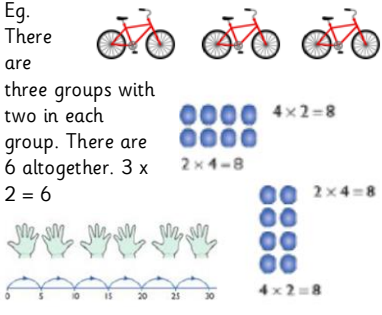
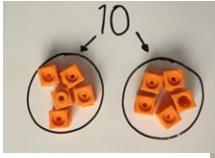
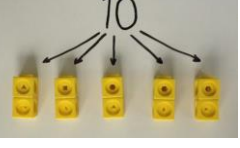

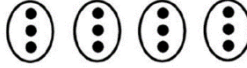
## Methods of Calculation Used in Each Year Group:

Year 1			
	Concrete	Pictorial	Abstract
Addition	<b>Key Vocabulary: addition, add, plus, total, altogether, combine, sum, increase, make</b>		
	<p>Children will use a range of resources to represent the groups they are combining. Emphasis will be placed on the value of each group as the part and then the whole.</p> <p>Eg. Four is a part, 3 is a part. The whole is 7.</p>	<p>Children will then move to look at images and representations to identify the parts and wholes and build calculations.</p> <p>Eg. There were four people on the bus, then three more got on, now there are 7 people on the bus. So, 4 represents how many people started on the bus, 3 represents how many people got on the bus and 7 represents how many people are on the bus in the end.</p>	<p>Children will then move on to applying their understanding built from the concrete and pictorial representations to solve abstract equations.</p> <p><math>4 + 3 = \underline{\quad}</math></p> <p>Eg. Can you arrange these numbers in the part part whole model? 10, 6, 4</p>
	<b>Key Vocabulary: subtraction, subtract, minus, difference, take away, leave, decrease</b>		
Subtraction	<p>Children will begin by using objects that they can physically remove from the group one at a time 'subtracting them'.</p> <p>Difference is an area of subtraction that is often missed children only see subtraction as 'take-away'. Laying two sets of objects out like the image helps children to visualise the difference problem.</p>	<p>Children will then begin to represent this by crossing off images or pictures to show what has been removed.</p> <p>A number line is also used to demonstrate 'counting back'.</p>	<p>Children will then move on to applying their understanding built from the concrete and pictorial representations to solve abstract equations.</p> <p><math>\underline{\quad} = 15 - 2</math></p> <p><math>10 - 4 = \underline{\quad}</math></p> <p><math>7 - \underline{\quad} = 3</math></p>
	<b>Key Vocabulary: multiplication, multiply, multiplied by, double, equal groups</b>		
	Multiplication	<p>Children will be introduced to multiplication by making equal groups and counting the number of equal groups they have made. Children first see multiplication as repeated addition before writing as a multiplication.</p>	<p>Children will then use images to represent multiplication calculations and write calculations from images.</p> <p>Draw  to show <math>2 \times 3 = 6</math></p>
<b>Key Vocabulary: divide, divided by, divided into, half, share, share equally, equal groups</b>			
Division		<p>Children first see division as grouping and sharing.</p> <p>Eg. 10 have been split into 2 equal groups.</p> <p>Eg. The cubes have been shared into two cases.</p>	<p>Children will then use pictures and shapes to group and share and write the corresponding division calculation.</p> <p>Eg. <math>8 \div 2 = 4</math> There are 8 flowers, they have been split into 2 equal groups. There are 4 flowers in each group.</p>

