

## MATHEMATICS - GRADE 8 2024

TOPIC	ASSESSMENT STANDARDS	PORTFOLIO ASSESSMENT TASKS	
<b>PHASE 1 (17 January 2024 – 20 March 2024)</b>			
<b>Numbers, Operations and relationships</b>	BODMAS, Whole numbers, Multiples and factors	<b>Task 1:</b> Assignment – Fractions, HCF, LCM, integers, number system 5 – 9 Feb	
	Rounding, HCF, LCM, squares, cubes, roots		
	Additive and Multiplicative inverses, integers and fractions		
<b>Algebra</b>	Introduction		
<b>Techniques, Strategies in calculations</b>	Exponents: laws, simple calculations, multiple operations		<b>Task 2:</b> March control test: 21 Feb – 5 March
	Scientific notation		
	Problem solving		
<b>PHASE 2 (3 April 2024 – 14 June 2024)</b>			
<b>Algebraic Operations</b>	Classification of like and unlike terms, algebraic language	<b>Task 3:</b> Investigation – Functions & relations 6 – 10 May	
	Addition and subtraction		
	Multiplying and dividing by monomials		
	Simplification with brackets		
	Expressions: simplification and combined operations		
<b>Substitution and Equations</b>	Solving by: inspection, trial and improvement, algebra, checking roots by substitution	<b>Task 4:</b> June Exams: 3 – 14 June	
	Calculator usage and problem solving		
<b>Functions/Relations and Number Patterns</b>	Investigate patterns and functions in Algebra		
	Recording and representation: flow charts and tables		
	Solution as a rule or formula and problem solving		
<b>PHASE 3 (9 July 2024 – 22 November 2024)</b>			
<b>Space and shape and Introduction to Geometry</b>	Intersecting, parallel and perpendicular lines	<b>Task 5:</b> Project – Area, Perimeter & Pythag : 12 – 16 Aug	
	Triangles: types and side and angle relationships. Similar and congruent shapes		
	Theorem of Pythagoras inc problem solving		
	Quadrilaterals, other polygons and circles		
	Problem Solving		
	Area and Perimeter of 2D shapes. Calculator usage and problem solving. Unit conversions		
	Surface Area and Volume – simple and compound shapes.		
<b>Data Handling</b>	Collection, Central tendencies, graphical representations and analysis	<b>Task 6:</b> Controlled Test 21 Aug – 3 Sep	
<b>Graphs</b>	Drawing graphs	<b>Task 7:</b> Year-end Exam 11 – 22 Nov	
<b>Graphs</b>	Recognising linear vs non-linear and discrete vs continuous		
	Use of terms: maximum, minimum, increasing, decreasing		
<b>Finance</b>	Profit and loss, simple interest, loans, hire purchase. Problem solving		
<b>Ratio and Rate</b>	Simplify, increase, decrease, share in a ratio		
<b>Consolidation</b>	Revision of all assessment standards		