

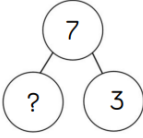
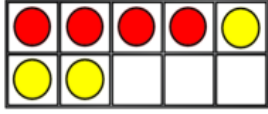
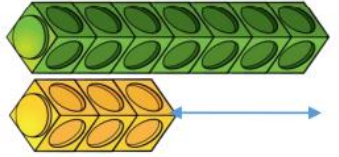
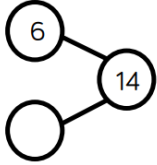
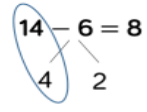
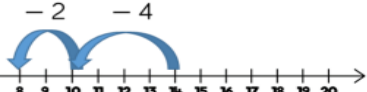
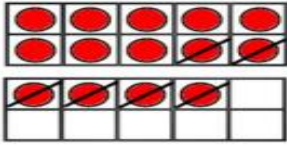

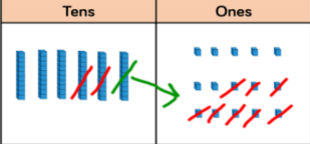
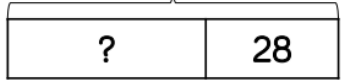
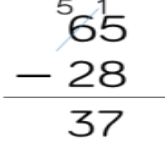
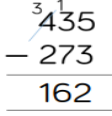

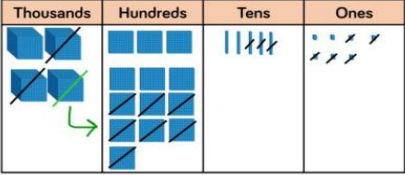
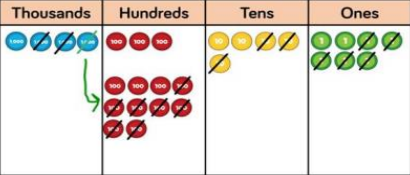
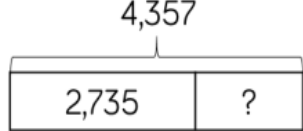
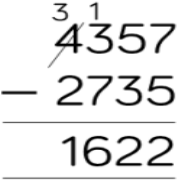

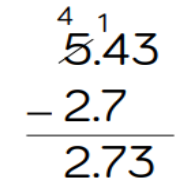
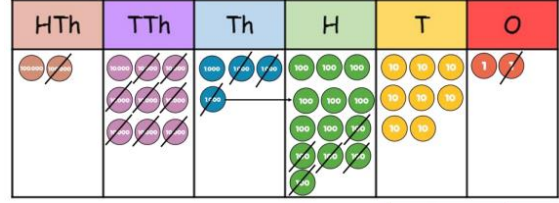
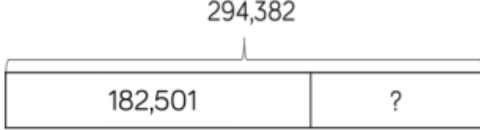
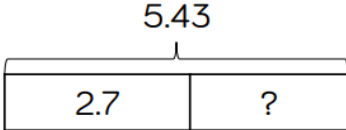

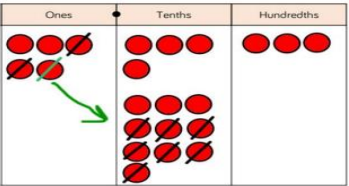



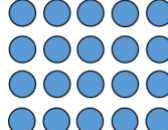
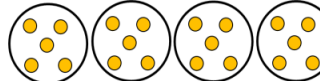
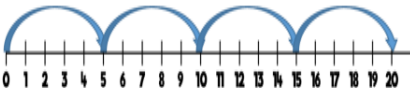
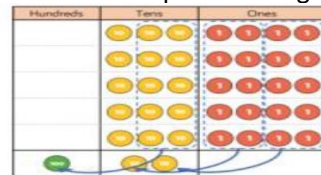
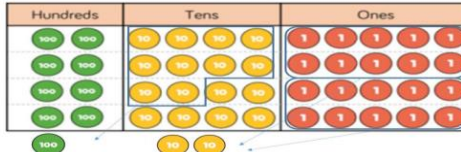
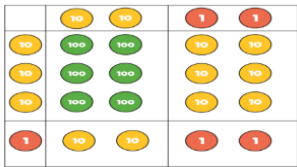
Addition Progression