## Year 2

	Concrete	Pictorial	Abstract
Addition	<p><b>Key Vocabulary:</b> addition, add, plus, total, altogether, combine, sum, increase, make</p> <p>Children will begin exploring addition using a range of resources.</p> <p>17 + 5 = 22 Use ten frame to make 'magic ten'</p> <p>The tens frame helps children visualise making the next 10, which is essential for efficient mental addition.</p> <p>Children explore the pattern. 17 + 5 = 22 27 + 5 = 32</p> <p>Dienes are used to differentiate between the tens and ones.</p> <p>3 tens + 5 tens = 8 tens 30 + 50 = 80</p> <p>Initially used when adding two tens numbers, children are asked to count in tens. Then children move on to adding two, two-digit numbers. Using the resources enables children to rearrange putting all the tens together, then all the ones making it easier to count the total. Children are taught that when they have 10 ones, this can be exchanged for one 10 stick.</p> <p>Eg. 4 tens and 7 ones + 2 tens and 5 ones = 6 tens and 12 ones</p> <p>which then can be regrouped as 7 tens and 2 ones.</p> <p>Therefore 47 + 25 = 72</p>	<p>Once children are confident with the concepts using the resources they then draw or use images of the resources.</p> <p>Lines and dots are used to represent the tens and ones.</p> <p>Children will use part part whole models and numberlines to represent 'bridging the ten'.</p> <p>Use part part whole and number line to model.</p>	<p>Once secure children will move on to abstract methods always focussing on the 'magic ten'.</p> <p>To solve 2-digit add 2-digit calculations children will initially partition both digits, adding the tens and then adding the ones together.</p> <p>Eg. <math>45 + 22 =</math>  <math>\begin{array}{r} 45 \\ + 22 \\ \hline 40 \quad 5 \quad 20 \quad 2 \end{array}</math></p> <p>40 + 20 = 60 5 + 2 = 7 60 + 7 = 67 Therefore 45 + 22 = 67</p> <p>When children are ready they will begin to see this method in a formal column addition.</p> <p>Eg. <math>\begin{array}{r} 40 \\ + 20 \\ \hline 60 \\ \quad 5 \\ \quad 2 \\ \hline 67 \end{array}</math></p> <p>Before seeing it as: <math>\begin{array}{r} 45 \\ + 22 \\ \hline 67 \end{array}</math></p>
	Subtraction	<p><b>Key Vocabulary:</b> subtraction, subtract, minus, difference, take away, leave, decrease</p> <p>Like with addition tens frames and dienes are the resources used the most to support the understanding of subtraction.</p> <p>Eg. Once again the 'magic ten' is used to support children to be able to efficiently mentally calculate when bridging the 10. 14 - 5 = 14 - 4 - 1 = 9</p> <p>Children use the dienes when counting in tens and ones.</p> <p>Eg. 60 - 20 = 40</p> <p>With the dienes children can physically remove the amount which is being subtracted. Eg. 75 - 42 = 33</p>	<p>Children will then use images given or drawn of the resources so they can cross off those which have been subtracted.</p> <p>Eg. 54 - 22 = 32</p> <p>It is important that children do not just see subtraction as a 'take-away'. Bar models are used to help children understand the concept of difference. Children also use bar models and part part whole models to help them see the connection between addition and subtraction. This supports with the rapid recall of the number bonds to 20.</p> <p>Explore related facts</p> <p>17 + 5 = 22 5 + 17 = 22 22 - 17 = 5 22 - 5 = 17</p> <p><b>Comparison Bar Models</b></p> <p>Lisa is 13 years old. Her sister is 22 years old. Find the difference in age between them.</p>






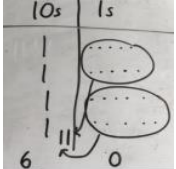
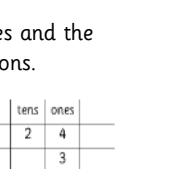





