



Build the 8x table
and count in steps
of 8 and multiples
of 8 from zero

Recall and use
multiplication facts
for the 8 times
table

Recall and use
division facts for
the 8 times table

Recall and use
division facts for the
4 times table

Recall and use
multiplication
facts for the 4
times table

Year 3

Unit 3

Multiplication and Division: Multiplication Tables

Build the 4x
table and count
in steps of 4
and multiples of
4 from zero

Build the 3x
table

Recall and use
multiplication facts
for the 3 times
table

Recall and use
division facts for
the 3 times table



Curriculum Progression

Manageable Steps 1 - 4

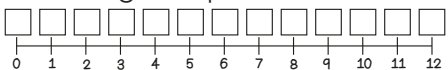
Depth of Understanding

Can Do Maths		Build the 3x table	Recall and use multiplication facts for the 3 times table	Recall and use division facts for the 3 times table	Build the 4x table and count in steps of 4 and multiples of 4 from zero															
What it is What it is also		Build the 3x table by: - counting in steps of 3 0 1 2 3 4 5 6 7 8 9 10 11 12 - use doubling and halving 0 1 2 3 4 5 6 7 8 9 10 11 12 0 1 2 3 4 5 6 7 8 9 10 11 12	Calculate: $3 \times 4 =$ $3 \times 6 =$ $3 \times 7 =$ $8 \times 3 =$ $= 12 \times 3$	Calculate: $18 \div 3 =$ $30 \div 3 =$ $33 \div 3 =$ $= 21 \div 3$ $9 =$ $\div 3$	Build the 4x table by: - counting in steps of 4 0 1 2 3 4 5 6 7 8 9 10 11 12 - use doubling and halving 0 1 2 3 4 5 6 7 8 9 10 11 12 0 1 2 3 4 5 6 7 8 9 10 11 12															
	What it is not	Coco thinks she is building the 3x table: 0, 3, 6, 9, 13, 16, 19, ... Explain why she is incorrect.	Coco thinks that $3 \times 3 = 6$ Explain why she is incorrect.	Coco thinks that $23 \div 3 = 7$ Explain why she is incorrect.	Coco thinks that if $2 \times 9 = 18$ then $4 \times 9 = 28$ Explain why she is incorrect.															
	What problems can I solve?	Always/ Sometimes/ Never True The sum of the digits of any multiple of 3 is 3, 6 or 9	Find the missing digits. $3 \times \square = \square 1$ $\square \times \square = \square 5$ $2 \square = 3 \times \square$ $\square \times 3 = \square + 9$ Solve each problem in several different ways where possible. Solve all the problems together using the digits 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.	Find the missing numbers <table><tr><td>x</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td>15</td></tr><tr><td></td><td>10</td><td></td><td></td></tr><tr><td></td><td></td><td>30</td><td></td></tr></table> Investigate the number of different solutions.	x				3			15		10					30	
x																				
3			15																	
	10																			
		30																		

Curriculum Progression

Manageable Steps 5 - 8

Depth of Understanding

Can Do Maths		Recall and use multiplication facts for the 4 times table	Recall and use division facts for the 4 times table	Build the 8x table and count in steps of 8 and multiples of 8 from zero	Recall and use multiplication facts for the 8 times table														
What it is What it is also	Calculate: $4 \times 4 =$ $4 \times 6 =$ $7 \times 4 =$ $9 \times 4 =$ $\square = 12 \times 4$	Calculate: $12 \div 4 =$ $20 \div 4 =$ $28 \div 4 =$ $\square = 36 \div 4$ $12 = 48 \div \square$	Build the 8x table by: - counting in steps of 8  - use doubling and halving  	Calculate: $8 \times 6 =$ $8 \times 7 =$ $9 \times 8 =$ $11 \times 8 =$ $\square = 12 \times 8$															
	Coco thinks that $4 \times 8 = 34$ Explain why she is incorrect.	Coco thinks that $20 \div 4 > 20 \div 2$ Explain why she is incorrect.	Coco thinks that If $4 \times 4 = 16$ then $8 \times 8 = 32$ Explain why she is incorrect.	Coco thinks that $8 \times 4 = 36$ Explain why she is incorrect.															
	Find the missing numbers <table border="1"><tr><td>x</td><td></td><td>4</td><td></td></tr><tr><td>3</td><td>6</td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td>45</td></tr></table> Investigate the number of different solutions.	x		4		3	6			7							45	Find the missing digits. $\square 6 \div 4 = \square$ $\square = 2 \square \div 4$ $\square \square \div 4 = \square$ $4 = \square \square \div \square$ Solve each problem in several different ways where possible. Solve all the problems together using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.	Always/ Sometimes/ Never True Multiples of 8 are in the 4 times table.
x		4																	
3	6																		
7																			
			45																

Curriculum Progression

Manageable Steps 9

	Recall and use division facts for the 8 times table																		
What it is What it is also What it is not What problems can I solve?	Calculate: $16 \div 8 =$ $32 \div 8 =$ $40 \div 8 =$ $= 96 \div 8$ $9 = 72 \div$																		
	Coco thinks that $8 = 1 \div 8$ Explain why she is incorrect.																		
	Find the missing numbers <table border="1" data-bbox="333 1137 649 1380"><tr><td>x</td><td></td><td></td><td></td></tr><tr><td></td><td>4</td><td></td><td></td></tr><tr><td></td><td></td><td>15</td><td></td></tr><tr><td></td><td></td><td>40</td><td>64</td></tr></table> Investigate the number of different solutions.	x					4					15				40	64		
x																			
	4																		
		15																	
		40	64																

Year 3 Maths Mastery Matrix

Find the missing digits - Possible solutions

Unit 3 Multiplication and Division

Manageable Step 2 - Recall and use multiplication facts for the 3 times table

$$3 \times \boxed{7} = \boxed{2}1$$

$$\boxed{3} \times \boxed{5} = \boxed{1}5$$

$$2 \boxed{4} = 3 \times \boxed{8}$$

$$\boxed{6} \times 3 = \boxed{9} + \overset{3}{9}$$

Manageable Step 6 - Recall and use division facts for the 4 times table

$$\boxed{3}6 \div 4 = \boxed{9}$$

$$\boxed{5} = 2 \boxed{0} \div 4$$

$$\boxed{2}8 \div 4 = \boxed{7}$$

$$4 = \boxed{1}\boxed{6} \div \boxed{4}$$

Manageable Step 8 - Recall and use multiplication facts for the 8 times table

$$8 \times \boxed{3} = \boxed{2}4$$

$$\boxed{5} \times 8 = 4 \boxed{0}$$

$$2 \times \boxed{1}\boxed{6} = \boxed{4} \times \boxed{8}$$

$$\boxed{7}2 = \boxed{9} \times 8$$