

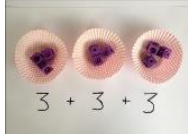



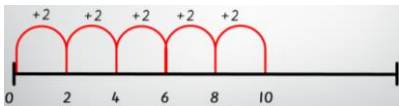




## Progression in Calculations - Multiplication



Skill	Example	Methods																																	
Introduce language of early multiplication by grouping		 																																	
Make links between multiplication and repeated addition	$3 \times 3 =$ $3 + 3 + 3 =$	 																																	
Solve one-and two-step problems that use 2, 5 and 10 multiplication tables	$5 \times 2 =$	  																																	
Multiply a 'teens' number by 2, 3, 4 or 5 using partitioning/grid method		<div><div><math>17 \times 4</math></div><div><math>= (10 \times 4) + (7 \times 4)</math> <math>= 40 + 28</math> <math>= 68</math></div></div> <table><tr><td>x</td><td>10</td><td>2</td></tr><tr><td>3</td><td><math>\equiv</math></td><td><math>\dots</math></td></tr></table>	x	10	2	3	$\equiv$	$\dots$																											
x	10	2																																	
3	$\equiv$	$\dots$																																	
Multiply a single digit number by a multiple of 10 up to 50		<table><tr><td>Th</td><td>H</td><td>T</td><td>U</td></tr><tr><td></td><td></td><td></td><td>7</td></tr><tr><td></td><td></td><td>7</td><td>0</td></tr></table> <div><math>7</math> <math>10 \times 7</math></div>	Th	H	T	U				7			7	0																					
Th	H	T	U																																
			7																																
		7	0																																
Use the grid method to multiply a 2 digit number by a single digit number	$23 \times 4 =$	<div><div><math>20 \quad 3</math></div><div><math>4 \quad 80 \quad 12</math></div></div> <div><math>\begin{array}{r} 12 \\ 80 \\ \hline 92 \end{array}</math></div>																																	
Use the expanded method and/or compact to multiply a 2 digit number by a single digit number	$23 \times 4 =$	<div><div><table><tr><td>T</td><td>U</td></tr><tr><td>23</td><td>x</td></tr><tr><td>4</td><td></td></tr><tr><td>12</td><td>+</td></tr><tr><td>80</td><td></td></tr><tr><td>92</td><td></td></tr></table><div><math>4 \times 20 = 80</math></div></div><div><table><tr><td>H</td><td>T</td><td>U</td></tr><tr><td>2</td><td>3</td><td>x</td></tr><tr><td></td><td>4</td><td></td></tr><tr><td>9</td><td>2</td><td></td></tr></table></div></div>	T	U	23	x	4		12	+	80		92		H	T	U	2	3	x		4		9	2										
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Use the grid method to multiply a 3 digit number by a single digit	$324 \times 3 =$	<div><div><math>300 \quad 20 \quad 4</math></div><div><math>3 \quad 900 \quad 60 \quad 12</math></div></div> <div><math>\begin{array}{r} 12 \\ 60 \\ 900 \\ \hline 972 \end{array}</math></div>																																	
Use the expanded and/or compact method to multiply a 3 digit number by a single digit	$324 \times 3 =$	<div><div><table><tr><td>H</td><td>T</td><td>U</td></tr><tr><td>324</td><td>x</td><td></td></tr><tr><td>3</td><td></td><td></td></tr><tr><td>12</td><td>+</td><td></td></tr><tr><td>60</td><td></td><td></td></tr><tr><td>900</td><td></td><td></td></tr><tr><td>972</td><td></td><td></td></tr></table><div><math>3 \times 20 = 60</math></div><div><math>3 \times 300 = 900</math></div></div><div><table><tr><td>H</td><td>T</td><td>U</td></tr><tr><td>3</td><td>2</td><td>4</td></tr><tr><td></td><td>3</td><td></td></tr><tr><td>9</td><td>7</td><td>2</td></tr></table></div></div>	H	T	U	324	x		3			12	+		60			900			972			H	T	U	3	2	4		3		9	7	2
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## Progression in Calculations - Multiplication



Multiply a 2 digit number by a 2 digit number using the grid method	$38 \times 72 =$	
Use the grid method to multiply 2 and 3 digit numbers by a 2 digit number	$372 \times 24 =$	
Use the compact method to multiply 2 and 3 digit numbers by a 2 digit number	$372 \times 24 =$	
Use the grid method to multiply a 1 place decimal by a single digit	$9.4 \times 6 =$	
Use the compact method to multiply a 1 place decimal by a single digit	$9.4 \times 6 =$	