

# MATHEMATICAL LITERACY

Dear Grade 12 Mathematical Literacy learner

Mathematical Literacy is intended to equip you with the knowledge and skills you need in dealing with real-life problems. The skills and knowledge you will master are drawn from the pure Mathematical knowledge you learned in previous grades. Real-life problems you may encounter are organised into FIVE topics, namely:

- finance
- measurement
- maps, plans and other representations of the physical world
- data handling and
- probability.

## Subject Requirements

- ➔ A textbook and exam study guide
- ➔ A calculator

## Content Checklist

The checklist below gives a summary of content you will cover in each of the topics.

### 1. Finance

- ➔ Financial documents
- ➔ Tariff systems
- ➔ Income/expenditure, profit/loss, budgets
- ➔ Cost price and selling price
- ➔ Break-even analysis
- ➔ Interest
- ➔ Banking, loans and investments
- ➔ Inflation
- ➔ Taxation
- ➔ Exchange rates

### 2. Measurement

- ➔ Unit conversions
- ➔ Length
- ➔ Weight
- ➔ Perimeter
- ➔ Area
- ➔ Volume
- ➔ Temperature
- ➔ Time

### 3. Maps, plans and other representations of the physical world

- ➔ Maps
- ➔ Scale
- ➔ Plans
- ➔ Models

### 4. Data handling

- ➔ Data collection
- ➔ Data classification
- ➔ Data organisation
- ➔ Summarising data
- ➔ Data representation
- ➔ Interpret and analyse data

### 5. Probability

- ➔ Expressions of probability
- ➔ Prediction
- ➔ Probability of simple events
- ➔ Probability of compound events

## Assessment

Throughout the year you will complete a minimum of SEVEN assessment tasks. Marks obtained in these tasks make up your final school-based assessment (SBA) mark. The SBA mark makes 25% of your final mark in the subject. The remaining 75% comes from your external exam mark.

TERM	GRADE 12	
1	Investigation	Minimum of 50 marks for each task
	Control Test 1	
2	Assignment	Minimum of 50 marks
	Paper 1 2 hours (100 marks)	Paper 2 2 hours (100 marks)
3	Assignment	Minimum of 50 marks
	<b>PRELIM EXAMINATION</b>	
	Paper 1 3 hours (150 marks)	Paper 2 3 hours (150 marks)
4	<b>EXTERNAL EXAMINATIONS</b>	
	Paper 1 3 hours (150 marks)	Paper 1 3 hours (150 marks)
<b>Total: SBA + External examination = 400</b>		

## Examinations

Mathematical Literacy examination consist of two papers (150 marks each). For both papers, about 30% of questions (45 marks) are all easy questions and test your ability to perform basic mathematical calculations in familiar context. 30% of the remaining questions test your ability to do 2-step or 3-step context-based questions. The rest, 40%, of the questions will test your ability to use mathematical and non-mathematical knowledge to solve problems in both familiar and non-familiar contexts.

**Paper 1:** The following context are covered in paper 1: Finance, Data and Probability.

**Paper 2:** The following context are covered in paper 2: Measurement, Maps and Plans and Probability.

PAPER 1	PAPER 2
Finance 60% ( $\pm 5$ ) Data Handling 35% ( $\pm 5$ ) Probability 5% Including Growth Charts (CAPS page 65) assesses application of measures of spread in data handling.	'Maps, plans and other representation of the physical world' 40% ( $\pm 5$ ) Measurement 55% ( $\pm 5$ ) Probability 5% Including $\pm 5\%$ (Income, Expenditure, Profit/loss, Income-and-Expenditure statements and Budgets, Cost price and Selling price) where there is direct link to Measurement and Maps and Plans.
<b>Question 1:</b> 30 marks $\pm 5$ marks Level 1 questions from Finance and Data Handling <b>Question 2:</b> Finance <b>Question 3:</b> Data Handling <b>Question 4:</b> Integrated context on Finance and Data Handling Including Growth Charts (CAPS page 65) assesses application of measures of spread in data handling. <b>Question 5: Finance, data handling or integrated question</b> Probability will be examined in the context of one or more of the other questions. Each question can contain more than one context.	<b>Question 1:</b> 30 marks $\pm 5$ marks Level 1 questions from Measurement and Maps, plans <b>Question 2:</b> 'Maps and plans' <b>Question 3:</b> Measurement <b>Question 4:</b> Integrated context on 'Measurement and Maps and plans' Including (Income, Expenditure, Profit/loss, Income-and-Expenditure statements and Budgets, Cost price and Selling price) where there is direct link to Measurement and Maps and Plans. <b>Question 5: Measurement, maps and plans or integration</b> Probability will be examined in the context of one or more of the other questions. Each question can contain more than one context.
<b>N.B: EACH PAPER MAY HAVE 4 OR 5 QUESTIONS</b>	