

**MATHEMATICS \_2025 WEEKLY TEACHING PLAN \_ GRADE 9**

| TERM 1                              | Week 1<br>3 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Week 2<br>5 days | Week 3<br>5 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Week 4<br>5 days | Week 5<br>5 days                                                                                                                      | Week 6<br>5 days                                                                                                                                | Week 7<br>5 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Week 8<br>5 days                                                                                                                                                                                                                                                                                  | Week 9<br>5 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Week 10<br>4 days | Week 11<br>5 days |                                                                    |
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| Hours per topic                     | 8 hrs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                  | 9 hrs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  | 4.5 hrs.                                                                                                                              | 9 hrs.                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9 hrs.                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.5 hrs.          | 4.5 hrs.          |                                                                    |
| %Coverage                           | 7.6%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  | 6.5 (14.1%)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                                                                                                                                       | 8.7 (22.8%)                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.2 (25%)                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |                   |                                                                    |
| Topics, concepts and skills         | <b>WHOLE NUMBERS</b><br><br><b>Properties of numbers</b> <ul style="list-style-type: none"><li>Describe the real number system by recognising, defining and distinguishing properties of:<ul style="list-style-type: none"><li>natural numbers, whole numbers, integers, rational numbers, irrational numbers</li></ul></li></ul><br><b>Multiples and factors</b> <ul style="list-style-type: none"><li>Use prime factorisation of numbers to find LCM and HCF</li></ul><br><b>Solving problems</b> <ul style="list-style-type: none"><li>Solve problems in contexts involving:<ul style="list-style-type: none"><li>Ratio and rate</li><li>Direct and indirect proportion</li></ul></li><li>Solve problems that involve whole numbers, percentages and decimal fractions in financial contexts such as:<ul style="list-style-type: none"><li>Commission</li><li>rentals</li><li>compound interest</li></ul></li></ul> |                  | <b>INTEGERS</b><br><br><b>Calculations with integers</b> <ul style="list-style-type: none"><li>Revise:<ul style="list-style-type: none"><li>addition and subtraction with integers</li><li>Multiplication and division with integers</li><li>perform calculations involving all four operations with integers</li><li>perform calculations involving all four operations with numbers that involve the squares, cubes, square roots and cube roots of integers</li></ul></li></ul><br><b>Properties of integers</b> <ul style="list-style-type: none"><li>Revise:<ul style="list-style-type: none"><li>Commutative, associative and distributive properties of addition and multiplication for integers</li><li>Additive and multiplicative inverses for integers</li></ul></li></ul> |                  | <b>FORMAL ASSESSMENT TASK</b><br><br><b>ASSIGNMENT</b> <ul style="list-style-type: none"><li>Whole numbers</li><li>Integers</li></ul> |                                                                                                                                                 | <b>EXPONENTS</b><br><br><b>Calculations using numbers in exponential form</b> <ul style="list-style-type: none"><li><b>Revise</b> the following general laws of exponents.<ul style="list-style-type: none"><li><math>a^m \times a^n = a^{m + n}</math></li><li><math>a^m \div a^n = a^{m - n}</math>, if <math>m &gt; n</math></li><li><math>(a^m)^n = a^{m \times n}</math></li><li><math>(a \times t)^n = a^n \times t^n</math></li><li><math>a^0 = 1</math></li></ul></li><li><b>Extend</b> the general laws of exponents to include:<ul style="list-style-type: none"><li>integer exponents</li><li><math>a^{-m} = \frac{1}{a^m}</math></li></ul></li><li>Perform calculations involving all four operations using numbers in exponential form</li></ul> |                                                                                                                                                                                                                                                                                                   | <b>NUMERIC AND GEOMETRIC PATTERNS:</b><br><b>Investigate and extend patterns</b> <ul style="list-style-type: none"><li>Investigate and extend numeric and geometric patterns looking for relationships between numbers including patterns:<ul style="list-style-type: none"><li>represented in physical or diagram form, not limited to sequences involving a constant difference or ratio, of learner's own creation, represented in tables, represented algebraically</li></ul></li><li>Describe and justify the general rules for observed relationships between numbers in own words or in algebraic language</li></ul> |                   | <b>REVISION</b>   | <b>FORMAL ASSESSE<br/>NT TASK</b><br><br><b>TEST</b><br>All topics |
| Prerequisite skill or pre-knowledge | <ul style="list-style-type: none"><li>The commutative; associative; distributive properties of whole numbers</li><li>0 in terms of its additive property (identity element for addition)</li><li>1 in terms of its multiplicative property (identify element for multiplication)</li><li>Recognise the division property of 0, whereby any number divided by 0 is undefined</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  | <ul style="list-style-type: none"><li>Perform calculations involving all four operations with numbers that involve squares, cubes, square roots and cube roots of integers</li><li>Calculate the squares, cubes, square roots and cube roots of rational numbers</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                                                                                                                                       | <ul style="list-style-type: none"><li>Recognize and use the appropriate laws of numbers involving exponents and square and cube roots</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"><li>Determine input values, output values and rules for patterns given in input-output diagrams</li><li>Determine equivalence of different descriptions of the same relationship or rule presented verbally, in a flow diagram, by a number sentence.</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |                   |                                                                    |