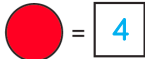

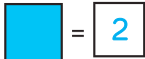


Y3 – Spring – Block 1 – Consolidate 2, 4 and 8 times-tables Answers

Question	Answer
1	a) $5 \times 2 = 10$ or $2 \times 5 = 10$ b) $3 \times 4 = 12$ or $4 \times 3 = 12$ c) $4 \times 8 = 32$ or $8 \times 4 = 32$
2	a) $9 \times 2 = 18$ or $2 \times 9 = 18$ b) $5 \times 4 = 20$ or $4 \times 5 = 20$ c) $8 \times 8 = 64$
3	a) 6 cm b) 12 cm c) 24 cm
4	a) 2 4 6 8 10 b) 4 8 12 16 20 c) 8 16 24 32 40 The values in the 4 times-table are all twice the corresponding values in the 2 times-table. The values in the 8 times-table are all twice the corresponding values in the 4 times-table.
5	a) 24 b) 20 c) 56 d) 24 e) 32 f) 22 g) 36 h) 80
6	a) $2 \times 8 = 16$ b) $4 \times 5 = 20$ c) $24 = 12 \times 2$ d) $8 \times 0 = 0$ e) $2 \times 4 \times 8 = 64$ f) $40 = 1 \times 5 \times 8$ or $40 = 2 \times 5 \times 4$ or $40 = 4 \times 5 \times 2$ or $40 = 8 \times 5 \times 1$

Y3 – Spring – Block 1 – Consolidate 2, 4 and 8 times-tables Answers (continued)

Question	Answer
7	  
8	70

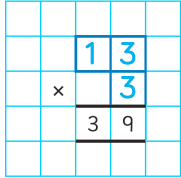
Y3 – Spring – Block 1 – Step 1 – Comparing statements Answers

Question	Answer												
1	<p>a) $4 \times 5 = 20$ $20 \div 5 = 4$ b) $5 \times 4 = 20$ $20 \div 4 = 5$</p> <p>The answer to the multiplication is the same in both parts. The multiplication in part a) is working out 4 lots of 5 and in part b) is working out 5 lots of 4 The division in part a) is working out how many 5s in 20 and in part b) is working out how many 4s in 20</p>												
2	<p>a) $>$ b) $=$ c) $=$</p>												
3	<p>a) 3 b) 4 c) on a plate 4 is greater than 3</p>												
4	<p>a) $=$ b) $=$ c) $>$ d) $<$ e) $>$ f) $=$ g) $<$ h) $>$</p> <p>Children may have used different strategies for different questions, e.g. noticing that the two numbers in a multiplication are the same but the other way round, noticing that one number in the multiplications is the same so only comparing the other number. Others may have worked out all the calculations and compared the results.</p>												
5	<table border="1"> <thead> <tr> <th>Less than 6×4</th> <th>Equal to 6×4</th> <th>Greater than 6×4</th> </tr> </thead> <tbody> <tr> <td>$30 \div 6$</td> <td>8×3</td> <td>5×6</td> </tr> <tr> <td>$27 \div 3$</td> <td>4×6</td> <td>4×8</td> </tr> <tr> <td>$18 \div 3$</td> <td>12×2</td> <td></td> </tr> </tbody> </table> <p>children's extra calculations written in each column, e.g. 2×2, 3×8, 6×8 All the division are less than 24 so do not need working out. 4×6 is the same as 6×4, so does not need working out. Some children may have used other strategies instead of working out the calculations.</p>	Less than 6×4	Equal to 6×4	Greater than 6×4	$30 \div 6$	8×3	5×6	$27 \div 3$	4×6	4×8	$18 \div 3$	12×2	
Less than 6×4	Equal to 6×4	Greater than 6×4											
$30 \div 6$	8×3	5×6											
$27 \div 3$	4×6	4×8											
$18 \div 3$	12×2												
6	<p>a) multiple possible answers, e.g.: $7 \times 3 > 5 \times 3$ (any value less than 7) b) $24 \div 8 < 2 \times 2$ or $24 \div 12 < 2 \times 2$ c) $30 \div 6 = 1 \times 5$ d) multiple possible answers, e.g.: $12 \times 2 > 12 \div 2$</p>												