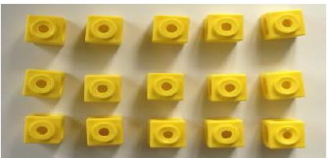
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<h2 style="writing-mode: vertical-rl; transform: rotate(180deg);">Multiplication</h2>	<p><b>Key Vocabulary: multiplication, multiply, multiplied by, double, equal groups</b></p> <p>Children will first be introduced to multiplication as repeated addition. Counting how many sets of equal groups.</p>  <p>Eg. <math>3 + 3 + 3 = 9</math> <math>3 \times 3 = 9</math></p> <p>Children will talk about multiplication as equal groups and how many there are. There are three groups with two in each group. There are 6 altogether. <math>3 \times 2 = 6</math></p>  <p>How many groups of 2 are there? <math>3 \times 2 = 6</math></p> <p><small>Pupils should understand that an array can represent different equations and that, as multiplication is commutative, the order of the multiplication does not affect the answer.</small></p>  <p>Children will then use arrays to help understand the commutativity of multiplication.</p>	<p>Children will then use images; real life, number lines and arrays to represent, write and solve multiplication calculations.</p> <p>Eg. There are three groups with two in each group. There are 6 altogether. <math>3 \times 2 = 6</math></p>  <p>Images like this are used to support the recall of times table facts.</p>	<p>Children will be asked to recall the multiplication facts for the 2, 5 and 10 times tables as well as using these to solve problems.</p> <p>Eg. Complete the sequence: 20, 25, 30, 35, _____, _____, _____, _____</p> <p>Complete the statement: <math>4 \times \underline{\quad} = 40</math></p>
	<h2 style="writing-mode: vertical-rl; transform: rotate(180deg);">Division</h2>	<p><b>Key Vocabulary: divide, divided by, divided into, half, share, share equally, equal groups</b></p> <p>Children will be exposed to questions which relate to division as grouping as well as sharing.</p>  <p>Can you put the 10 cubes into 2 equal groups? <math>10 \div 2 = 5</math></p>  <p>Can you share the 10 cubes equally between 5 people? <math>10 \div 5 = 2</math></p> <p>Children will use cubes and counters to support them understand these concepts and write the calculations which match.</p>	<p>Children will then use images and pictures to represent this.</p>  <p>10 sweets are divided into groups of 2, so there will be 5 groups.</p> <p>Children will use dots to represent objects in a problem. Eg. Sam has 12 sweets. He shares them with his 4 friends. How many sweets does each person get? <math>12 \div 4 = 3</math></p> 

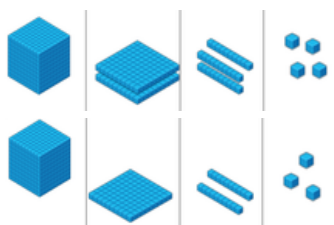
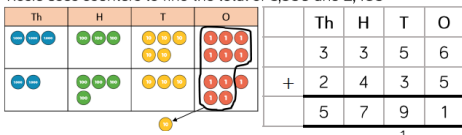
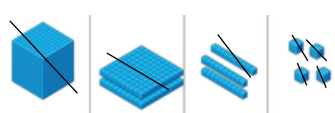
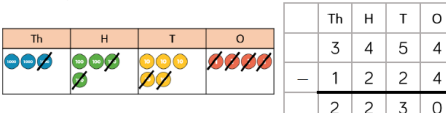


