| Summative Assessment | PMAT <br> Assess ment | Achieved Students are able to: | Where next Students are Learning to: | Maths Aotearoa | Ready for Year |
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| Early Level 1 <br> By end of 6 months | Use Section 1 | Match 1 - 1 <br> Make a set up to 10 <br> Count to 10 <br> Copy simple patterns | - Read and Write Numerals to 20; <br> - Join and Partition Sets; <br> - Using + symbol; <br> - Share into equal groups; <br> - Count to say how many; <br> - Name and sort common shapes. | Working in Book 1A | Year 1 |
| Mid Level 1 <br> By end of year 1 | Use Section 2 | Read and Write Numerals to 20 Join and Partition Sets <br> Using + symbol <br> Share into equal groups <br> Count to say how many <br> Name and sort common shapes | - Solve problems by counting on or back or skip counting using known counting sequence; <br> - Use number patterns <br> - Read \& write numerals to 100 <br> - Recognise halves and quarters as 2 or 4 equal groups or pieces. | Working in book 1B | Year 2 |
| Upper Level 1 <br> By end of year 2 | Use Section 3 | Solve problems by counting on or back or skip counting using known counting sequence in the range 0-100. <br> Recognises halves and quarters as 2 or 4 equal groups or pieces. | - Use doubles and teens knowledge to solve addition problems within 20; <br> - Add and subtract double digit numbers with no regrouping; <br> - Understand multiplication as equal grouping; <br> - Understand unit fractions as equal parts. | Working in Book 2A | Year 3 |
| Early Level 2 <br> By end of Year 3 <br> End of Phase 1 | Use <br> Section 3 <br> Section 4 <br> Q1 \& Q2 | Use doubles and teens knowledge to solve addition \& subtraction problems within 20. Add and subtract double digit numbers with no regrouping. <br> Understand multiplication as equal grouping. Can read an array. <br> Recalls $\times 2 \times 5 \times 10$ | - Add and subtract double digit numbers using knowledge of place value and basic facts; <br> - Represent multiplication using an array; <br> - Use doubling and halving; <br> - Understand fractions as a result of a division. | Working in Book 2B | Year 4 |


| Upper Level 2 <br> By end of Year 4 | $\begin{gathered} \hline \text { Use } \\ \text { Section } 4 \end{gathered}$ | Add and subtract double \& triple digit numbers reliably \& efficiently <br> Recall addition and subtraction facts to 20 <br> Can represent multiplication using an array. <br> Uses doubling and halving. <br> Recall $\times 3 \times 4$ <br> Understands fractions as a result of a division. | - Add \& subtract double \& triple digit addition and subtraction reliably \& efficiently <br> - Derive unknown multiplication facts from known facts using the distributive property; <br> - Use the multiplicative relationship between halves and quarters. <br> - Use division as the inverse of multiplication; <br> - Find a unit fraction of a set using multiplication facts. | Working in Book 3A | Year 5 |
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| Early Level 3 <br> By end of year 5 | Use Section 4 Section 5 Q 1-3 | Add \& subtract double \& triple digit addition and subtraction reliably \& efficiently <br> Recall or quickly derive using the distributive property or doubling \& halving most multiplication facts <br> Understand division as the inverse of multiplication. <br> Can find a unit fraction of a set using multiplication facts. | - Add and subtract whole numbers and decimals <br> - Divide whole numbers by a single divisor <br> - Multiply 2 digit numbers <br> - To find a non-unit fraction of a set using multiplication \& division. <br> - Solve ratio problems | Working in Book 3B | Year 6 |
| Upper Level 3 <br> By end of year 6 <br> End of Phase 2 | Use Section 5 Section 6 Q1 | Add and subtract whole numbers and decimals Divide whole numbers by a single divisor Multiply 2 digit numbers Find a non-unit fraction of a set using multiplication \& division. Solve ratio problems | - Solve more complex problems with addition and subtraction Solve problems involving fractions <br> - Use the inverse relationship between multiplication \& division. <br> - Use a standard algorithm for a single digit multiplier or divisor as appropriate <br> - Solve multi digit multiplication problems using array thinking. <br> - Use ratios and equivalent fractions to solve problems by making proportional adjustments. | Working in Book 4A | Year 7 |


| Early Level 4 <br> By end of year 7 | Use Section 6 | Understand and use inverse relationship between multiplication \& division. <br> Solve multi digit multiplication problems using array thinking. <br> Use ratios and equivalent fractions to solve problems by making proportional adjustments. | - Solve multi step problems requiring a mix of operations; <br> - Apply knowledge of multiplication and place value to decimals. <br> - Work efficiently with multiplication and division in multiplicative comparison situations requiring proportional adjustments. <br> - Multiply and divide decimal numbers using standard written form as appropriate. | Working in Book 4B | Year 8 |
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| Upper Level 4 <br> By end of year 8 <br> End of Phase 3 | Use Section 6 | Solve multi step problems requiring a mix of operations. <br> Work efficiently with addition and subtraction of whole numbers and decimals making estimations and checking reasonableness of answers. <br> Work efficiently with multiplication and division in multiplicative comparison situations requiring proportional adjustments. <br> Multiply and divide decimal numbers using standard written form as appropriate | - Work flexibly with whole numbers, integers, decimals \& fractions |  | Year 9 |