Y3 – Spring – Block 1 – Step 2 – Related calculations Answers

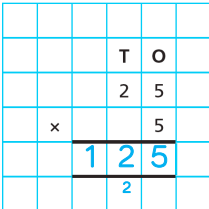
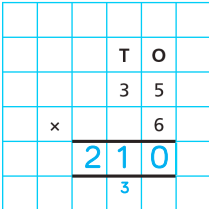
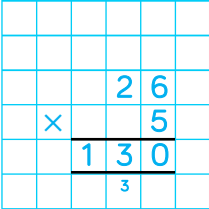
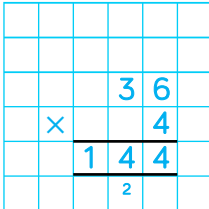
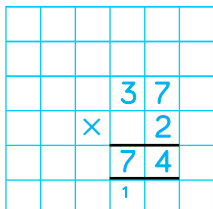
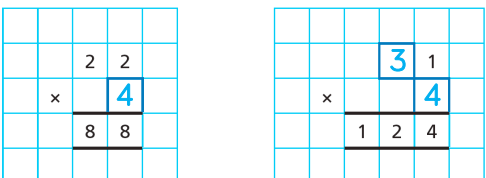
Question	Answer
1	a) 3×2 ones = 6 ones $3 \times 2 = 6$ b) 3×2 tens = 6 tens $3 \times 20 = 60$
2	a) $2 \times 4 = 8$ $2 \times 40 = 80$ b) $5 \times 3 = 15$ $5 \times 30 = 150$ c) $5 \times 2 = 10$ $5 \times 20 = 100$ d) $2 \times 8 = 16$ $2 \times 80 = 160$
3	$4 \times 3 = 12$ $4 \times 30 = 120$ Both are 4 by 3 arrays. The first array is made from ones counters and the second array is made from tens counters.
4	$6 \times 3 = 18$ $6 \times 30 = 180$ The second calculation is 10 times the first calculation.
5	$14 \div 2 = 7$ $140 \div 2 = 70$
6	a) 350 b) 35 c) 350 d) 7 e) 70 f) 50
7	Each jug costs £20 $240 \div 12$
8	a) $3 \times 70 = 210$ b) $240 \div 6 = 40$ c) $4 \times 90 = 360$ d) $120 \div 60 = 2$
9	10 and 24 40 and 6 12 and 20 3 and 80 60 and 4 30 and 8 There are six possible answers.

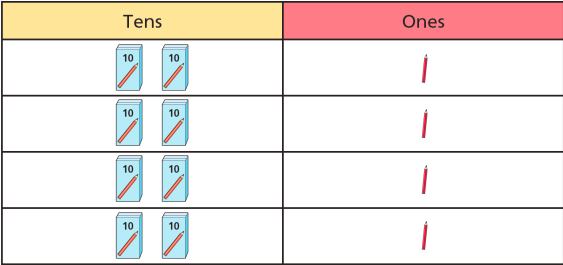
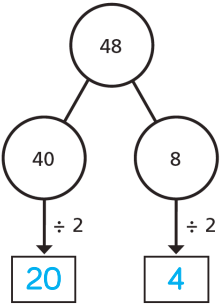
Question	Answer																																																																																																																																		
1	$3 \times 3 \text{ ones} = 9$ $3 \times 2 \text{ tens} = 60$ $9 + 60 = 69$ $3 \times 23 = 69$ There are 69 marbles in total.																																																																																																																																		
2	$2 \times 4 = 8$ $2 \times 20 = 40$ $2 \times 24 = 48$																																																																																																																																		
3	Both methods work out 43×2 and multiply each digit by 2 The place value chart uses concrete resources (counters) but the column method just uses numbers.																																																																																																																																		
4	a) <table border="1"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>T</td><td>O</td><td></td></tr> <tr><td></td><td></td><td>2</td><td>4</td><td></td></tr> <tr><td></td><td>x</td><td></td><td>2</td><td></td></tr> <tr><td></td><td></td><td>4</td><td>8</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table> b) <table border="1"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>T</td><td>O</td><td></td></tr> <tr><td></td><td></td><td>4</td><td>4</td><td></td></tr> <tr><td></td><td>x</td><td></td><td>2</td><td></td></tr> <tr><td></td><td></td><td>8</td><td>8</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table> c) <table border="1"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>3</td><td>1</td><td></td></tr> <tr><td></td><td>x</td><td></td><td>3</td><td></td></tr> <tr><td></td><td></td><td>9</td><td>3</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table> d) <table border="1"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>4</td><td>2</td><td></td></tr> <tr><td></td><td>x</td><td></td><td>2</td><td></td></tr> <tr><td></td><td></td><td>8</td><td>4</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>								T	O				2	4			x		2				4	8																			T	O				4	4			x		2				8	8																			3	1			x		3				9	3																			4	2			x		2				8	4											
		T	O																																																																																																																																
		2	4																																																																																																																																
	x		2																																																																																																																																
		4	8																																																																																																																																
		T	O																																																																																																																																
		4	4																																																																																																																																
	x		2																																																																																																																																
		8	8																																																																																																																																
		3	1																																																																																																																																
	x		3																																																																																																																																
		9	3																																																																																																																																
		4	2																																																																																																																																
	x		2																																																																																																																																
		8	4																																																																																																																																
5	<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>3</td><td>4</td><td></td></tr> <tr><td></td><td>x</td><td></td><td>2</td><td></td></tr> <tr><td></td><td></td><td>6</td><td>8</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>								3	4			x		2				6	8																																																																																																															
		3	4																																																																																																																																
	x		2																																																																																																																																
		6	8																																																																																																																																
6	£96																																																																																																																																		












