Class	Skills	How
1	Add two 1-digit numbers to 10 Add 1 and 2-digit numbers to 20	Part-whole models Counting counters Ten frames Number lines
2	Add three 1-digit numbers Add 1 and 2-digit numbers to 100 Add two 2-digit numbers	Part-whole models Ten frames Number lines Making links with number bonds to ten
3	Add with up to 3-digits	Bar models Base ten Place value counters Column addition
4	Add with up to 4-digits	Bar models Place value counters Column addition
5	Add with more than 4 digits Add with up to 2 decimal places	Bar models Place value counters Column addition
6	Add with more than 5 digits Add with up to 3 decimal places	Bar models Place value counters Column addition

Subtraction Progression

Class	Skills	How
1	Subtract two 1-digit numbers to 10 Subtract 1 and 2-digit numbers to 20	Part-whole model Ten frames Bead strings     
2	Subtract 1 and 2-digit numbers to 100 Subtract two 2-digit numbers	Part-whole model Ten frames Hundred square Number lines     
3	Subtract with up to 3- digits	Bar model Base 10 Place value counters Column subtraction     
4	Subtract with up to 4- digits	Bar model Place value counters Column subtraction    
5	Subtract with more than 4 digits Subtract with up to 2 decimal places	Bar model Place value counters Column subtraction   
6	Subtract with more than 5 digits Subtract with up to 3 decimal places	Bar model Place value counters Column subtraction    