<h2 style="color: #0070C0;">Year 3</h2>			
	<b>Concrete</b>	<b>Pictorial</b>	<b>Abstract</b>
Addition	<b>Key Vocabulary: addition, add, plus, total, altogether, combine, sum, increase, make</b>		
	<p>Children will use dienes to explore what happens to a 3-digit number when you add 1s, 10s, 100s to it.</p> <div style="display: flex; align-items: center;"> <div style="font-size: 0.8em;"> <p>Children will use dienes to represent 3-digit and 3-digit addition. Counting how many hundreds, tens and ones there are by grouping them together.</p> <p>Eg. <math>123 + 234 = 357</math></p> </div> </div>	<p>Children will use pictorial images of the calculations to help understand how the abstract methods work.</p> <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> <div style="text-align: center;"> <p>Step 1</p> </div> <div style="text-align: center;"> <p>Step 2</p> </div> </div> <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> <div style="text-align: center;"> <p>Step 3</p> </div> <div style="text-align: center;"> <p>Step 4</p> </div> </div>	<p>Methods shown with no regrouping: Expanded Column Method: <math>425 + 321 = 746</math></p> $\begin{array}{r} 425 \\ + 321 \\ \hline 6 \\ 40 \\ 700 \\ \hline 746 \end{array}$ <p>Compact Column Method <math>425 + 321 = 746</math></p> $\begin{array}{r} 425 \\ + 321 \\ \hline 746 \end{array}$ <p>Methods shown with regrouping: Expanded Column Method: <math>267 + 148 = 415</math></p> $\begin{array}{r} 267 \\ + 148 \\ \hline 15 \\ 100 \\ 300 \\ \hline 415 \end{array}$ <p>Compact Column Method <math>267 + 148 = 415</math></p> $\begin{array}{r} 267 \\ + 148 \\ \hline 415 \\ \hline 1 \quad 1 \end{array}$
Subtraction	<b>Key Vocabulary: subtraction, subtract, minus, difference, take away, leave, decrease</b>		
	<p>Children will use dienes to explore what happens to a 3-digit number when you subtract 1s, 10s, 100s from it.</p> <div style="display: flex; align-items: center;"> <div style="font-size: 0.8em;"> <p>Children will use dienes to represent 3-digit and 3-digit subtraction. Counting how many hundreds, tens and ones there are left when some have been removed.</p> <p>Eg. <math>263 - 119 = 144</math></p> </div> </div> <p>Children will use the dienes to exchange 1 ten stick for 10 ones to be able to complete the calculation, and 1 hundred plate for 10 tens.</p>	<p>Children will use pictorial images of the calculations to help understand how the abstract methods work.</p> <div style="display: flex; align-items: center; justify-content: center;"> </div> <p>Children can cross out those which are being subtracted. Eg. <math>234 - 23 = 211</math></p>	<p>Methods shown with no regrouping: Expanded Column Method: <math>400 - 234 = 223</math></p> $\begin{array}{r} 400 \ 50 \ 7 \\ - 200 \ 30 \ 4 \\ \hline 200 \ 20 \ 3 \end{array}$ <p>Compact Column Method: <math>457 - 234 = 223</math></p> $\begin{array}{r} 457 \\ - 234 \\ \hline 223 \end{array}$ <p>Methods shown with regrouping: Expanded Column Method: <math>621 - 318 = 303</math></p> $\begin{array}{r} 621 \\ - 318 \\ \hline 10 \\ 600 \ 20 \ 11 \\ - 300 \ 10 \ 8 \\ \hline 300 \ 00 \ 3 \end{array}$



			Compact Column Method: $621 - 318 = 303$ $\begin{array}{r} 621 \\ - 318 \\ \hline 303 \end{array}$																	
Multiplication	<b>Key Vocabulary: multiplication, multiply, multiplied by, double, equal groups</b>																			
	<p>Children will use arrays to help visualise the multiplication facts for the 3,4 and 8 times tables as well as see the commutativity of multiplication. They will begin to be introduced to formal methods to multiply a 2-digit number by a 1-digit number.</p>  <p style="margin-left: 20px;">4 rows of 13</p> <p>Children will use the dienes to represent the calculation. They will then place these numbers into a grid format, partitioning the two digit number.</p> <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">x</td> <td style="padding: 2px 5px;">10</td> <td style="padding: 2px 5px;">2</td> <td style="padding: 2px 5px;">x</td> <td style="padding: 2px 5px;">10</td> <td style="padding: 2px 5px;">2</td> </tr> <tr> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;"></td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">30</td> <td style="padding: 2px 5px;">6</td> </tr> </table> <p style="margin-left: 20px; text-align: center;"><math>3 \times 12 = 36</math></p>	x	10	2	x	10	2	3			3	30	6	<p>Children will then use images and drawings to represent the equipment used, beginning to see the connection between the resources and the abstract representations.</p>    	<p>Children will be able to fluently recall the multiplication facts for the 3, 4 and 8 times tables.</p> <p>Once children are confident partitioning the two digit numbers and multiplying them they will move onto formal written methods, initially alongside the partition method.</p>  <p style="margin-left: 20px;"> <math>10 \times 4 = 40</math>  <math>5 \times 4 = 20</math>  <math>40 + 20 = 60</math> </p> <p>Expanded Column Multiplication Method</p> <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">x</td> <td style="padding: 2px 5px;">30</td> <td style="padding: 2px 5px;">5</td> </tr> <tr> <td style="padding: 2px 5px;">7</td> <td style="padding: 2px 5px;">210</td> <td style="padding: 2px 5px;">35</td> </tr> </table> <p style="margin-left: 20px; text-align: center;"><math>210 + 35 = 245</math></p> <p><math>35 \times 7 =</math></p> $\begin{array}{r} 35 \\ \times 7 \\ \hline 35 \quad (5 \times 7) \\ 210 \quad (30 \times 7) \\ \hline 245 \end{array}$	x	30	5	7	210
x	10	2	x	10	2															
3			3	30	6															
x	30	5																		
7	210	35																		
Division	<b>Key Vocabulary: divide, divided by, divided into, half, share, share equally, equal groups</b>																			
	<p>Children will use arrays to help see the connection between multiplication and division, and therefore how times table facts help when solving division problems.</p>  <p>Eg. This array shows <math>3 \times 5 = 15</math>  <math>5 \times 3 = 15</math>                  and also: <math>15 \div 3 = 5</math>  <math>15 \div 5 = 3</math></p> <p>Children will use stem sentences such as:                  'If I know <math>3 \times 5 = 15</math> then I know <math>5 \times 3 = 15</math> and I also know <math>15 \div 3 = 5</math> and <math>15 \div 5 = 3</math>.'</p>	<p>Children will be able to draw their own arrays or use images to help them solve a variety of multiplication problems.</p>	<p>Children will become fluent with their division facts for the 3,4 and 8 times tables and use them to solve a series of problems including missing box problems.</p> <p>Eg. <math>\underline{\quad} \div 4 = 8</math></p> <p><math>16 \div \underline{\quad} = 4</math></p> <p><math>\underline{\quad} = 24 \div 8</math></p>																	

