**Ascot High School Department** 

**Mathematics Department** 

**Grade 10 C&G Curriculum** 

September - December 2025

## **Introduction:**

Based on the philosophy that mathematics is all around us and that everyone uses and understands some mathematics, the Mathematics Curriculum for Grade 10 C&G is designed to:

- build students' learning and numeracy skills by exploring and applying the model of the 4Cs (creativity, critical thinking, collaboration and communication), while gaining knowledge of the content area;
- correct, where necessary, and build upon the knowledge of students through activities related to everyday life, applying mathematical principles of investigating, reasoning, estimating, forming conjectures and testing them, and through meaningful communication;
- expand knowledge through the formation of new concepts while establishing the inter-relatedness of mathematics with other disciplines;
- enable the development of attitudes of self-awareness and self-confidence, appreciation of enquiry, independent thinking, willingness to share, and cooperation with others in the pursuit of knowledge.
- help students' build life skills in order for them to be; flexible, productive, have good initiatives, exercise healthy habits, be a good leader and to be able to develop their social skills; by implementing the concept of the National Goals (Jamaicans are empowered to achieve their fullest potential, The Jamaican society is secure, cohesive and just, Jamaica's economy is prosperous, Jamaica has a healthy natural environment) while gaining knowledge of the content areas.

<b>Topic/Units</b>	Objectives	Duration	Assessments	Remarks
Computations	Students should be able to:		Practice questions from past	
	Determine the place value of digits in a given number		paper booklet	

	<ul> <li>Perform computation using any of the four basic operations;</li> <li>Convert among fractions, percentages and decimals;</li> <li>Convert from one set of unit to another;</li> <li>Express a value to a given number of: significant figures, and decimal places (up to 3</li> <li>Write any rational number in standard form;</li> <li>Calculate any fraction or percentage of a given quantity (whole number)</li> <li>Express one quantity as a fraction or percentage of another</li> <li>Compare two quantities using ratio –ratio and proportion</li> <li>Solve problems involving fractions decimals percentages, ratio rates and proportion</li> </ul>	3 weeks	Home work/ class work ongoing weekly  End of unit test/pop quizzes
Statistics	<ul> <li>Students should be able to:</li> <li>Differentiate between types of data</li> <li>Construct a frequency table for a given set of data</li> <li>Determine class features for a given set of data</li> <li>Interpret statistical diagrams-: Pie charts, bar charts, line graphs,</li> <li>Determine the measures of central tendency for raw, ungrouped mean, mode and median;</li> <li>Determine when it is most appropriate to use the mean, median and mode as the average of a set of data.</li> </ul>	4weeks	Practice questions from past paper booklet  Home work/ class work ongoing weekly  End of unit test/pop quizzes
Consumer	Students should be able to:		Practice questions from past

Arithmetic	<ul> <li>Solve problems involving simple interest- principal, time rate and amount;</li> <li>Solve problems involving compound interests</li> <li>Solve problems involving measures and money- including exchange rates</li> <li>Solve problems involving – rate and taxes, and shopping bills;</li> </ul>	3 weeks	Home work/ class work ongoing weekly
Measurement 2:	<ul> <li>Students should be able to:</li> <li>Calculate the volume of solids- prisms(cylinder, cube cuboid)</li> <li>Convert unit of length, area, capacity, time and speed;</li> </ul>	3weeks	End of unit test/pop quizzes  Practice questions from past paper booklet
	<ul> <li>Use an appropriate SI unit of measure for area, Volume, mass temperature and time (12 &amp; 24hour clock and other derived quantities)</li> <li>Solve problems involving time distance and speed;</li> <li>Use maps and scale drawings to determine distances and areas;</li> <li>Solve problems involving measurements;</li> </ul>	J WEEKS	Homework/ class work ongoing weekly  End of unit test/pop quizzes

## **ASSESSMENTS:**

A unit test will be done at the end of each unit. For each sub-topic students will be assessed using graded class work and homework assignments along with any other form of assessment the teacher may devise.

**Homework**: 10% of the overall grade for the semester **Class Work**: 10% of the overall grade for the semester

**Sessional Test** 1: 20%

Practical: 20% **End of Term Exam**: 40% of the overall grade for the semester