Multiplication Progression

Class	Skills	Example	How																																																																										
1 and 2	Solve one-step problems with multiplication	One bag holds 5 apples, how many apples do 4 bags hold?	Concrete equipment 	Arrays 	Repeated addition $5 + 5 + 5 + 5 = 20$ $4 \times 5 = 20$ $5 \times 4 = 20$	Counting 	Number Lines 																																																																						
3	Multiply 2-digit by 1- digit numbers	34×5 Partition the 2-digit number 30×5 4×5 Calculate and add together	Counters and place value grid 	Long Multiplication <table><tr><td></td><td>H</td><td>T</td><td>O</td><td></td></tr><tr><td></td><td></td><td>3</td><td>4</td><td></td></tr><tr><td>\times</td><td></td><td></td><td>5</td><td></td></tr><tr><td></td><td></td><td>2</td><td>0</td><td>(5×4)</td></tr><tr><td>$+$</td><td>1</td><td>5</td><td>0</td><td>(5×30)</td></tr><tr><td></td><td>1</td><td>7</td><td>0</td><td></td></tr></table>		H	T	O				3	4		\times			5				2	0	(5×4)	$+$	1	5	0	(5×30)		1	7	0		Short Multiplication <table><tr><td></td><td>H</td><td>T</td><td>O</td><td></td></tr><tr><td></td><td></td><td>3</td><td>4</td><td></td></tr><tr><td>\times</td><td></td><td></td><td>5</td><td></td></tr><tr><td></td><td></td><td>1</td><td>7</td><td>0</td></tr><tr><td></td><td></td><td>1</td><td>2</td><td></td></tr></table>		H	T	O				3	4		\times			5				1	7	0			1	2																		
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$+$	1	5	0	(5×30)																																																																									
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		1	2																																																																										
4	Multiply 3-digit by 1- digit numbers	245×4 Partition the 3-digit number 200×4 40×4 5×4 Calculate and add together	Counters and place value grid 	Short Multiplication <table><tr><td></td><td>H</td><td>T</td><td>O</td><td></td></tr><tr><td></td><td></td><td>2</td><td>4</td><td>5</td></tr><tr><td>\times</td><td></td><td></td><td></td><td>4</td></tr><tr><td></td><td></td><td>9</td><td>8</td><td>0</td></tr><tr><td></td><td></td><td>1</td><td>2</td><td></td></tr></table>		H	T	O				2	4	5	\times				4			9	8	0			1	2																																																	
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\times				4																																																																									
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5	Multiply 4-digit by 1- digit numbers Multiply 2-digit by 2- digit numbers	1826×3 using short multiplication -line up your digits in place value order -multiply a digit at a time, from the right -if the answer crosses the place value -then record below in the next column i.e. $8 \times 6 = 18$ so record 8 in the ones column and -the "1" for the 10 in the tens column	<table><tr><td></td><td>Th</td><td>H</td><td>T</td><td>O</td></tr><tr><td></td><td></td><td>1</td><td>8</td><td>2</td><td>6</td></tr><tr><td>\times</td><td></td><td></td><td></td><td></td><td>3</td></tr><tr><td></td><td></td><td></td><td>5</td><td>4</td><td>7</td><td>8</td></tr><tr><td></td><td></td><td>2</td><td></td><td></td><td>1</td><td></td></tr></table>		Th	H	T	O			1	8	2	6	\times					3				5	4	7	8			2			1		22×31 explored in grid method and then long multiplication 1×22 then 30×22 <table><tr><td>\times</td><td>20</td><td>2</td></tr><tr><td>30</td><td>600</td><td>60</td></tr><tr><td>1</td><td>20</td><td>2</td></tr></table> 	\times	20	2	30	600	60	1	20	2	<table><tr><td></td><td>H</td><td>T</td><td>O</td></tr><tr><td></td><td></td><td>2</td><td>2</td></tr><tr><td>\times</td><td></td><td>3</td><td>1</td></tr><tr><td></td><td></td><td>2</td><td>2</td></tr><tr><td></td><td>6</td><td>6</td><td>0</td></tr><tr><td></td><td>6</td><td>8</td><td>2</td></tr></table>		H	T	O			2	2	\times		3	1			2	2		6	6	0		6	8	2								
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	6	8	2																																																																										
6	Multiply 2-digit by 3- digit numbers Multiply 2-digit by 4- digit numbers	234×32 explored in grid method and then long multiplication 2×34 then 30×234 <table><tr><td>\times</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></table>	\times	200	30	4	30	6,000	900	120	2	400	60	8	<table><tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr><tr><td></td><td>2</td><td>3</td><td>4</td></tr><tr><td>\times</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</td><td>7</td><td>1</td><td>0</td></tr><tr><td>7</td><td>4</td><td>8</td><td>8</td></tr></table>	Th	H	T	O		2	3	4	\times		3	2		4	6	8	1	7	1	0	7	4	8	8	2739×28 explored in grid method and then long multiplication 8×2739 then 20×2739 <table><tr><td>TTh</td><td>Th</td><td>H</td><td>T</td><td>O</td></tr><tr><td></td><td></td><td>2</td><td>7</td><td>3</td><td>9</td></tr><tr><td>\times</td><td></td><td></td><td></td><td>2</td><td>8</td></tr><tr><td>2</td><td>5</td><td>1</td><td>9</td><td>1</td><td>2</td></tr><tr><td>1</td><td>5</td><td>4</td><td>1</td><td>7</td><td>8</td><td>0</td></tr><tr><td>7</td><td>6</td><td>6</td><td>9</td><td>2</td><td></td><td></td></tr></table>	TTh	Th	H	T	O			2	7	3	9	\times				2	8	2	5	1	9	1	2	1	5	4	1	7	8	0	7	6	6	9	2		
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Division Progression

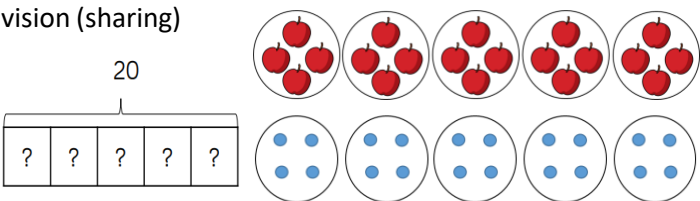
Class

Skills and How

1 and 2

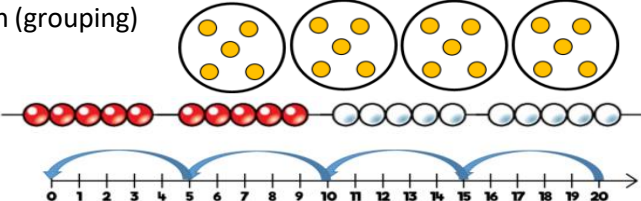
Solve one-step problems with division (sharing)

There are 20 apples altogether.
They are shared equally between 5 bags.
How many apples are in each bag?