Question	Answer
7	
8	<p>a) Multiply each digit by 2</p> <p>b) 4×22 ✓ 3×23 ✓ 3×33 ✓</p> <p>12×4 ✓ 3×32 ✓ 4×20 ✓</p> <p>Some children's answers may differ.</p>

Y3 – Spring – Block 1 – Step 4 – Multiply 2-digits by 1-digit (2) Answers

Question	Answer																																																																		
1	$5 \times 3 \text{ ones} = 15$ $5 \times 2 \text{ tens} = 100$ $15 + 100 = 115$ $5 \times 23 = 115$ There are 115 marbles in total.																																																																		
2	$4 \times 5 = 20$ $4 \times 10 = 40$ $4 \times 15 = 60$																																																																		
3	a) 96 b) 51 c) 75 d) 136																																																																		
4	<div style="display: flex; flex-direction: column; align-items: center;"> <table border="1" style="border-collapse: collapse; text-align: center; margin-bottom: 10px;"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>T</td><td>O</td><td></td></tr> <tr><td></td><td></td><td>2</td><td>4</td><td></td></tr> <tr><td></td><td>×</td><td></td><td>3</td><td></td></tr> <tr style="border-top: 1px solid black;"><td></td><td></td><td>7</td><td>2</td><td></td></tr> <tr><td></td><td></td><td>1</td><td></td><td></td></tr> </table> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td>T</td><td>O</td><td></td></tr> <tr><td></td><td></td><td></td><td>3</td><td>5</td><td></td></tr> <tr><td></td><td>×</td><td></td><td></td><td>4</td><td></td></tr> <tr style="border-top: 1px solid black;"><td></td><td></td><td>1</td><td>4</td><td>0</td><td></td></tr> <tr><td></td><td></td><td></td><td>2</td><td></td><td></td></tr> </table> </div>								T	O				2	4			×		3				7	2				1												T	O					3	5			×			4				1	4	0					2		
		T	O																																																																
		2	4																																																																
	×		3																																																																
		7	2																																																																
		1																																																																	
			T	O																																																															
			3	5																																																															
	×			4																																																															
		1	4	0																																																															
			2																																																																

