



NZ Curriculum Level 1	NZ Curriculum Level 2	NZ Curriculum Level 3	NZ Curriculum Level 4
Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.	Use simple additive strategies with whole numbers and fractions.	Use a range of additive and multiplicative strategies with whole numbers, fractions, decimals and percentages.	Use a range of multiplicative strategies when operating on whole numbers. Understand addition and subtraction of fractions, decimals and integers.
$3 + 2$ $5 + 4$ $6 + 3$ $10 + 6$ $8 + 5$	$49 + 7$ $30 + 40$ $62 + 30$ $53 + 21$	$27 + 38$ $231 + 245$ $98 + 50$ $147 + 35$	$2876 + 735$ $3.452 + 2.86$ $0.7 + 0.4$ $0.26 + 1.7$ $-4 + -7$
6 months	Year 2	Year 4	Year 8

Introduce vertical methods

New expectations with the revised curriculum

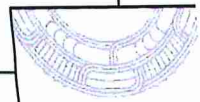
NZ Curriculum Level 1		NZ Curriculum Level 2		NZ Curriculum Level 3		NZ Curriculum Level 4		
<p>Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.</p> <p> $3 + 2$ $5 + 4$ $6 + 3$ $49 + 7$ $30 + 40$ $62 + 30$ $10 + 6$ $8 + 5$ $53 + 21$ </p>	<p>Use simple additive strategies with whole numbers and fractions.</p> <p> $27 + 38$ $98 + 50$ $147 + 35$ $0.7 + 0.4$ </p>	<p>Use a range of additive and multiplicative strategies with whole numbers, fractions, decimals and percentages.</p> <p> $2876 + 735$ $0.26 + 1.7$ </p>	<p>Use a range of multiplicative strategies when operating on whole numbers. Understand addition and subtraction of fractions, decimals and integers.</p> <p> $3.452 + 2.86$ $-4 + -7$ </p>					
Introduce vertical methods								
6 months	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
<p>join and separate groups of up to a total of 10 objects, and find the difference between groups by grouping and counting</p>	<p>use estimation to predict and to check the reasonableness of calculations</p> <p>join and separate groups of up to a total of 20 objects, and find the difference between groups by grouping and counting</p>	<p>use estimation to predict and to check the reasonableness of calculations</p> <p>add and subtract numbers up to 100 without renaming (e.g., $53 + 21$; $55 - 32$)</p>	<p>use rounding and estimation to predict and to check the reasonableness of calculations</p> <p>add and subtract 2- and 3-digit numbers without renaming and without a change-unknown</p>	<p>add and subtract 2- and 3-digit numbers</p> <p>add and subtract decimals to one decimal place</p>	<p>add and subtract whole numbers up to 10,000</p> <p>add and subtract decimals to two decimal places</p>	<p>add and subtract any whole numbers</p> <p>add and subtract whole numbers and decimals to two decimal places</p>	<p>add and subtract decimals to three decimal places, with an emphasis on estimating before calculating</p> <p>order, compare, add, and subtract integers (using tools in year 7)</p>	
discrete materials, number lines (years 0-2)	horizontal and vertical methods	horizontal and vertical methods	Materials, horizontal and vertical methods					

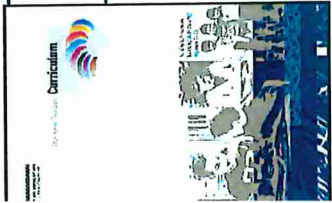


NZ Curriculum Level 1	NZ Curriculum Level 2	NZ Curriculum Level 3	NZ Curriculum Level 4
Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.	Use simple additive strategies with whole numbers and fractions.	Use a range of additive and multiplicative strategies with whole numbers, fractions, decimals and percentages.	Use a range of multiplicative strategies when operating on whole numbers. Understand addition and subtraction of fractions, decimals and integers.
8 x 2	4 x 6	2 x 23	5 x 46
6 x 5	3 x 20	65 ÷ 5	54 x 112
	32 ÷ 4		37 x 84
		198 ÷ 7	237 x 73
		83 ÷ 5	6 x 248
		327 ÷ 5	Introduce vertical methods
Year 1	Year 2	Year 3	Year 4
		Year 5	Year 6
		Year 7	Year 8

