

MULTIPLICATION AND DIVISION POLICY

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Reviewed and ratified at

Full Governors Meeting: January 2023

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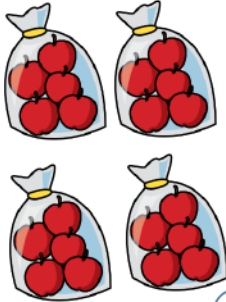
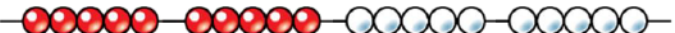
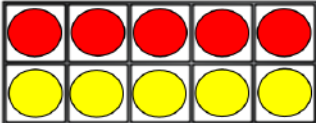
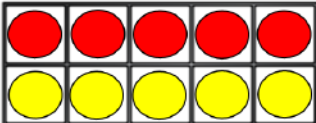
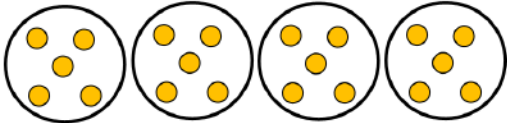
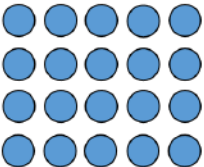
Through our lives we will have HOPE and aspiration for ourselves and our community, we will come to know and BELIEVE that God loves us and wants the very best for us because we are uniquely and wonderfully made and that we will fulfil our God-given gifts in order that we might ACHIEVE and enjoy life in all its fullness.

HOPE | BELIEVE | ACHIEVE

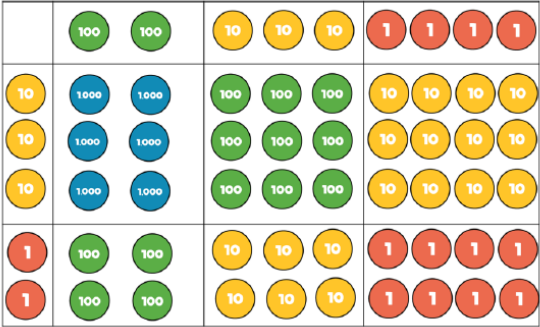
To develop confident, curious, independent, resilient life-long learners within a Christian environment

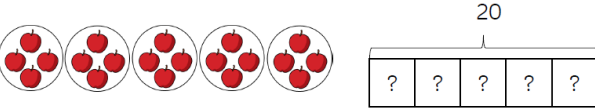
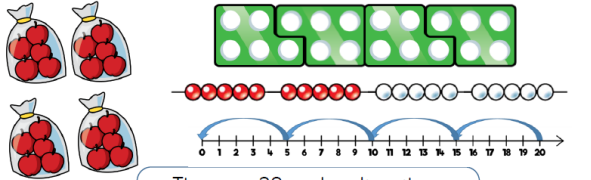
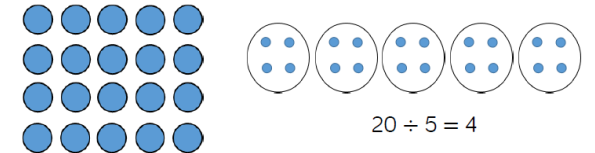
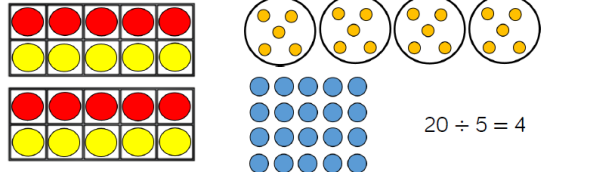
Trust | Friendship | Hope | Compassion | Respect | Forgiveness

Multiplication and Division

Year Group	National Curriculum Links/skills	Representations and models	Manipulatives	Vocabulary
1	In Year 1, children use concrete and pictorial representations to solve problems. They are not expected to record multiplication formally. (solve 1-step problems using multiplication)	    One bag holds 5 apples. How many apples do 4 bags hold?	Numicon Tens Frame Number lines Bead strings Everyday objects	How many times? Lots of Groups of Multiple of Multiply by Repeated addition Array, row and column. Group in
2	In Year 2, children are introduced to the multiplication symbol. (solve 1-step problems using multiplication)	    $5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$	Everyday objects Numicon Bead Strings Number line Tens Frame	How many times? Lots of Groups of Multiple of Multiply by Repeated addition Array, row and column. Group in

