**MATHEMATICS - GRADE 8 2021**

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| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (15 February 2021 – 23 April 2021)** |
| **Numbers, Operations and relationships** | Multiples and factors | **Task 1:** Assignment – Fractions, HCF, LCM, integers, number system15 – 19 Mar**Task 2:** Control test:12 – 23 April  |
| Integers |
| Fractions |
| Additive and multiplicative inverses |
| **Techniques, Strategies in calculations** | Exponents: laws, simple calculations, scientific notation |
| Rounding, estimation |
| Multiple operations |
| **Algebra** | Introduction |
| **PHASE 2 (3 May 2021 – 9 July 2021)** |
| **Patterns, Functions, Algebra** | Classification of like and unlike terms | **Task 3:** Investigation – Number patterns7 – 11 June**Task 4:** June Control test:28 Jun – 9 Jul  |
| Addition and subtraction |
| Multiplying and dividing monomials |
| Simplification with brackets |
| Expressions: simplification and combined operations |
| **Equations** | Solving by: inspection, trial and improvement, algebra |
| Checking roots by substitution, calculator usage |
| **Space and shape: Geometry** | Intersecting, parallel and perpendicular lines |
| **PHASE 3 (26 July 2021 – 26 November 2021)** |
| **Space and shape: Lengths, perimeter and area** | Triangles: types and side and angle relationships | **Task 5:** Project – Measurement23 – 27 Aug**Task 6: C**ontrolled Test13 – 17 Sept**Task 7:** Year-end Control test15 – 26 Nov  |
| Theorem of Pythagoras |
| Quadrilaterals and other polygons |
| Circles |
| Estimation and calculators |
| Relevant unit conversions |
| **Data Handling** | Collection, Central tendencies, graphical representations and analysis |
| **Graphs** | Drawing graphs |
| **Graphs****Transformations** | Recognising linear vs non-linear and discrete vs continuous |
| Use of terms: maximum, minimum, increasing, decreasing |
| Defining: translation, rotation, reflection |
| **Transformations****Financial calculations** | Using symmetry to investigate geometric figures |
| Profit and loss |
| **Financial calculations****Consolidation** | Simple interest, loans, hire-purchase |
| Revision of all assessment standards |