

**THE LESTER VAUGHAN SCHOOL**  
**MATHEMATICS DEPARTMENT**

**FIRST YEAR 2015-2016**

**Term 1**

<b>TOPIC</b>	<b>MAIN OBJECTIVES</b>	<b>DURATION</b>
<b>1. CCSLC Module 1: Number and Number Sense</b>	(a) Properties of Numbers; (b) Number Patterns; (c) Symbolic Representations; (d) Ratio; (e) Use of the Calculator	5 weeks
<b>2. CCSLC Module 3: Spaces in the Environment</b>	(a) Lines, Angles, Direction	4 weeks
<b>3. Project: Portfolio (Number &amp; Number Sense)</b>	(a) Number Pattern (b) Number Chart (c) Number Puzzle (d) Use of the Calculator	4 weeks

**SECOND YEAR TOPICS 2015-2016**

**Term 1**

<b>TOPIC</b>	<b>MAIN OBJECTIVES</b>	<b>DURATION</b>
<b>1. CCSLC Module 1: Number and Number Sense</b>	(c) Symbolic Representations; (d) Ratio; (e) Use of the Calculator	2 weeks
<b>2. Project: Portfolio (Number &amp; Number Sense)</b>	(a) Number Pattern (b) Number Chart (c) Number Puzzle (d) Use of the Calculator	2 weeks
<b>3. CCSLC Module 2: Conscious Consumer</b>	(a) Percentages; (b) Currency; (c) Household Bills; (d) Purchasing; (e) Taxes; (f) Wages, Salary and Commission	3 weeks
<b>4. Project: Investigation (Conscious Consumer)</b>	Comparison of the cost of two similar items <b>OR</b> two decisions to determine which is more feasible	3 weeks
<b>5. CCSLC Module 3: Spaces in the Environment</b>	b) Plane Shapes	3 weeks

### THIRD YEAR TOPICS 2015-2016

#### Term 1

TOPIC	MAIN OBJECTIVES	DURATION
<b>1. Algebra</b>	(a) Binary operations; (b) Linear inequalities (one unknown) (c) Linear equations (d) Distributive law (e) Algebraic fractions (f) Laws of indices (g) Simultaneous linear equations	5 weeks
<b>2. Consumer Arithmetic</b>	(a) Hire purchase (b) Simple interest (c) Compound Interest/Depreciation	4 weeks
<b>3. Trigonometry</b>	(a) Pythagoras' theorem (b) Trigonometric ratios	4 weeks

### FOURTH YEAR TOPICS 2015-2016 (Section 1 of CSEC Mathematics Paper)

#### Term 1

TOPIC	MAIN OBJECTIVES	DURATION
<b>Question 1:</b> Computation, Number Theory, Consumer Arithmetic	a) Fractions, b) Decimal places, Significant figures, Standard form c) Ratio d) Use of calculator e) Currency conversions, Price comparisons f) Simple/Compound Interest g) Percentage Profit & Loss h) Hire Purchase i) Wages & Salaries	3 weeks
<b>Question 2:</b> Algebra	a) Substitution b) Algebraic expression c) Algebraic Fractions d) Equations & Inequations e) Simultaneous Linear Equations f) Factorization g) Changing the subject of the formula	3 weeks
<b>Question 3:</b> Set Theory, Matrices	a) Types of numbers; even, odd, factors, multiples, prime numbers b) Universal set, Subset, Complement c) Venn diagrams d) Union & Intersection e) Set Notation	3 weeks

	<ul style="list-style-type: none"> <li>f) Perform addition and subtraction of matrices</li> <li>g) Multiply matrices by a scalar</li> <li>h) Perform pre- and post-multiplication of matrices</li> </ul>	
<b>Question 4:</b> Relations, Functions & Graphs	<ul style="list-style-type: none"> <li>a) Composite functions</li> <li>b) Inverse functions</li> <li>c) Undefined functions</li> <li>d) Table of values</li> <li>e) Straight line graphs</li> <li>f) Gradient of a line</li> <li>g) Midpoint of a line segment</li> <li>h) Length of a line</li> <li>i) Equation of a line/perpendicular line</li> </ul>	4 weeks

**FIFTH YEAR TOPICS 2015-2016**  
**(Section 1 of CSEC Mathematics Paper)**

**Term 1**

<b>Question 1:</b> Computation, Number Theory, Consumer Arithmetic
<b>Question 2:</b> Algebra
<b>Question 3:</b> Set Theory
<b>Question 4:</b> Relations, Functions & Graphs
<b>Question 5:</b> Transformational Geometry/Trigonometry
<b>Question 6:</b> Measurement
<b>Question 7:</b> Statistics
<b>Question 8:</b> Number Patterns