5	Multiply 4 digit numbers by 1 digit numbers.	Thousands Hundreds Tens Ones 1 8 2 6
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	Multiply by 3 digit by 2 digits.  <table border="1"> <thead> <tr> <th>Th</th><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr> <td></td><td>2</td><td>3</td><td>4</td></tr> <tr> <td>x</td><td></td><td>3</td><td>2</td></tr> <tr> <td></td><td>4</td><td>6</td><td>8</td></tr> <tr> <td>1 7</td><td>1 0</td><td>2</td><td>0</td></tr> <tr> <td>7</td><td>4</td><td>8</td><td>8</td></tr> </tbody> </table> <table border="1"> <tbody> <tr> <td>x</td><td>200</td><td>30</td><td>4</td></tr> <tr> <td>30</td><td>6,000</td><td>900</td><td>120</td></tr> <tr> <td>2</td><td>400</td><td>60</td><td>8</td></tr> </tbody> </table> $234 \times 32 = 7,488$	Th	H	T	O		2	3	4	x		3	2		4	6	8	1 7	1 0	2	0	7	4	8	8	x	200	30	4	30	6,000	900	120	2	400	60	8	Base ten Place value counters	
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x	200	30	4																																				
30	6,000	900	120																																				
2	400	60	8																																				
6	Multiply 4 digit numbers by 2 digit numbers. <table border="1"> <thead> <tr> <th>Th</th><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr> <td></td><td>2</td><td>3</td><td>4</td></tr> <tr> <td>x</td><td></td><td>3</td><td>2</td></tr> <tr> <td></td><td>4</td><td>6</td><td>8</td></tr> <tr> <td>1 7</td><td>1 0</td><td>2</td><td>0</td></tr> <tr> <td>7</td><td>4</td><td>8</td><td>8</td></tr> </tbody> </table>	Th	H	T	O		2	3	4	x		3	2		4	6	8	1 7	1 0	2	0	7	4	8	8	Base ten and Place Value counters as needed.	Common factors Common multiples Factor pairs												
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7	4	8	8																																				

Year Group	National Curriculum Links/skills	Representations and models	Manipulatives	Vocabulary
1	Solve 1 step problems multiplication – sharing and grouping.	Sharing  Grouping 	Everyday objects Counters Bar Model arrays Numicon Tens Frame Bead String	Divided by Sharing Grouping
2	Solve 1- step problems using division.	Sharing  Grouping 	Everyday objects Counters Bar Model arrays Numicon Tens Frame Bead String	Divided by Sharing Grouping

3	Divide 2 digits by 1 digit. Sharing	Sharing <table><tr><th>Tens</th><th>Ones</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> + Number line Straws Base Ten Place Value Counters Number line Divide Sharing Grouping	Tens	Ones																																
Tens	Ones																																			
4	Divide 2 digits by 1 digit – with exchange and remainder.	$52 \div 4 = 13$ 52 <table><tr><td>?</td><td>?</td><td>?</td><td>?</td></tr></table> <table><tr><th>H</th><th>T</th><th>O</th></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> $53 \div 4 = 13 \text{ r}1$ 53 <table><tr><td></td><td></td><td>1</td><td>3</td><td></td></tr><tr><td></td><td>4</td><td>5</td><td>1</td><td>2</td></tr></table> <table><tr><td>13</td><td>13</td><td>13</td><td>13</td><td>1</td></tr></table> Place Value Counters Sharing Grouping Divide Division facts Inverse Remainder	?	?	?	?	H	T	O															1	3			4	5	1	2	13	13	13	13	1
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H	T	O																																		
		1	3																																	
	4	5	1	2																																
13	13	13	13	1																																

5	Divide 2 digit by 1 digit – grouping. Divide 3 digit by 1 digit- grouping. Divide 4 digit by 1 digit – grouping.	$52 \div 4 = 13$ $856 \div 4 = 214$ $8,532 \div 2 = 4,266$	Place Value counters	Divide Share Group
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6	Divide multi digits by 2 digits- short division Divide multi digits by 2 digits – long division.	<table><tr><td></td><td></td><td>0</td><td>3</td><td>6</td></tr><tr><td></td><td>12</td><td>4</td><td>⁴3</td><td>⁷2</td></tr></table> 432 ÷ 12 = 36 7,335 ÷ 15 = 489 <table><tr><td></td><td>0</td><td>4</td><td>8</td><td>9</td></tr><tr><td>15</td><td>7</td><td>⁷3</td><td>¹³3</td><td>¹³5</td></tr></table><table><tr><td>15</td><td>30</td><td>45</td><td>60</td><td>75</td><td>90</td><td>105</td><td>120</td><td>135</td><td>150</td></tr></table> <table><tr><td></td><td></td><td>0</td><td>3</td><td>6</td></tr><tr><td>1</td><td>2</td><td>4</td><td>3</td><td>2</td></tr><tr><td></td><td>—</td><td>3</td><td>6</td><td>0</td></tr><tr><td></td><td></td><td></td><td>7</td><td>2</td></tr><tr><td></td><td>—</td><td></td><td>7</td><td>2</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr></table> (x30) (x6)			0	3	6		12	4	⁴ 3	⁷ 2		0	4	8	9	15	7	⁷ 3	¹³ 3	¹³ 5	15	30	45	60	75	90	105	120	135	150			0	3	6	1	2	4	3	2		—	3	6	0				7	2		—		7	2					0	Number tracks	Divide
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