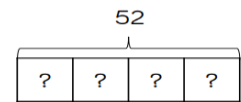
Solve one-step problems with division (grouping)

There are 20 apples altogether.
They are put in bags of 5.
How many bags are there?

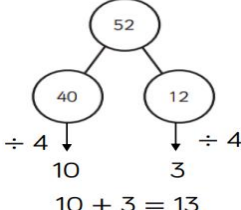
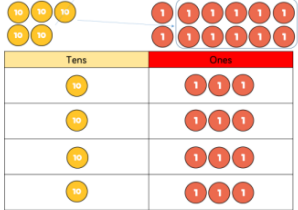


3

Divide 2-digits by 1- digit
(sharing with exchange)

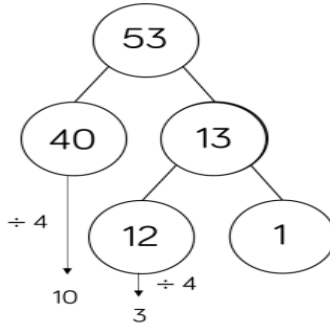
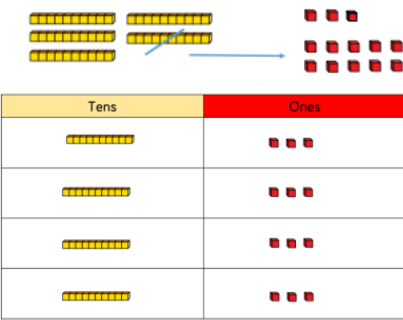
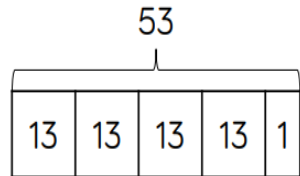


$52 \div 4 = 13$



Divide 2-digits by 1- digit (sharing with remainders)

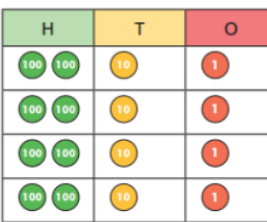
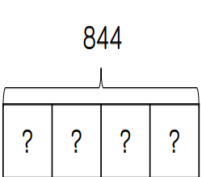
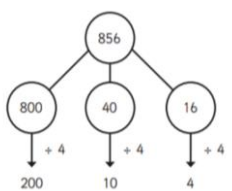
$53 \div 4 = 13 \text{ r}1$



4

Divide 3-digits by 1- digit
(sharing with exchange)

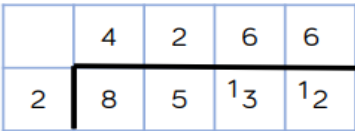
$856 \div 4 = 214$



Divide 4-digits by 1- digit (grouping)

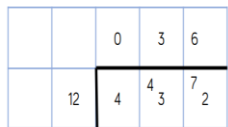
$8,532 \div 2 = 4,266$

Short division



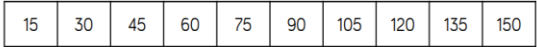
6

Divide multi-digits by 2-digits (short division)

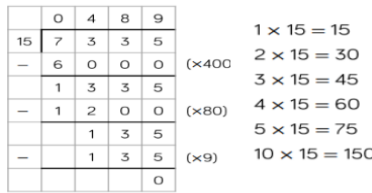
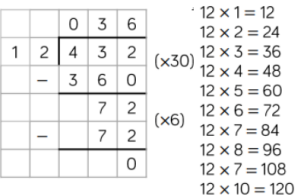


$432 \div 12 = 36$

$7,335 \div 15 = 489$



Divide multi-digits
by 2-digits (long division)



