

| NUMBER  |   |  |  | Levels  |   |   |  |   |
|---|---|--|--|---|---|---|--|---|
|   |   | 3  |  | 4   |   | 5   |  |   |
| 2   |   |  |  |   |   | 6   |  |   |
| <b>6 Understand Numbers</b><br>Students read, write and understand the meaning, order and relative magnitudes of numbers, moving flexibly between equivalent forms.   | N 6a.2<br><i>Understand whole numbers and decimals</i><br><b>The student:</b><br>Reads, writes, says and counts with whole numbers to beyond 100, using them to compare collection sizes and describe order.  | N 6b.2<br><i>Understand fractions</i><br><b>The student:</b><br>Understands the meaning of 'half' and 'quarter', splitting quantities into 'equal' shares and partitioning quantities repeatedly into halves.  | N 6a.3<br><i>Understand whole numbers and decimals</i><br><b>The student:</b><br>Reads, writes, says, counts with and compares whole numbers into the thousands, money and familiar measurements.<br>N 6b.3  | <i>Understand fractions</i><br><b>The student:</b><br>Reads, writes, says and understands the meaning of unit fractions, flexibly partitioning and rearranging quantities to show equal parts.  | N 6a.4<br><i>Understand whole numbers and decimals</i><br><b>The student:</b><br>Reads, writes, says, counts with and compares whole numbers into the millions and decimals (to an equal number of decimal places).   | N 6b.4<br><i>Understand fractions</i><br><b>The student:</b><br>Reads, writes, says and understands the meaning of fractions. The student estimates the relative size and order of readily-visualised fractions, including key percentages, and shows equivalence between them. | N 6.5<br><b>The student:</b><br>Reads, writes, says and understands the meaning, order and relative magnitude of whole and decimal numbers, negative integers, fractions, familiar ratios, rates and percentages and numbers expressed with whole-number powers and knows the more common equivalences between them. | N 6.6<br><b>The student:</b><br>Reads, writes, says and understands the meaning, order and relative magnitude of positive and negative rational numbers, ratios, rates and numbers expressed with integer powers. |
|   |   |  | n31w1<br>n31w2<br>n31w3<br>n31w4<br>n31w5<br>n31w6   | <b>M4WA1</b><br>1A 3A 3B<br>BC 1.2 pp9-12, 30   | n41w1a<br>n41w2<br>n41w3<br>n41w4<br>n41w5<br>n41w6<br>n41w7  | <b>M4WA1</b><br>1A 3J<br>BC 1.2 p 8<br>BC 1.2 pp 43-51<br><b>M4WA2</b><br>1A 1B 1C  | n51w1<br>n51w2<br>n51w3  | <b>M4WA1</b><br>2G 2H 2I 2J 2K 2L<br>2M 2N 2O<br>4K 4L 4M 4N<br>BC 3. 4 Ch 4<br>BC 4.4 pp 47-48<br><b>M4WA2</b><br>1B 1C 1D 2A 2B 2C<br>6A  |
| <b>7 Understand Operations</b><br>Students understand the meaning, use and connections between addition, multiplication, subtraction and division.  | N 7.2<br><b>The student:</b><br>understands the meaning and connections between counting, number partitions, addition and subtraction, and uses this understanding to represent situations involving all four basic operations.                       | N 7.3<br><b>The student:</b><br>understands the meaning, use and connections between the four operations on whole numbers, and uses this understanding to choose appropriate operations and construct and complete simple equivalent statements.   | N 7.4<br><b>The student:</b><br>Understands the meaning, use and connections between the four operations on whole and decimal numbers, and uses this understanding to choose appropriate operations (whole multipliers and divisors), including those for familiar everyday rates, and constructs and completes equivalent statements.                       | N 7.5<br><b>The student:</b><br>Understands the meaning, use and connections between the four operations on whole, decimal and fractional numbers, and uses this understanding to choose appropriate operations, including those in which fractional and decimal multipliers and divisors are required. | N 7.6<br><b>The student:</b><br>Understands the meaning, use and connections between the four operations on positive and negative rational numbers, ratios and rates and numbers expressed with integer powers, and uses this understanding to choose appropriate operations. |   |  |   |
|   |   | N32w3<br>N32w4<br>N32w5  | <b>M4WA1</b><br>II<br>BC 1.2 pp 15-29  | n42w1<br>n42w2<br>n42w3<br>n42w4<br>n42w5   | <b>M4WA1</b><br>4A<br>BC 2.4 Ch 5<br><b>M4WA2</b><br>1E 1F 1G 1H II   | n52w1<br>n52w2<br>n52w3   | <b>M4WA1</b><br>1I 4I 4J<br>3C 3D 3E 3F<br><br>BC 1.2 pp 38-42<br><b>M4WA2</b><br>1E 1F 1G 1H II 2I  | n62w1<br>n62w2  |
| <b>8 Calculate</b><br>Students choose and use a repertoire of mental, paper and calculator computational strategies for each operation, meeting needed degrees of accuracy and judging the reasonableness of results. | N 8.2<br><b>The student:</b><br>Counts, partitions and regroups in order to add and subtract one and two-digit numbers, drawing mostly on mental strategies for one-digit numbers and a calculator if numbers are beyond the student's present scope. | N 8.3<br><b>The student:</b><br>Adds and subtracts whole numbers, money and fractions with the same denominator, multiplying and dividing by one-digit whole numbers, using mainly mental strategies for doubling, halving, adding to 100 and additions and subtractions derived readily from basic facts. | N 8.4<br><b>The student:</b><br>Calculates with whole numbers, money and measures (at least multipliers and divisors to 10), drawing mostly on mental strategies to add and subtract two-digit numbers and for multiplications and divisions related to basic facts, including finding the unit fraction of a number which is a multiple of the denominator. | N 8.5<br><b>The student:</b><br>Calculates with integers, decimals and fractions (well-known equivalences, whole-number multipliers and divisors), using mostly mental strategies for integers, money and readily visualized fractions.   | N 8.6<br><b>The student:</b><br>Calculates with positive and negative numbers, decimals, fractions, ratios and integer powers, using mostly mental strategies, including those for frequently used fractions and percentages of amounts.                                      |   |  |   |
|   |   | n33w1<br>n33w2<br>n33w3<br>n33w4   | <b>M4WA1</b><br>1B 1G 1H   | n43w1<br>n43w2<br>n43w3<br>n43w4<br>n43w5<br>n43w6<br>n43w7<br>n43w8<br>n43w9<br>n43w10   | n43w11<br>n43w12<br>n43w13<br><b>M4WA1</b><br>1D 1E 1F<br>4C 4 D 4E 4F 4G 4H<br><b>M4WA2</b><br>1L  | n53w1<br>n53w2<br>n53w3   | <b>M4WA1</b><br>1B 1C 1D 1E<br>3C 3D 3E 3F<br>4C 4 D 4E 4F 4G 4H<br><b>M4WA2</b><br>1L 1O 1P 2A 2B 2C  | <b>M4WA2</b><br>1L 6B 6C 6D<br>6E 9K 9L 9M<br>9N 9O   |