New expectations with the revised curriculum

NZ Curriculum Level 1	NZ Curriculum Level 2	NZ Curriculum Level 3	NZ Curriculum Level 4
<p>Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.</p>	<p>Use simple additive strategies with whole numbers and fractions.</p>	<p>Use a range of additive and multiplicative strategies with whole numbers, fractions, decimals and percentages.</p>	<p>Use a range of multiplicative strategies when operating on whole numbers. Understand addition and subtraction of fractions, decimals and integers.</p>
8×2 6×5	4×6 3×20 2×23 $32 \div 4$	5×46 $65 \div 5$ 54×112 6×248 $83 \div 5$ $198 \div 7$ 37×84	237×73 $327 \div 5$ $327 \div 15$ 23×4.7
<p>Year 1</p> <p>multiply and divide by making equal groups and using grouping or counting</p>	<p>Year 2</p> <p>multiply and divide by grouping and skip counting</p>	<p>Year 3</p> <p>multiply a 1- or 2-digit number by a 1-digit number, without renaming</p> <p>divide whole numbers by a 1-digit divisor with no remainders, by grouping and using the inverse relationship with multiplication</p>	<p>Year 4</p> <p>multiply a 2-digit by 1-digit number and two 1-digit whole numbers</p> <p>divide whole numbers by a 1-digit divisor, with no remainders</p>
<p>Year 5</p> <p>multiply a 3-digit by 1-digit number and two 2-digit whole numbers</p>	<p>Year 6</p> <p>multiply multi-digit whole numbers</p>	<p>Year 7</p> <p>multiply whole numbers</p>	<p>Year 8</p> <p>multiply decimals by whole numbers, and find a percentage of a whole number</p>
<p>Introduce vertical methods</p>			
<p>Horizontal and vertical methods</p>			





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<p>Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.</p>	<p>Use simple additive strategies with whole numbers and fractions.</p>	<p>Use a range of additive and multiplicative strategies with whole numbers, fractions, decimals and percentages.</p>	<p>Use a range of multiplicative strategies when operating on whole numbers. Understand addition and subtraction of fractions, decimals and integers.</p>
<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{1}{2}$ of 8 </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{1}{4}$ of 12 <small>($\frac{1}{2}$ is 6, $\frac{1}{2}$ of 6 = 3)</small> </div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-top: 5px;"> $\frac{1}{5}$ of 15 <small>(3+3+3+3+3)</small> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{1}{5}$ of 40 <small>(5x8=40)</small> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{2}{3}$ of 24 </div>
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$ </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{2}{5} + \frac{2}{5}$ </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{2}{5} + \frac{3}{10}$ </div>
		<div style="border: 1px solid black; padding: 5px; text-align: center;"> $\frac{2}{5} + \frac{4}{5}$ </div>	
Year 1	Year 2	Year 3	Year 4
Year 5	Year 6	Year 7	Year 8

New expectations with the revised curriculum

	NZ Curriculum Level 1	NZ Curriculum Level 2	NZ Curriculum Level 3	NZ Curriculum Level 4
Find a fraction of a region or set Add / subtract Fractions	<p>Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.</p> <p>$\frac{1}{2}$ of 8</p> <p>$\frac{1}{4}$ of 12 <i>Share in ones</i></p>	<p>Use simple additive strategies with whole numbers and fractions.</p> <p>$\frac{1}{5}$ of 40 <i>(5x8=40)</i></p> <p>$\frac{1}{5}$ of 15 <i>(3+3+3+3+3)</i></p>	<p>Use a range of additive and multiplicative strategies with whole numbers, fractions, decimals and percentages.</p> <p>$\frac{2}{3}$ of 24</p> <p>$\frac{2}{5} + \frac{2}{5}$</p> <p>$\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$</p>	<p>Use a range of multiplicative strategies when operating on whole numbers. Understand addition and subtraction of fractions, decimals and integers.</p> <p>$\frac{2}{3}$ of 150</p> <p>$\frac{2}{5} + \frac{4}{5}$</p> <p>$\frac{2}{3} + \frac{2}{5}$</p> <p>$\frac{2}{15} + \frac{3}{10}$</p>
	<p>find a half or quarter of a set using equal sharing and grouping</p> <p>find a half, quarter, or third of a set by identifying groups and patterns (rather than sharing by ones)</p>	<p>find a unit fraction of a whole number, using multiplication or division facts and where the answer is a whole number</p>	<p>find a fraction of a whole number, using multiplication and division facts and where the answer is a whole number</p>	<p>find a fraction or percentage of a whole number where the answer is a whole number</p> <p>multiply fractions and decimals by whole numbers, and find a percentage of a whole number</p> <p>find a whole amount, given a simple fraction or percentage (e.g., '25% of \$100, what is the original amount?')</p>
	Year 1	Year 2	Year 3	Year 4
	Year 5	Year 6	Year 7	Year 8
	add and subtract fractions with the same denominators to make up to one whole or less than one whole	add and subtract fractions with the same denominators, including to make more than one whole	add and subtract fractions with the same or related denominators	add and subtract fractions with different denominators up to tenths
	add and subtract fractions with the same denominators, including to make more than one whole	add and subtract fractions with the same or related denominators	add and subtract fractions with different denominators up to tenths	add and subtract fractions with different denominators by using equivalent fractions