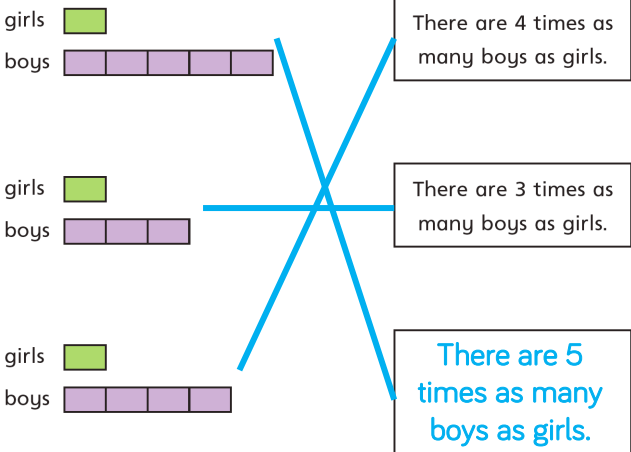






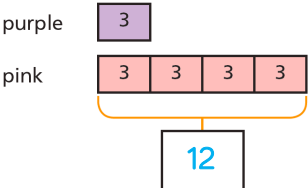



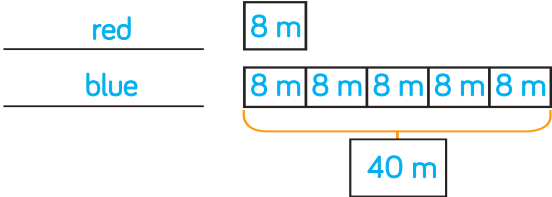






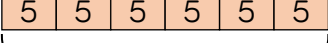
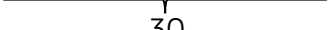
Question	Answer
5	<p>a) </p> <p>b) </p> <p>c) </p> <p>d) </p>
6	<p>He has written 3×2 followed by 7×2. He should have added the two calculations together.</p> 
7	
8	<p>a) multiple possible answers, e.g: $45 \times 3 = 135$</p> <p>b) multiple possible answers: odd product: both numbers odd even product: one or both numbers even exchange in the ones column: product of last two digits > 10 and answer < 100 exchange in the both columns: product of last two digits > 10 and answer > 100</p>

Question	Answer
1	<p>a) </p> <p>b) $8 \text{ tens} \div 4 = 2 \text{ tens}$ $4 \text{ ones} \div 4 = 1 \text{ one}$ $84 \div 4 = 21$</p> <p>c) 21</p>
2	<p>a) 13 b) 34</p>
3	 <p>$48 \div 2 = 24$</p>
4	<p>a) 23 b) 33</p>
5	<p>a) 31 32 33 b) 41 42 43</p> <p>When the number being divided by goes up by the number dividing, the answer goes up by 1</p>
6	<p>Yes. 8 is in both the 2 and 4 times-tables, so 88 can be divided by both 2 and 4 1 and 8</p>
7	<p>There are 32 mints in each bowl. Divide both 60 and 36 by 3 and then add the answers. Add the numbers in the jars and then divide by 3</p>

Question	Answer										
1	<p>a) </p> <p>b) <table border="1"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table></p> <p>c) 14 d) Yes.</p>	Tens	Ones								
Tens	Ones										
											
											
											
											
2	<p>a) <table border="1"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table></p> <p>b) £14</p>	Tens	Ones								
Tens	Ones										
											
											
											
3	24										
4	<p>a) 15 b) 19 c) 23</p>										
5	<p>a) Tommy's Both 40 and 12 are in the 4 times-table. b) 13</p>										
6	<p>a) $48 \div 3 = 16$ $30 \div 3 = 10$ $18 \div 3 = 6$ $48 \div 3 = 16$ b) 24 c) 13 d) 25</p>										
7	<p>a) All of the divisions are dividing 96 96 is being divided by a different number in each division. b) $96 \div 8 = 12$ $96 \div 4 = 24$ $96 \div 2 = 48$ c) When the number being divided by halves, the answer doubles.</p>										

Y3 – Spring – Block 1 – Step 7 – Divide 2-digits by 1-digit (3) Answers

Question	Answer
1	There are 4 groups of 4 There is 1 lolly stick remaining. $17 \div 4 = 4$ remainder 1 Mo can make 4 squares.
2	There are 5 groups of 3 There are 2 lolly sticks remaining. $17 \div 3 = 5$ remainder 2 Mo can make 5 triangles.
3	There are 3 groups of 5 There are 2 lolly sticks remaining. $17 \div 5 = 3$ remainder 2 Mo can make 3 pentagons.
4	a) 5 remainder 3 b) 4 remainder 3 c) 7 remainder 2
5	No. 6 is larger than 4, so she can subtract another 4 $34 \div 4 = 8$ remainder 2
6	a) $29 \div 6 = 4$ remainder 5 b) $29 \div 7 = 4$ remainder 1 c) $29 \div 2 = 14$ remainder 1
7	75 has 5 ones so it is in the 5 times-table. 1
8	a) 21 remainder 3 b) 25 remainder 2 c) 14 remainder 4
9	51