Times Table Knowledge

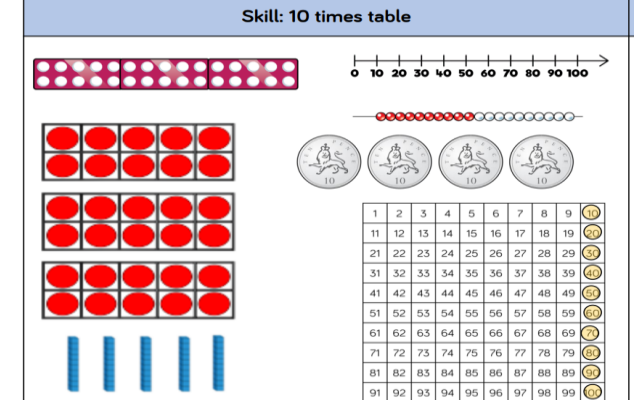
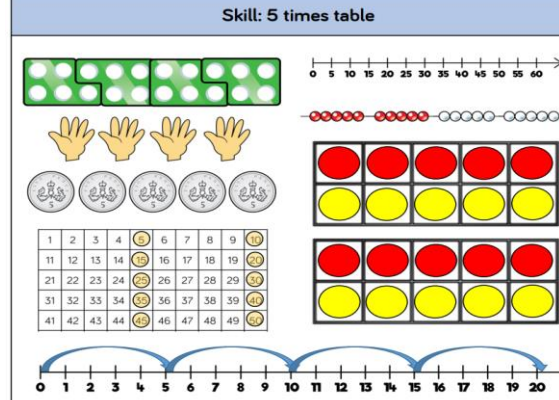
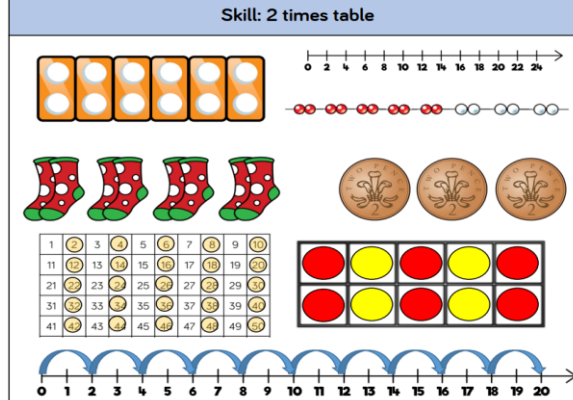
Class

Skill

How

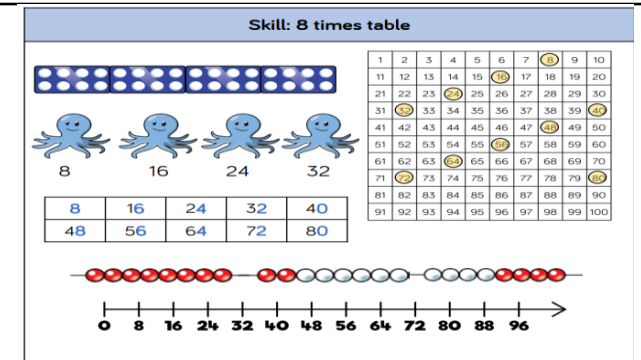
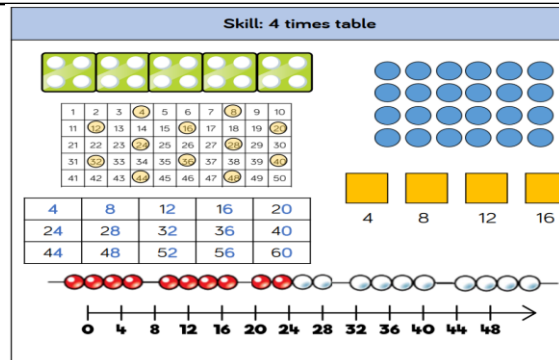
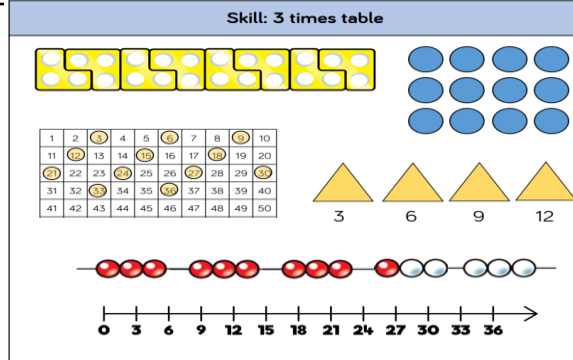
2

Recall and use multiplication and division facts for the 2,5 and 10-times table



3

Recall and use multiplication and division facts for the 3,4 and 8-times table



4

Recall and use multiplication and division facts for the 6,7,9,11 and 12-times table