## Year 4

	<b>Concrete</b>	<b>Pictorial</b>	<b>Abstract</b>
<b>Addition</b>	<b>Key Vocabulary: addition, add, plus, total, altogether, combine, sum, increase, make</b>		
	<p>Children will use dienes to explore what happens to a 4-digit number when you add 1s, 10s, 100 or 1000s to it.</p> <p>Children will use dienes to represent 4-digit and 4-digit addition. Counting how many hundreds, tens and ones there are by grouping them together.</p> <div style="text-align: center;">  </div> <p>Eg. <math>1234 + 1123 = 2357</math></p>	<p>Children will use pictorial images of the calculations to help understand how the abstract methods work.</p> <p>Rosie uses counters to find the total of 3,356 and 2,435</p> <div style="text-align: center;">  </div>	<p>Methods shown with no regrouping: Expanded Column Method: <math>1245 + 2312 = 3557</math></p> $\begin{array}{r} 1245 \\ + 2312 \\ \hline 7 \\ 50 \\ 500 \\ 3000 \\ \hline 3557 \end{array}$ <p>Compact Column Method <math>1245 + 2312 = 3557</math></p> $\begin{array}{r} 1245 \\ + 2312 \\ \hline 3557 \end{array}$ <p>Methods shown with regrouping: Expanded Column Method: <math>1748 + 2516 = 4264</math></p> $\begin{array}{r} 1748 \\ + 2516 \\ \hline 14 \\ 50 \\ 1200 \\ 3000 \\ \hline 4264 \end{array}$ <p>Compact Column Method <math>1748 + 2516 = 4264</math></p> $\begin{array}{r} 1748 \\ + 2516 \\ \hline 4264 \end{array}$
<b>Subtraction</b>	<b>Key Vocabulary: subtraction, subtract, minus, difference, take away, leave, decrease</b>		
	<p>Children will use dienes to explore what happens to a 4-digit number when you subtract 1s, 10s, 100s or 1000s from it.</p> <p>Children will use dienes to represent 4-digit and 4-digit subtraction. Counting how many thousands, hundreds, tens and ones there are left when some have been removed.</p> <div style="text-align: center;">  </div> <p>Eg. <math>1234 - 1114 = 220</math></p>	<p>Children will use pictorial images of the calculations to help understand how the abstract methods work.</p> <p>Eva uses place value counters to calculate <math>3454 - 1224</math></p> <div style="text-align: center;">  </div>	<p>Methods shown with no regrouping: Expanded Column Method: <math>5000 - 2512 = 3231</math></p> $\begin{array}{r} 5000 \ 700 \ 40 \ 3 \\ - 2000 \ 500 \ 10 \ 2 \\ \hline 3000 \ 200 \ 30 \ 1 \end{array}$ <p>Compact Column Method: <math>5743 - 2512 = 3231</math></p> $\begin{array}{r} 5743 \\ - 2512 \\ \hline 3231 \end{array}$ <p>Methods shown with regrouping: Expanded Column Method: <math>7284 - 5628 = 1656</math></p> $\begin{array}{r} 6000 \ 1200 \ 80 \ 14 \\ 7000 \ 1200 \ 80 \ 14 \\ - 5000 \ 600 \ 20 \ 8 \\ \hline 2000 \ 600 \ 60 \ 6 \end{array}$