Question	Answer
1	There are 3 apples. There are 9 strawberries. There are 3 times as many strawberries as apples.
2	The spotty ribbon measures 4 cm. The plain ribbon measures 16 cm. The spotty ribbon is 4 times as long as the spotty ribbon.
3	 <p>girls  boys  There are 4 times as many boys as girls.</p> <p>girls  boys  There are 3 times as many boys as girls.</p> <p>girls  boys  There are 5 times as many boys as girls.</p>
4	 <p>purple  3</p> <p>pink  3 3 3 3</p> <p> 12</p>
5	<p>a)</p>  <p> red  8 m</p> <p> blue  8 m 8 m 8 m 8 m 8 m</p> <p> 40 m</p> <p>b) The blue rope is 40 m long.</p>
6	<p>Ron  5</p> <p>Esther  5 5 5 5 5 5</p> <p> 30</p> <p>Esther has got 30 bananas.</p>
7	<p>45 is 9 times greater than 5 $9 \times 5 = 45$ 5 is 9 times smaller than 45 $45 \div 5 = 9$</p>

Y3 – Spring – Block 1 – Step 8 – Scaling Answers (continued)

Question	Answer					
8		Alex	Eva	Dexter	Annie	Tommy
	Scales	D	E	B	A	C

Question	Answer																										
1	<p>a)</p> <table border="1"> <thead> <tr> <th>Ice cream flavour</th> <th>Topping</th> </tr> </thead> <tbody> <tr><td>chocolate</td><td>nuts</td></tr> <tr><td>chocolate</td><td>choc chips</td></tr> <tr><td>chocolate</td><td>sprinkles</td></tr> <tr><td>vanilla</td><td>nuts</td></tr> <tr><td>vanilla</td><td>choc chips</td></tr> <tr><td>vanilla</td><td>sprinkles</td></tr> <tr><td>mint</td><td>nuts</td></tr> <tr><td>mint</td><td>choc chips</td></tr> <tr><td>mint</td><td>sprinkles</td></tr> <tr><td>strawberry</td><td>nuts</td></tr> <tr><td>strawberry</td><td>choc chips</td></tr> <tr><td>strawberry</td><td>sprinkles</td></tr> </tbody> </table> <p>b) Keep the flavour of ice cream the same and go through all the toppings. Repeat for each flavour of ice cream.</p>	Ice cream flavour	Topping	chocolate	nuts	chocolate	choc chips	chocolate	sprinkles	vanilla	nuts	vanilla	choc chips	vanilla	sprinkles	mint	nuts	mint	choc chips	mint	sprinkles	strawberry	nuts	strawberry	choc chips	strawberry	sprinkles
Ice cream flavour	Topping																										
chocolate	nuts																										
chocolate	choc chips																										
chocolate	sprinkles																										
vanilla	nuts																										
vanilla	choc chips																										
vanilla	sprinkles																										
mint	nuts																										
mint	choc chips																										
mint	sprinkles																										
strawberry	nuts																										
strawberry	choc chips																										
strawberry	sprinkles																										
2	<p>a)</p> <table border="1"> <thead> <tr> <th>Mittens</th> <th>Scarfs</th> </tr> </thead> <tbody> <tr><td>A</td><td>1</td></tr> <tr><td>A</td><td>2</td></tr> <tr><td>B</td><td>1</td></tr> <tr><td>B</td><td>2</td></tr> <tr><td>C</td><td>1</td></tr> <tr><td>C</td><td>2</td></tr> <tr><td>D</td><td>1</td></tr> <tr><td>D</td><td>2</td></tr> <tr><td>E</td><td>1</td></tr> <tr><td>E</td><td>2</td></tr> </tbody> </table> <p>b) 10 c) Work systematically, putting each scarf with one pair of gloves before moving on to the next pair of gloves. d) $5 \times 2 = 10$</p>	Mittens	Scarfs	A	1	A	2	B	1	B	2	C	1	C	2	D	1	D	2	E	1	E	2				
Mittens	Scarfs																										
A	1																										
A	2																										
B	1																										
B	2																										
C	1																										
C	2																										
D	1																										
D	2																										
E	1																										
E	2																										
3	<p>No. $4 \times 4 = 16$ There are 16 combinations.</p>																										
4	<p>a) $5 \times 4 = 20$ b) $7 \times 4 = 28$</p>																										
5	<p>18 54</p>																										
6	<p>8</p>																										