

GRADE 11 (2014) – MATHEMATICAL LITERACY ASSESSMENT PROGRAMME

TOPIC / CONTEXT	SECTION	BASIC SKILLS / CONTENT	FORMAL ASSESSM'T
Numbers & Calculations in Context	Estimation Rounding off Percentages Proportion Ratio Rates	Estimate anticipated solutions to calculations Types of rounding and the effect of rounding Percentage notation and percentage calculations Direct and indirect (inverse) proportion Basic ratio concepts and ratio calculations Rate calculations (e.g. cost, consumption, distance, time)	<u>TERM 1:</u> <u>Task 1</u> Investigation on Representation (Due: March)
	Representations of relationships in tables, equations and graphs	Limited to those that include: Fixed, linear, inverse proportion, compound growth and other non-linear relationships – in two relationships Estimation required in determining values in tables and on graphs – relate to temperature, time & foreign exchange etc	<u>Task 2</u> March Control (1 Paper – 1 hr)
Finance	Documents Tariff systems Income/Expenses Cost/Selling price Profit/loss Budgets Break-even analys Interest Hire-purchase Banking, Loans & Investments Inflation Taxation Exchange rates	Limited to those that deal with personal, household, workplace and small business finance – Demonstrate how the values in the documents have been determined. Calculate costs, draw & interpret graphs of various tariffs Calculations involving income, expenditure, profit & loss values, including fixed and variable values Determine cost of production &/or cost price and selling price of an item based on an expected percentage profit Break-even values using graphs and substitution in rules Simple & compound interest with loans & investments Calculation of interest on different types of accounts Investigate changes in prices & the impact over time Percentage calculations involving VAT and UIF Work with rates presented in foreign exchange tables	<u>TERM 2:</u> <u>Task 3</u> Assignment: Business opportunity (Due: June)
	Conversions Temperature Length & distance Mass (weight) Perimeter, Area & Volume Time	Express values using given factors and tables, including metric to imperial units & appropriate to the context Performing calculations in the context of maps, plans, models and rates (eg: costs, speed, consumption rates) Calculate values using formulae for perimeter, area & volume and express answers in appropriate units Calculate quantities & cost of materials needed for a task Converting units of time, time values in different formats	<u>Task 4</u> June Exam (2 Papers – 2 hr)
Maps, Plans and other Representations	Scale Maps Plans Models	Working with various types of scales- calculating actual distances, rates & determining the scale on a map or plan Describing location & bearing on various types of maps 2-Dimensional Floor, elevation and design plans Make & use 3D scale models of packaging containers	<u>TERM 3:</u> <u>Task 5</u> Investigation: Scale/ plans and measurement (Due: Sept)
Data Handling	Develop questions Collecting data Classifying and organising data Summarising data Representing data Analysing data	Questions that requires the collection of 2 sets of data Collect data on problems relating to the wider community Classify discrete & continuous data, group data using intervals, organize data using tallies & frequency tables Measures of central tendency & spread (excl. quartiles) Representing 2 sets of data in various types of graphs Analyzing data presented in graphs to identify trends Situations where data is interpreted in different ways	<u>Task 6</u> Control Test: (Due: Sept) <u>Task 7</u> Assignment: Data Handling
Probability	Expressions Prediction Representations for determining possible outcomes	Definition of probability & interpretation of ranges 0 – 1 Tests where there is a chance of inaccurate results Recognise that probability is predictions about the outcome of an event & the future based on past events Identify possible outcomes for compound events by making use of tree diagrams & two-way tables	<u>Task 8</u> Nov Exam (2 Papers – 2 hr)