

# **MATHEMATICS**

**GRADE 10 TERM 3**

Tracker



Topic 1: Analytical Geometry												
CAPS Concepts and Activities	Time (Hrs)	CAPS Page no.	Year:					Year:				
			Class					Class				
			Date Completed					Date Completed				
<b>Lesson 1</b>												
<b>Topic: Analytical Geometry</b> <ul style="list-style-type: none"> <li>• Derive and apply for any two points <math>(x_1; y_1)</math> and <math>(x_2; y_2)</math> the formulae for calculating the:               <ul style="list-style-type: none"> <li>○ distance between the two points</li> </ul> </li> </ul>	2.5	26										
<b>Lesson 2</b>												
<b>Topic: Analytical Geometry</b> <ul style="list-style-type: none"> <li>• Derive and apply for any two points <math>(x_1; y_1)</math> and <math>(x_2; y_2)</math> the formulae for calculating the:               <ul style="list-style-type: none"> <li>○ gradient of the line segment connecting the two points (and from that identify parallel and perpendicular lines)</li> </ul> </li> </ul>	1.5	26										
<b>Lesson 3</b>												
<b>Topic: Analytical Geometry</b> <ul style="list-style-type: none"> <li>• Derive and apply for any two points <math>(x_1; y_1)</math> and <math>(x_2; y_2)</math> the formulae for calculating the:               <ul style="list-style-type: none"> <li>○ coordinates of the mid-point of the line segment joining the two points</li> </ul> </li> </ul>	2	26										
<b>Lesson 4</b>												
<b>Topic: Analytical Geometry</b> <ul style="list-style-type: none"> <li>• Revision and consolidation</li> </ul>	3	26										

**Reflection**

Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?

What will you change next time? Why?

HOD:

Date:

Topic 2: Finance and Growth												
CAPS Concepts and Activities	Time (Hrs)	CAPS Page no.	Year:					Year:				
			Class					Class				
			Date Completed					Date Completed				
<b>Lesson 1</b>												
<b>Topic: Finance and Growth</b> <ul style="list-style-type: none"> <li>• Revision:               <ul style="list-style-type: none"> <li>○ Simple interest</li> </ul> </li> </ul>	1.5	26										
<b>Lesson 2</b>												
<b>Topic: Finance and Growth</b> <ul style="list-style-type: none"> <li>• Revision:               <ul style="list-style-type: none"> <li>○ Compound interest</li> </ul> </li> </ul>	1.5	26										
<b>Lesson 3</b>												
<b>Topic: Finance and Growth</b> <ul style="list-style-type: none"> <li>• answer questions involving hire purchase, which involve deposits and monthly instalments.</li> </ul>	1.5	26										
<b>Lesson 4</b>												
<b>Topic: Finance and Growth</b> <ul style="list-style-type: none"> <li>• answer questions related to inflation and population growth.</li> </ul>	1.5	26										
<b>Lesson 5</b>												
<b>Topic: Finance and Growth</b> <ul style="list-style-type: none"> <li>• convert from one country's currency to another</li> <li>• answer questions related to foreign exchange.</li> </ul>	1.5	26										
<b>Lesson 6</b>												
<b>Topic: Finance and Growth</b> <ul style="list-style-type: none"> <li>• Revision and consolidation</li> </ul>	1.5	26										

**Reflection**

Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?

What will you change next time? Why?

HOD:

Date:

**Topic 3: Statistics**

CAPS Concepts and Activities	Time (Hrs)	CAPS Page no.	Year:					Year:				
			Class					Class				
			Date Completed					Date Completed				
<b>Lesson 1</b>												
<b>Topic: Statistics</b> <ul style="list-style-type: none"> <li>• Revision:               <ul style="list-style-type: none"> <li>○ Measures of central tendency in ungrouped data</li> </ul> </li> <li>• Measures of central tendency in grouped data:               <ul style="list-style-type: none"> <li>○ calculation of mean estimate of grouped and ungrouped data and identification of modal interval and interval in which the median lies.</li> </ul> </li> </ul>	2	27										
<b>Lesson 2</b>												
<b>Topic: Statistics</b> <ul style="list-style-type: none"> <li>• Revision of range as a measure of dispersion and extension to include percentiles, quartiles, interquartile and semi interquartile range.</li> </ul>	2	27										
<b>Lesson 3</b>												
<b>Topic: Statistics</b> <ul style="list-style-type: none"> <li>• Five number summary (maximum, minimum and quartiles) and box and whisker diagram.</li> </ul>	2	27										
<b>Lesson 4</b>												
<b>Topic: Statistics</b> <ul style="list-style-type: none"> <li>• Use the statistical summaries (measures of central tendency and dispersion), and graphs to analyse and make meaningful comments on the context associated with the given data.</li> </ul>	4	27										

Lesson 5											
<b>Topic: Statistics</b> <ul style="list-style-type: none"> <li>Revision and consolidation</li> </ul>	5	27									
	<b>Reflection</b>										
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

**Topic 4: Trigonometry**

CAPS Concepts and Activities	Time (Hrs)	CAPS Page no.	Year:					Year:				
			Class					Class				
			Date Completed					Date Completed				
<b>Lesson 1</b>												
<b>Topic: Trigonometry</b> <ul style="list-style-type: none"> <li>• Revision:               <ul style="list-style-type: none"> <li>○ Trigonometric ratios</li> </ul> </li> </ul>	1.5	28										
<b>Lesson 2</b>												
<b>Topic: Trigonometry</b> <ul style="list-style-type: none"> <li>• Explain what angles of elevation and depression are and represent it in a diagram.</li> </ul>	2	28										
<b>Lesson 3</b>												
<b>Topic: Trigonometry</b> <ul style="list-style-type: none"> <li>• Solve problems in 2 dimensions.</li> </ul>	3	28										
<b>Reflection</b>												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
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Topic 5: Euclidean Geometry												
CAPS Concepts and Activities	Time (Hrs)	CAPS Page no.	Year:					Year:				
			Class					Class				
			Date Completed					Date Completed				
Lesson 1												
<b>Topic: Euclidean Geometry</b> <ul style="list-style-type: none"> <li>• Solve problems and prove riders using the properties of parallel lines, triangles and quadrilaterals.</li> </ul>	1.5	28										
Reflection												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?							What will you change next time? Why?					
							HOD:		Date:			

**Topic 6: Measurement**

CAPS Concepts and Activities	Time (Hrs)	CAPS Page no.	Year:					Year:				
			Class					Class				
			Date Completed					Date Completed				
<b>Lesson 1</b>												
<b>Topic: Measurement</b> <ul style="list-style-type: none"> <li>Revision:               <ul style="list-style-type: none"> <li>volume and surface areas of right-prisms and cylinders.</li> </ul> </li> </ul>	1.5	28										
<b>Lesson 2</b>												
<b>Topic: Measurement</b> <ul style="list-style-type: none"> <li>Study the effect on volume and surface area when multiplying any dimension by a constant factor k.</li> </ul>	1.5	28										
<b>Lesson 3</b>												
<b>Topic: Measurement</b> <ul style="list-style-type: none"> <li>Calculate the volume and surface areas of spheres, right pyramids and right cones.</li> </ul>	2	28										
<b>Reflection</b>												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD:			Date:			