# Regent Farm First School Calculation Policy

<p style="font-size: small;">100s 10s 1s 4 0 4 - 2 5 7</p> <p style="font-size: small;">100s 10s 1s 3 10 4 - 2 5 7</p> <p style="font-size: small;">100s 10s 1s 2 10 4 - 2 5 7</p> <p style="font-size: small;">100s 10s 1s 1 14 4 - 2 5 7</p>		<p>1000 600 50 6</p> <p>Compact Column Method:</p> $7284 - 5628 = 1656$ $\begin{array}{r} 67 \\ 7284 \\ - 5628 \\ \hline 1656 \end{array}$
<p>Children will use the dienes to exchange 1 ten stick for 10 ones to be able to complete the calculation, and 1 hundred plate for 10 tens.</p>		

<b>Multiplication</b>	<b>Key Vocabulary: multiplication, multiply, multiplied by, double, equal groups</b>																																																							
	<p>Children will build on their learning from Year 3 to become confident using formal written methods for 2-digit multiplied by 1-digit and 3-digit multiplied by 1-digit calculations.</p> <table border="1" style="font-size: x-small; width: 100%;"> <tr><th>Hundreds</th><th>Tens</th><th>Ones</th></tr> <tr><td>3</td><td>2</td><td>7</td></tr> <tr><td colspan="3">x 4</td></tr> <tr><td colspan="3">-----</td></tr> <tr><td>12</td><td>8</td><td>8</td><td></td></tr> <tr><td>120</td><td>80</td><td>28</td><td></td></tr> <tr><td>1200</td><td>800</td><td>280</td><td></td></tr> <tr><td>12000</td><td>8000</td><td>2800</td><td></td></tr> <tr><td colspan="4">-----</td></tr> <tr><td>128</td><td>88</td><td>288</td><td></td></tr> </table> <p>Children will use dienes to represent the calculations.</p> <p>Eg. <math>327 \times 4</math></p> <p>This enables children to count the number of hundreds, tens and ones they have in total.</p> <p>Dienes also help represent scaling and the connection between multiplying by 1, 10, 100 and 1000.</p> <table style="font-size: x-small;"> <tr><td><math>5 = 1 \times 5</math></td><td></td></tr> <tr><td><math>50 = 10 \times 5</math></td><td></td></tr> <tr><td><math>500 = 100 \times 5</math></td><td></td></tr> <tr><td><math>5000 = 1000 \times 5</math></td><td></td></tr> </table>	Hundreds	Tens	Ones	3	2	7	x 4			-----			12	8	8		120	80	28		1200	800	280		12000	8000	2800		-----				128	88	288		$5 = 1 \times 5$		$50 = 10 \times 5$		$500 = 100 \times 5$		$5000 = 1000 \times 5$		<p>Children will then use images and drawings to represent the equipment used, beginning to see the connection between the resources and the abstract representations.</p> <p style="font-size: x-small;">10s   1s 6   0</p> <table border="1" style="font-size: x-small; margin-top: 10px;"> <tr><th>tens</th><th>ones</th></tr> <tr><td>2</td><td>4</td></tr> <tr><td>x</td><td>3</td></tr> <tr><td colspan="2">-----</td></tr> <tr><td>7</td><td>2</td></tr> </table>	tens	ones	2	4	x	3	-----		7	2
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<b>Division</b>	<b>Key Vocabulary: divide, divided by, divided into, half, share, share equally, equal groups</b>		
	<p>Children use counters and cubes to represent division problems including those multiplying by 0 and 1. As in Year 3, where appropriate, children will use arrays to support understanding of division facts.</p>	<p>Children will be able to draw their own arrays or use images to help them solve a variety of multiplication problems.</p>	<p>Children will be able to fluently recall the division facts for all tables up to <math>12 \times 12</math>.</p>